



raízen

INTEGRATED REPORT
2022 - 2023

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INTRODUCTION

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For the 12th time we are disclosing the results of our activities and challenges faced, opportunities seized and progress made towards our public commitments - established in our ESG Raízen Agenda (Environmental, Social and Governance), in line with the United Nations Sustainable Development Goals (SDGs) and the Global Compact Principles, of which we have been signatories since 2022.

In accordance with internationally recognized best reporting practices, this report has been prepared in accordance with Global Reporting Initiative (GRI 2021) Standards, the Sustainability Accounting Standards Board (SASB) Standard, the Stakeholder Capitalism Metrics developed by the World Economic Forum (WEF) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

NB: this file is best viewed in Acrobat Reader, which you can download for free [here](#).

For the first time, this publication has been prepared in the format of an Integrated Report, formally adhering to the framework of the International Integrated Reporting Council (IIRC), proposed by the Value Reporting Foundation, which assures the Integrated Report is the complete. In our annual reports, we have always demonstrated how we create and share value with all our stakeholders, and now we are even closer to the format with which investors and financial market agents are familiar.

Covering the period April 01 2022 to March 31 2023 (crop year 2022/2023), this edition reports on the performance of our operations in Brazil and Argentina¹. The list of entities included can be seen on pages 46 and 85, [here](#)².

¹ The data pertaining to the assets of Barcos y Rodados are still being integrated into the systems and are not therefore included in this material, but can be seen in our financial statements for the 2022/2023 crop year, published on 05/31/2023.

² Our Integrated Report does not cover the same period as the Financial Report, as the latter is usually published in May, and as we need the crop year closure to obtain the information that forms the Integrated Report, it is not possible to collect, consolidate and assure external data and publish it for the same period as the Financial Report. The latest Financial Report published on 05/31/2022 is available [here](#).



The information in the report has been compiled by an internal multi-stakeholder working group, and has been approved by the Executive Board and independently assured by KPMG Auditores Independentes. If you have any questions or feedback about our report, please write to fale@raizen.com or call 0800 728 1616. Your feedback can help us to continue to reshape the future of energy, together!

For the first time, this publication is formally following the framework of the International Integrated Reporting Council (IIRC).



MESSAGE FROM THE CEO

| GRI 2-22 |

We want to reshape the future of the energy that moves the world and transforms people's lives. We have a clear vision of where we want to be and a detailed execution plan to get there. We have made significant progress at all levels of our business and exceeded our expected results for the crop year. And we want to do even more with regard to the company's future deliverables in various areas. The way our team adapts and innovates amazes me every cycle—and 2022-2023 was no different. There is no doubt that we are in the right place, at the right time, with the right crop, in the right way and getting increasingly closer to our goals. The future is now!

Thanks to our team's commitment to productivity, we improved the yield of our first sugarcane cuts considerably, standing out in the market for our higher yield per hectare. We unlocked value not only from sugarcane juice, to produce sugar and ethanol, but also from bagasse and straw to produce second-generation ethanol (E2G). Our E2G broke another record last year with 30 million liters produced, a volume 64% higher than the previous crop year. And we will go further! We will continue to advance our plan to build 19 plants by

2030—eight of these plants have already been announced and will be delivered by 2027.

We are very proud of our E2G. We are the only company in the world that has mastered this technology on an industrial scale. E2G receives a unique classification, because it is produced using waste from the production of conventional ethanol, justifying its higher premium in more demanding markets, such as Europe, where the "food versus fuel" dilemma and the pursuit of smaller carbon footprint are at the center of discussions. By scaling up our E2G production, we are introducing a different proposition that allows us to speak of "food AND fuel", reinforcing the value of energy efficiency, the decarbonization of the planet and the reuse of by-products in the context of efficient land use.

We have been following closely the evolution of the global demand for products made according to high sustainability standards. For example, sustainable aviation fuel (SAF), which can be produced from ethanol, is the big bet for the decarbonization of the aviation sector, positioning us as a relevant player in this journey that is just beginning. This is one of

the solutions we are studying to accelerate the transition to a low-carbon economy, targeting sectors that are wide-reaching sectors such as transportation.

At Raízen, we say that it is not enough to be renewable—it must be sustainable. We ensure the traceability of raw materials and the highest standards of sustainability in our production. We are the company in the sugar-energy sector with the highest number of sugarcane processing sites operating in compliance with the Bonsucro Standard¹, which is internationally recognized for its strict social and environmental requirements. Currently, 80% of our bioenergy parks are Bonsucro certified, and we remain focused on our commitment to reaching 100%.

Our concern extends to the entire value chain, and I am proud to see our responsible approach as our main competitive advantage. We offer our supplying partners, responsible for approximately half of the sugarcane we process, an integrated value proposition that includes Jornada Cultivar and Elos Raízen. These programs have essentially cared for our supply chain for almost 10 years, by offering solutions to support producers, encouraging the progressive adoption of best practices, and providing us strong social and environmental credentials.

¹ Global certification for sustainability in the sugarcane value chain.

We reduced our agro-industrial costs with a focus on increasing efficiency by concentrating on the integrated management of our supply chain and the expansion of the Raízen Excellence System (SER+). Our efforts led to optimized processes, reduced waste, a stronger safety culture, and increased performance.

Currently, approximately 80% of the volume of ethanol we produce benefits from a premium over hydrous ethanol sold in Brazil, since it targets markets that value sustainability, leveraging Raízen's competitive advantages. The execution of this strategy has resulted in an average sales price 30% higher than the reference price in the local market.

We expanded our presence in the electricity segment, creating the Raízen Power brand that was launched in the 2023-2024 crop year, and is already the fifth largest energy trader in Brazil, with more than 24,000 customers connected to integrated and customized solutions for each consumer profile. In Mobility, in addition to continuing to grow in Argentina and Paraguay, we celebrated, together with Shell, the 110th anniversary of the brand in Brazil. With more than 340 new gas stations, we ensure the highest standards of efficiency and safe supply to our customers. In Proximity, a segment in which we operate through Grupo Nós, we enhanced our presence through more than 1,600 Shell Select stores in Brazil and 250

OXXO markets, which we continue to expand at an accelerated pace.

We manage our business with financial sustainability and capital discipline in all aspects. Our results are clear: our R\$246 billion net revenue (25% higher than the previous crop year) and R\$15.3 billion adjusted EBITDA (up 43% compared to the previous crop year) reflect the effectiveness of our strategy of identifying the best opportunities for selling our renewable products to customers who value Raízen's contribution to their decarbonization journey. Our reputation is reflected in the award of investment grade by the three international rating agencies, which places us in a select group of Brazilian companies.

But the best result we have is our team. There are more than 46,000 direct employees², in an environment guided by respect, with safety as a non-negotiable value, promoting expansion of opportunities for professional development. We reached 25% of women in leadership³, due to our continuous efforts to expand gender diversity. Our Governance is also a reference for diversity and transparency in actions, with the establishment of an Independent Audit Committee and Fiscal Council. The Raízen Foundation impacts the life of over 25,000 peo-

² Including Apprentice and Internship positions.

³ Biosev and Lubricants were not included in the calculation; they will be part of the scope of this commitment as of the next crop year.



ple, directly and indirectly, in seven centers in the states of São Paulo and Goiás, with various development and learning programs. In this crop year, we proudly celebrated a partnership with the BNDES (National Bank for Economic and Social Development) to train teachers in the public education network in 90 Brazilian municipalities.

All our results are guided by our public commitments and our active engagement with the sustainability agenda. Among other national and global initiatives, we are signatories to the United Nations (UN) Global Compact, and our Raízen ESG Agenda embodies the Sustainable Development Goals (SDGs), guiding us to leverage initiatives that generate shared value by tackling key global challenges.

We lead by example, share the lessons we learn, and support the advance of the global sustainable development agenda. In the last crop year, we presented at COP 27 the unique case of sugarcane as a readily-available,

efficient and scalable solution to the global decarbonization challenges. We also contributed to the creation of recommendations for energy transition policies and the pursuit of decarbonization solutions for hard to abate sectors, actively participating as co-president of the Energy Task Force of B20, the representation of the private sector in the G20.

These and other accomplishments are detailed in this report, which, for the first time, is published as an Integrated Report.

I am very proud of everything we have achieved so far and excited for what is to come. My sincere appreciation to the entire Raízen team—employees, partners, customers, consumers and investors—for another year of significant achievements. We know that the future is now. Let's continue to work together to reshape the future of energy!

Ricardo Mussa
CEO, Raízen

THE CROP YEAR AT A GLANCE



25% of our management positions held by women¹



+2 million hours of team development



Construction of **8 E2G plants** and our **second biogas plant**



Strategic partnerships for the **conversion of ethanol into green hydrogen** and for the development of a **Sustainable Aviation Fuel (SAF)** production ecosystem

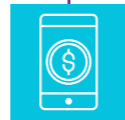


Raw sugar **100% traceable**

Signing of a long-term agreement with ASR Group for the creation of the first ever 100% traceable global chain for raw sugar, made from non-transgenic sugarcane ("Non-GMO").



Acquisition of Shell's entire **Lubricants** business, a global leader in the segment for the past 15 years



Acquisition of Payly, creating a financial services unit



Launch of the **Shell Recharge Electromobility Program** in Brazil and Argentina



Shell Box with over **4,000 stations**, more than 50 million transactions and more than R\$ 7 billion transacted



New crude oil distillation column in our refinery in **Argentina**, bringing energy efficiency to the entire operation



Completion of the **network's brand in Paraguay**, which went better than planned

¹ Biosev and Lubricants were not included in the calculation, they will be part of the scope of this commitment as of the next crop year.

04



INTEGRATED AND IRREPLICABLE PLATFORM

IN THIS CHAPTER

- OUR GEOGRAPHIES → 12
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- BUSINESS MODEL → 14



AN INTEGRATED AND IRREPLICABLE PLATFORM

| GRI 2-1, 2-6; WEF - Governance Pillar - Setting purpose |

We are Raízen, an integrated energy company, with an irreplicable platform for the demands of the present and future. We started out as a joint venture between Cosan and Shell, incorporating their assets and long-term strategies, grounded in the biofuel, sugar, renewable energy and mobility markets. Since then, we have consolidated our position as one of the largest companies in Brazil, with global scale in our geographies.

Many of our products come from sugarcane, which we process in strategically located bioenergy facilities, concentrated mainly in Southeast Brazil, close to the country's largest consumer markets and with enviable access to terminals and ports.

We produce sugar and bioenergy from sugarcane. Through advanced, proprietary technologies and guided by the principles of the circular economy, we have **expanded our renewables portfolio** beyond tradition-

al first-generation ethanol (E1G), to now include second-generation ethanol (E2G), biogas, biomethane and bioelectricity.

We invest in new sources to usher in a gradual, safe and diversified energy transition. Since we started business in 2011, we have avoided **30 million tons of CO₂** and aspire to continue fulfilling our decarbonization potential through our products.

Our operative bioenergy facilities are self-sufficient in electricity generation and sell the production surplus to the National Interconnected Grid (SIN), through high-complexity trading operations and energy auctions.

For higher consuming customers, our **Power** team has a strong performance in electricity marketing, in addition to migrations to the free energy market and management of this trading environment.



Our purpose is to redefine the future of energy from an integrated portfolio of solutions.

Moreover, we already have more than 30 renewable energy plants in operation to serve captive market consumers through distributed generation solutions. Customers therefore have access to our energy without the need to invest and also save on their electricity bills. Other renewable sources in our portfolio include biogas, small hydroelectric plants, and solar energy farms. We already serve more than 24,000 consumer units with our electricity solutions.

In the Power front, we offer complete electric mobility solutions for the entire consumer journey. In 2022, we inaugurated the first EV recharging stations under the **Shell Recharge** solution. We are therefore expanding a fast and ultra-fast charging network for both end consumers and companies. In an investment of R\$ 70 million, we will continue to expand Shell Recharge to more locations around the country, plus Paraguay and Argentina.

Alongside Renault, Localiza and Uber, we have started a partnership in São Paulo's capital to provide 200 units of the electric version of the Renault Kwid E-tech for Zarp customers, a Localiza unit that rents vehicles to app drivers. In partnership with Tupinambá Energia – our electric mobility investment – we created software and an app for managing charging, along with launching a recharge hub for drivers.

We also work alongside Shell Brazil, Hytron, the University of São Paulo (USP), the Research Center for Innovation in Greenhouse Gases (RCGI), Senai CETIQT, and Toyota do Brasil on a Research & Development (R&D) project for the **production of renewable hydrogen (H₂) from ethanol**. This is an efficient, sustainable and easily globally replicable solution, due to the low cost of biofuel transportation. Starting with the Toyota Mirai, the first mass-produced fuel cell vehicle (Fuel Cell Electric Vehicle), we will test the hydrogen-powered vehicle's performance, which will be delivered within the first half of 2023, to the Research Center for Greenhouse Gas Innovation (RCGI) at USP, established in 2015, with funding from FAPESP and Shell, which runs the research. In addition to the Toyota Mirai, three buses circulating in the USP campus will run on renewable hydrogen.

Spearheading the energy transition is also about providing society with the energy it needs in the present. In **mobility** we own the Shell brand, a structuring element of our business and which ensures supply security for consumers. **We operate the second largest fuel distribution network in Brazil and Argentina**, according to data from the National Agency for Petroleum, Natural Gas and Biofuel (ANP) and the Ministry of Energy and Mining of the Republic of Argentina (MI-NEM Argentina), respectively, and control



the largest ethanol distributor in Brazil, supported by robust infrastructure and logistics, which have been modernizing since the beginning of our operations, expanding our capacity and extensive footprint to serve our customers in Brazil and other Latin American countries (Latam – Latin America), like Argentina and Paraguay.

Focusing on end consumers, through **Nós Group**, a joint venture with FEMSA Group, the largest retailer in the Americas, we have been exploring the **convenience store** segment since 2019, under the **Shell Select** brand, in our service stations; and



24,000

consumer units rely on our electricity solutions.

proximity stores, under the **OXXO** brand. We also develop initiatives that deepen the customer experience, such as **Shell Box**, a Shell-branded payment and experiences app that increases customer loyalty and engagement in Brazil and Argentina.

In May 2022, we completed the acquisition of Shell's **Lubricants** division in Brazil. This gave us **control of the lubricant plant** on Ilha do Governador, in Rio de Janeiro (RJ); the oil base in Campos Elíseos, in Duque de Caxias (RJ), Shell Marine's ship lubricant division; and the businesses offering and distributing lubricants in the country. **This integration affords us operational synergies while ensuring the supply of premium lubricants and fuels.**

In Argentina, we expanded the capacity of our lubricant plant and launched the first natural gas-based product (Shell Helix Ultra ECT C2/C3 0W-30), which helps **diminish our carbon footprint by offsetting emissions of 2,000 tons of CO₂ equivalent**, generated during all stages of its processing cycle: from raw material extraction, production, packaging, transportation and use, to end-of-life treatment.

In the 2022/2023 crop year, we posted **net revenue of R\$ 246 billion**, generating jobs and income, firing up the economy and promoting positive social impact through numerous initiatives, with a leading role played in Brazil by **Raízen Foundation**, a non-profit institution, which has been engaging in the education of underprivileged children and young people for 20 years; and in Argentina, where we operate programs and positive social impact actions. Wherever we go, we ensure that our actions create value, respecting the vocations of those around us.

We completed the acquisition of Shell's Lubricants division in Brazil and expanded the capacity of Argentina plant.



BIG NUMBERS | GRI 2-61



35 bioenergy operations

1 E2G plant and 8 more under construction

1 biogas plant and 1 more under construction

68 airports bases

2 lubricant plant, with one in **Brazil** and another in **Argentina**

Presence in 19 ports

+2K Shell Select stores

+300 OXXO proximity stores

1 refinery (Argentina)



3 billion liters of cane ethanol produced

30 million liters of E2G produced

4.8 million tons of sugar produced

More than 8,000 service stations in Brazil, Argentina and Paraguay

+ 50 million end consumers served every year

+ 5,000 B2B clients worldwide

3.0 TWh of biomass-generated electricity

73.5 million metric tons of processed sugarcane

VOLUMES SOLD:

11,3 million metric tons of sugar

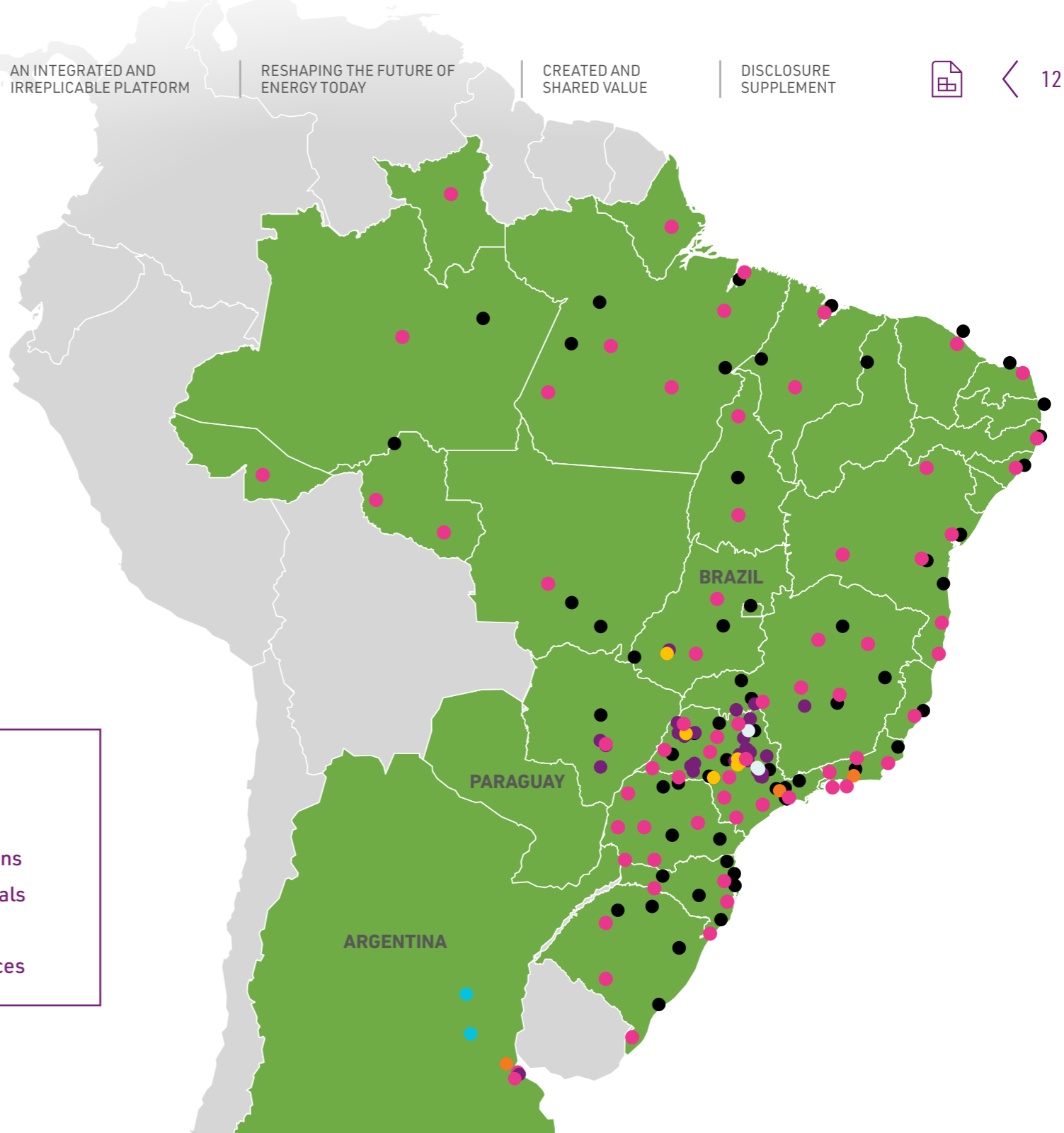
6.1 billion liters of ethanol

22 TWh of electricity from biomass-fueled cogeneration facilities

35 billion liters of fuel

OUR GEOGRAPHIES

[GRI 2-6]



MARKETS SERVED

[GRI 2-6]



N. AMERICA

0.8 M ton
2.8 M m³

EUROPE/ BLACK SEA

0.9 M ton
5 M m³

AFRICA

2.6 M ton
1.2 M m³

S. AMERICA

0.1 M ton
1.2 M m³

ASIA

3.8 M ton
7.8 M m³

MIDDLE EAST/ SOUTH ASIA

1.4 M ton
1.1 M m³

SOUTHEAST ASIA

3.1 M m³

BUSINESS MODEL

VALUE CAPTURED

FINANCIAL CAPITAL

- R\$ 246 billion in net revenue
- R\$ 1.2 billion raised under sustainable-linked bonds (SDL)
- R\$ 2 billion raised via Green CRAs
- R\$ 11.3 billion invested, focused on expanding our renewables portfolio

MANUFACTURED CAPITAL

- 35 bioenergy complexes, 2 E2G and 1 biogas plants
- 70 distribution terminals
- Presence in 19 ports
- 68 airport bases
- More than 8,000 service stations
- 1 refinery
- 2 lubricant plants
- More than 2,000 Shell Select stores (Grupo Nós)
- And More than 300 OXXO proximity stores in Brazil (Grupo Nós)

INTELLECTUAL CAPITAL

- 1 open innovation hub (Pulse Hub)
- Shell brand leadership in Brazil, Argentina and Paraguay
- Proprietary advanced technology for E2G production
- Equipment patents, exclusive rights over any biomass in Brazil and on sugarcane biomass globally

HUMAN CAPITAL

- More than 46,000 employees¹
- More than 1,700 service providers

SOCIAL AND RELATIONSHIP CAPITAL

- 1,898 sugarcane suppliers in our ELOS and Cultivar
- Operations in all states of Brazil
- R\$ 16.2 million invested in training public municipal teachers*

NATURAL CAPITAL

- Approximately 995,000 hectares of cultivated land
- Presence in the 6 Brazilian Biomes
- 189,000 megaliters of water were sourced
- 202 million GJ of energy consumed

¹ Including Apprentice and Internship positions.

² The project will receive non-refundable financial support from BNDES of R\$ 8.1 million, with resources from the Socio-environmental Fund, amount corresponding to 50% of the total cost. The remaining 50% will be contributed by the Raízen Foundation itself.

HOW WE CREATE VALUE

We are a world-leading, integrated bioenergy company with a broad portfolio of renewable products. The largest integrated and vertically integrated player in the world, in a country of continental proportions. We redefine the future of energy from an integrated portfolio of solutions.

- Renewable: Ethanol, Second-generation Ethanol (E2G), Biogas Energy cogeneration, Energy trading and Electro-mobility.
- Mobility: Shell Stations; Aviation; Shell Box; Premium Products; B2B; and Lubricants.
- Proximity: Shell Select; and Oxxo.
- Sugar: Production, Exports and B2B.

EXTERNALITIES

- Emissions: of greenhouse gases and particulate matter, dust, and smoke in the value chain;
- Erosion and soil contamination
- Water consumption;
- LTIF (Lost Time Injury Frequency).

VALUE CAPTURED

FINANCIAL CAPITAL

- R\$ 3.9 billion in adjusted net income
- R\$ 15.3 billion in EBITDA
- R\$ 26.9 billion of distributed added value
- R\$ 7.8 billion in primary cash generation³

MANUFACTURED CAPITAL

- 5 E2G plants under construction, with a target to build 20 by 2030
- 80% of bioenergy operations Bonsucro-certified

INTELLECTUAL CAPITAL

- A study conducted in collaboration with the Massachusetts Institute of Technology (MIT) on the potential of sugarcane to stimulate the net-zero economy
- A study conducted in partnership with Agroicone, Unicamp and Embrapa on land use and the contribution of sugarcane in carbon sequestration from the atmosphere
- Participation in the Business20 (B20) and the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP)

HUMAN CAPITAL

- 13,144 jobs created in the year
- 25% of our leadership positions are held by women
- 2 million hours of training, an average of 62 hours per employee

SOCIAL AND RELATIONSHIP CAPITAL

- Safety devices installed in 100% of the transportation fleet
- R\$ 9.6 billion spent on procurements suppliers in Brazil
- 26,496 people directly and indirectly impacted by the Raízen Foundation
- 152,000 direct and indirect beneficiaries since 2003 through
- Creating Bonds in Argentina

NATURAL CAPITAL

- 17,484 tCO2 avoided by increasing irrigation and organics
- 1,152,253 carbon credits (Cbios) traded
- 5,658,889 emissions avoided (tCO2e vs. fossil fuel)
- Restoration of 500 hectares, where approximately 1 million seedlings will be planted
- 1 billion liters of water saved through the ReuZa Program

³ Adjusted EBITDA Aminus recurring CAPEX

05



RESHAPING THE FUTURE OF ENERGY TODAY



IN THIS CHAPTER

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- MAXIMIZING PRODUCTIVITY AND EFFICIENCY → 18
- ADVANCED TECHNOLOGIES → 20
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FEEDSTOCK TRACEABILITY

| GRI 3-3 (Cane field management & biodiversity), 3-3 (Sustainable procurements) |

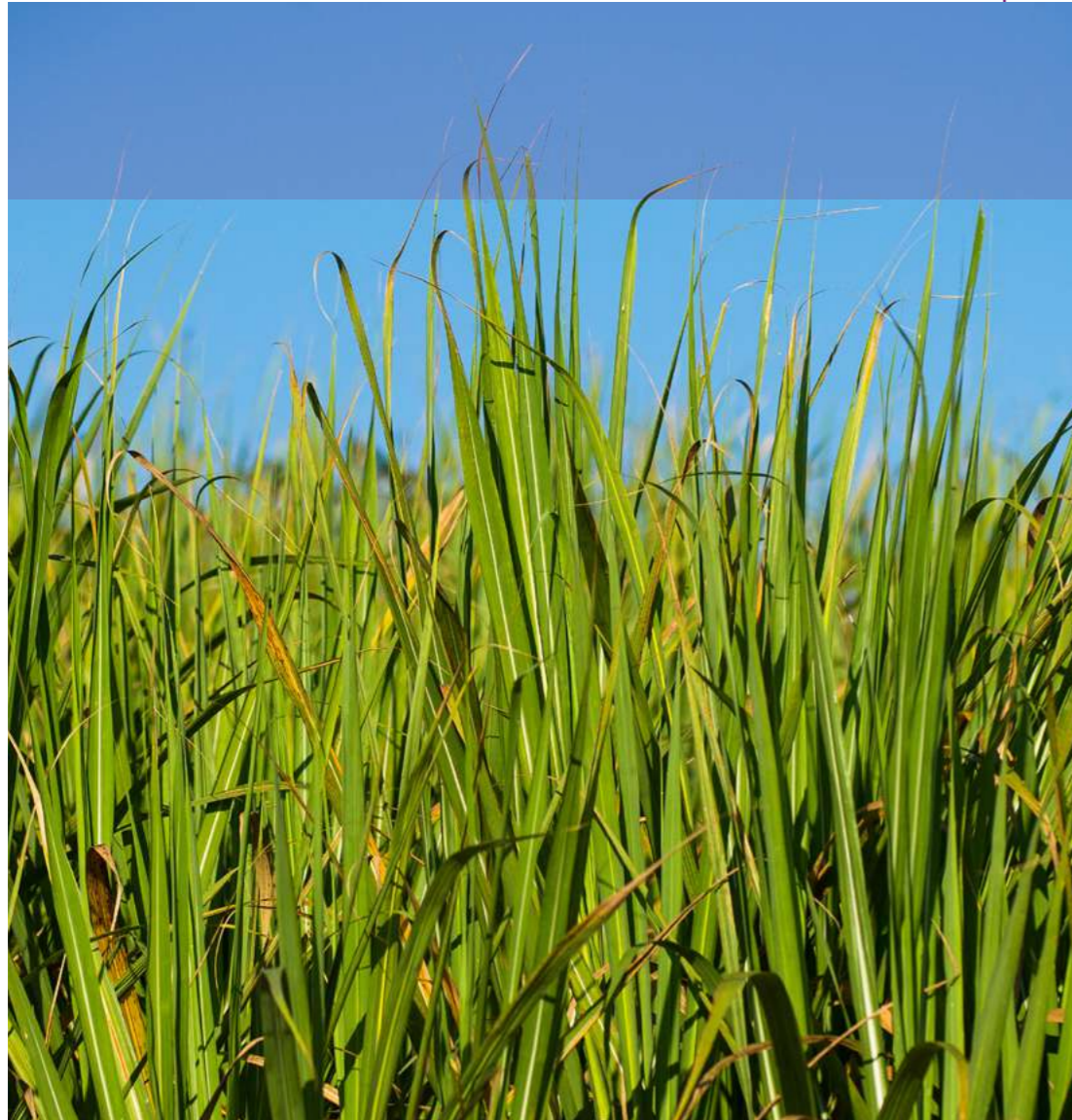
Our unique approach to managing our supply chain ensures that all raw material is traceable and produced to the highest standards of sustainability. We are the company in the sugar and energy sector with the highest number of sugarcane processing units operating under the **Bonsucro Standard** - the most internationally recognized by the industry that certifies our operations respect human rights throughout the chain; conserve natural resources; are environmentally friendly, especially in protection against deforestation; among other sustainability criteria evaluated by strict standards.

In March 2023, **we expanded to 24 the number of our bioenergy** operations that are certified, or about 80% of our units. This was our first achievement after the introduction of the New Bonsucro Standard, which came into effect in September 2022 and is even more demanding. Each certified unit undergoes an annual evaluation and must be recertified every three years.

About half of the raw material we process comes from partner suppliers, of which **93% are part of the Raízen Elos Program**. This is an inclusive initiative, with a dedicated team that encourages the progressive adoption of good socio-environmental practices at all stages of agricultural production and is checked by civil society organizations that contribute to an increasingly sustainable ecosystem. In 2022/2023, **the program provided over 48,500 hours of consulting to farmers**, resulting in **over 445 improvement actions** that had a positive impact on the lives of people in the field. The Elos Program is recognized by Bonsucro as a program aligned with its principles, criteria and international sustainability indicators. Learn more about Elos [here](#).



80% of certified units



NON-GMO SUGARCANE

In response to a strong demand for more sustainable sugarcane supply chains, we, the largest individual exporter of sugar in the international market, and ASR Group, the world's largest refiner and marketer of cane sugar, have partnered to create the world's first sustainable and fully traceable supply chain, with non-genetically modified and independently certified sugarcane.

The partnership extends from our farms and our certified energy operations in Brazil's Center-South, to the well-known brands of ASR Group's cane sugar products in North America and Europe.

Supported by an investment and a 10-year purchase commitment from ASR Group, we have developed unique processes, infrastructure and technological solutions to trace the raw cane sugar from our farms and biooperations and segregate the product to a dedicated port terminal for export in Porto de Paranaguá, Paraná.

During the first year of the partnership, ASR Group's sugarcane refineries in Canada, the UK, Portugal and Italy will take deliveries as part of the group's local brand supply chains, including Redpath®, Tate & Lyle®, Lyle's®, and Sidul®. Future shipments to refineries in the United States and supplying the Domino® and C&H® brands are also being considered.

In addition to being non-GMO, the raw sugar meets the highest global ethical and environmental standards. As such, we will fully reinvest the premiums paid by ASR Group in support of our ESG commitments, being allocated to initiatives to increase productivity and reduce GHG emissions, including agricultural innovation and efficiency projects, alongside initiatives to reduce water use in energy biooperations and other sustainability initiatives. In August 2022, we also entered into a multi-year contract to supply Lantic Inc.'s Eastern Canadian operations with non-GMO sugar beginning in 2023.

MAXIMIZING PRODUCTIVITY AND EFFICIENCY

[WEF – Governance Pillar - Setting purpose]

We are aware of our potential to continue improving the productivity and the utilization rate of our plants, which is essentially monitored by the indicator relative to effective milling *versus* milling capacity. Through this metric, we are monitoring and disseminating best operational practices across all our bioenergy operations.

Based on the Lean philosophy, which encompasses various management and resource optimization methodologies, the **Raízen Excellence System - SER+** was made to enhance value-added actions and eliminate waste, elevating our level of performance by involving our employees.

The initiative, which had already been implemented in 12 bioenergy operations in the previous crop year, was expanded to all industrial areas of 30 biooperations and to nine agricultural units, plus the lubricants plant and administrative offices of the Vice-Presidency of Business Services and Technology (SN&Tech) in 2022/2023.

SER+ is being implemented according to a previously defined Master Plan in modules and phases. **The goal is to consolidate the application within all agro-industrial facilities, including the new E2G and Biogas plants,** and expand to all areas in the medium term - in view of the real, positive and sustainable impact of the results.

Click on the icons to learn more

The adopted methodologies under the SER+ scope include:

- Standard Operating Procedures
- Plan-Do-Check-Act (PDCA)
- 5S
- Kaizen
- Hoshin

SER+ OUTCOMES IN 2022/2023



30,000

employees impacted



1,800

Standard Operational Procedures (POPs)



500

continuous improvement projects (PDCA)



22 THOUSAND

ideas received

and implemented (Kaizen), with over 200,000 hours of training

In industrial and agricultural activities, the solutions provided by SER+ have yielded potential gains of approximately R\$ 60 million, including the returns since its implementation in 2021 involving cost reduction and performance and quality improvement.



GREATER EFFICIENCY AND SUSTAINABILITY IN MARITIME TRANSPORT

In January 2023, we signed a contract with KCC Chartering AS, a subsidiary of the Norwegian company Klaveness Combination Carriers ASA (KCC), to improve efficiency and reduce CO₂ emissions from our operations through the combined transportation of liquid and dry cargo on KCC's ships. The combination of cargo, with minimal ballast and waiting time between voyages, should reduce CO₂ emissions per tonne of cargo transported by up to 40%, depending on the route and compared to standard tankers and bulk carriers carrying out the same trade activities.

We have eight hybrid ships from KCC at our service, equivalent to half of the chartering company's current fleet. Each vessel can transport approximately 75,000 tons of dry cargo and 65,000 tons of liquid cargo. The charter contract is valid for three years, but we intend to further reduce emissions together by collaborating with the entire maritime sector in establishing goals for long-term cooperation in operational and energy efficiency initiatives, and possible tests of new types of fuel.

In **Argentina**, starting in 2024, legislation will require a **further reduction in sulfur volume in fuels**. Anticipating this scenario, after many years of study and preparation, we began installing four new production units in our refinery in 2022/2023, which are:

- A plant **PRODUCING HYDROGEN** from natural gas (HMU).
- A **NAPHTHA HYDRO-TREATMENT** plant (HDT2).
- A **GASOIL HYDRO-TREATMENT** plant (HDS3).
- A **SOUR WATER** stripping unit – containing hydrogen sulfide (SWS3).

All the components for assembly were already acquired in 2022 and will be installed in 2023. The structure also includes multiple interconnections so that the new units can operate seamlessly. **In total, we are investing upwards of USD 340 million..**

In addition to complying with legal requirements, the initiative aims to further improve the quality of our products, enhance the energy efficiency of our process and ex-

pand business opportunities with better profitability.

The year at our refinery was also marked by the most important stoppage in the last 35 years. The maintenance operation, which involved multiple departments and sectors, entailed an investment of around USD 80 million, made to expand the main crude oil distillation unit. Consequently, we can now refine up to 300,000 barrels of unconventional crude oil per month, such as that from the Vaca Muerta basin in northern Patagonia.



ADVANCED TECHNOLOGY

Advanced technologies are one of the pillars that support all links in our value chain. We have developed a series of technologies applied to our portfolio, which assist us in analyzing data and obtaining intelligence to support our processes and decision-making.



SECOND-GENERATION ETHANOL (E2G)

Second-generation ethanol (E2G) is the result of research that **pursues the complete utilization of sugarcane**. Also known as cellulosic ethanol, our biofuel is produced from the waste remaining from the first-generation ethanol (E1G) and sugar manufacturing process, and is considered **one of the fuels with the lowest carbon footprint in the world**.

We are the only producers of sugarcane E2G on a commercial scale in the world, and we hold exclusive rights to process sugarcane biomass in our patented equipment, enzymes and specialized yeasts for production, and partnerships with leading biochemistry companies and modular scalability of pre-treatment.

This gives us a foundation **to aim to have 20 E2G generation plants by 2030, always connected to the sugar and alcohol mills**. Three new plants are already under construction, with the most advanced one being in the Bonfim unit in Guariba (SP), and the other two - in the Barra unit in Barra Bonita (SP) and the Univalem unit in Valparaíso (SP) - will start operating by 2024 and more than double the volume of biofuel produced, with 80% already sold. Moreover, to further advance towards the goal, we reached a long-term agreement with Shell for the delivery of 3.3 billion liters, which will be produced in five new plants that are expected to go online between 2025 and 2027.



WORKFORCE PROFESSIONALIZATION

As the world's only producer of the biofuel on a commercial scale, we seek to develop capabilities related to our industrial processes. In this regard, in March 2022, we launched the **world's first E2G-focused Learning Program**, aimed at professionalizing employees and members of local communities to work in our plants.

One of the initiatives is the technical trail, which offered over 20 exclusive content modules. The program also includes a course developed in partnership with the National Industrial Training Service (SENAI), with a duration of 160 hours, accompanied by periodic knowledge assessments.

The first class consisted of students from the communities near the Bonfim Bioenergy Facility, with **65% women and 35% men**, selected in a selective process conducted by Senai in October 2022. The recent graduates have already been directed to our recruitment processes, and some of them have been absorbed into our team. The expectation is that the entire Learning Journey will be replicable in other locations where we are building our E2G plants.

FIELD TECHNOLOGY

Our plantations also benefit from intensive use of technology: we use drones and proprietary algorithms to map and determine how and when to plant and harvest, and we apply artificial intelligence to large databases across our ecosystem, allowing us to have a market view to optimize hedge and pricing strategies, among other decision-making information.



In 2022/2023, our center harnessed new technologies to expand its monitoring to include vinasse, cultural practices and sugarcane planting. Another novelty is that, in addition to managing for increased productivity in operations, our center now monitors the quality of field operations through georeferenced application maps with application rates and input flow controllers - all in real-time, to enhance the sugarcane field quality.

Seeking to standardize the technologies embedded in tractors, planters, harvesters, and trucks, we continue to invest in our **Field-Mill Integration Center**, responsible for monitoring and analyzing field performance indicators 24 hours a day, seven days a week. Currently, the center monitors **6,000 pieces of agricultural equipment, impacting over 10,000 employees**.

In recent harvests, the CIA has developed its processes to unify and schedule various operations such as: localized vinasse application, georeferencing and monitoring operations to ensure their effectiveness, machine guidance, management of cane inventory in the logistical cycle, and real-time monitoring of field activity records. For this, the 220 analysts in the center - dedicated to programming and supporting the entire operation, equipment and machinery - recommend improvements in executions and standardize work procedures, avoiding potential deviations in procedures and operational plans.



INDUSTRY 4.0

The 4th Industrial Revolution is changing the way companies produce, enhance and distribute their products and services. Internet of Things, robotics, artificial intelligence (AI), and cloud storage are some of the intelligent technologies driving this movement. Mindful of these trends, we are experimenting with innovations and reinventing processes.

Click on each initiative's name to learn more:



DIGITAL TWIN AND PLANT SIMULATION



ADVANCED CONTROL AND AI-DRIVEN OPTIMIZATION



GAS ANALYZERS



MILL NIR



ADVANCED QUALITY CONTROL UNIT (UACQ)

SUPPLY CHAIN DIGITIZATION

In 2021, we embarked on a digitization journey, which is being cemented through a series of initiatives under the **Integra** program. This program aims to digitize and optimize our supply chain, further enhancing process efficiency through a fully monitored fleet, fully automated bases, lower operational times, fleet fuel consumption monitoring, and operational planning and execution software.

In total, there are **more than 20 initiatives** that make up the program, and in just two years, they **have already generated over R\$ 150 million in benefits and direct impact on productivity**. In addition to the financial contribution, Integra has been supporting the training of teams involved with analytics, enabling us to increasingly achieve data-driven predictions.

By increasing the efficiency of our operations through the use of **advanced technologies**, **we were able to avoid the emission of 53,000 tons of CO₂**. The next step of the program involves perpetuating this digitization with the aim of extracting and unlocking value between interfaces with other areas and business units.

PAYMENT METHODS

Another important technological milestone in our ecosystem is Shell Box. Developed in 2016, the application is fully integrated with fuel pumps at service stations, offering more transparency and security in a 100% digital journey. By providing a complete universe of Shell brand experiences and benefits in a practical and intuitive way, we ensure customer loyalty and consequently increase their share of wallet, capturing new sources of revenue.

Through the app customers also have the convenience of identifying the nearest Shell Box-enabled station, participating in current promotions, exchanging shells (loyalty program currency) for exclusive items and easily accessing their statement and identifying all refueling and discounts received.

There are currently over 5,000 stations in Brazil and Argentina that offer the option of payments via Shell Box, in addition to Shell Select convenience stores in both countries. In 2022/2023, the app processed R\$ 7 billion in transactions, reaching a customer base of over 15 million.

Since 2021, we have also offered **Shell Box Empresas**, which provides personalized and efficient fleet management for our clients through comprehensive performance reports and refueling rules in a 100% digital and free experience. The app helps business customers to manage their (light, medium and heavy) fleet expenses at service stations in our network.



NEW FINANCIAL SERVICES UNIT | GRI 2-6I

In October 2022, we completed the acquisition of the payment institution **Payly**, which initiated our financial services unit. This line of business is focused on developing solutions that better serve our partners, promote convenience and loyalty, positively impacting all business chains, and generating a predictable and stable revenue stream.

Payly will benefit from our current B2C and B2B ecosystem, in which Shell Box is already a major player. The operations have the potential to reach over 8,000 retail stations, 5,000 B2B clients, 50 million end customers and 17,000 clients in the electric power segment and 1,500 convenience stores and proximity markets.

The 120-strong structure will report to a committee composed of executives and Board members, independently ensuring agility and autonomy in decision-making.

Payly

ACCELERATING INNOVATION

Pulse Hub, our innovation hub, celebrated its fifth anniversary in August 2022. Created to connect startups with our business areas - from the field to the fuel station - the **hub has already achieved a potential financial impact of R\$ 50 million in our operations and our suppliers**, promoting work focused on various topics and technologies: artificial intelligence; telemetry; process digitization; aerial application and diagnostics; soil, yield and pest monitoring; safety; diversity; among other areas.

Since its creation in 2017, Pulse Hub has already hosted three hackathons, a sustainability tender, an energy project tender and multiple innovation journeys - a methodology in which the hub maps and identifies technology-based companies to generate opportunities and connect us with startups, thereby validating solutions for possible Proof of Concepts (POCs) or pilot projects. **To learn more about the hub's partnerships, visit www.pulsehub.com.br.**



INNOVATION IN ARGENTINA

In Argentina, we launched the second edition of the Impulso Raízen open innovation program in partnership with Endeavor. This is a competition aimed at startups and entrepreneurs who want to be part of the country's energy transformation.

To participate, each of the 100 candidates submitted an innovation project related to one of the following areas: Logistics & production processes, Customer relationships, Renewable energy and sustainability, and New technologies. The 13 finalists participated in a Demo Day, where they could present their projects directly to our panel of judges. The winning startup, Quales Group, won a trip to Brazil to visit our Pulse Hub and deepen its innovation strategy to provide solutions for the energy sector's transformation. Quales Group specializes in data solutions, engaging with its clients' businesses to process, organize, analyze and interpret data in a way that transforms them into insights that drive effective decision-making.

CORPORATE GOVERNANCE

| GRI 2-1, 2-23, 2-24,3-3 (Ethics & governance); WEF – Governance Pillar - Setting purpose |

We are a joint venture between Shell and Cosan and our shares have been listed on B3 (Brasil, Bolsa, Balcão) under ticker **RAIZ4** since 2021. Despite our Tier 2 listing, our governance practices are consistent with those required for listing on *Novo Mercado*, a segment bringing together companies that voluntarily adopt enhanced corporate governance practices above and beyond those required by Brazilian regulations. This is because we inherited the almost 100 years of experience boasted by our founders in corporate governance flows, practices and structures.

We have a series of standards, policies and procedures to govern how our activities should be managed, especially regarding compliance with legal, statutory and regulatory norms. **We also maintain a range of internal control mechanisms, combined with training for our employees.**

There are also documents and guidelines applicable to the related parties with whom we engage. These documents convey what we expect in terms of ethics and transparency when doing business with us.

The effectiveness of these controls is monitored through rigorous internal and external audit processes, with their findings reported periodically to the Audit Committee, which oversees the quality of the presented results and reports its progress to the Board of Directors.

We follow the highest standards of corporate governance.

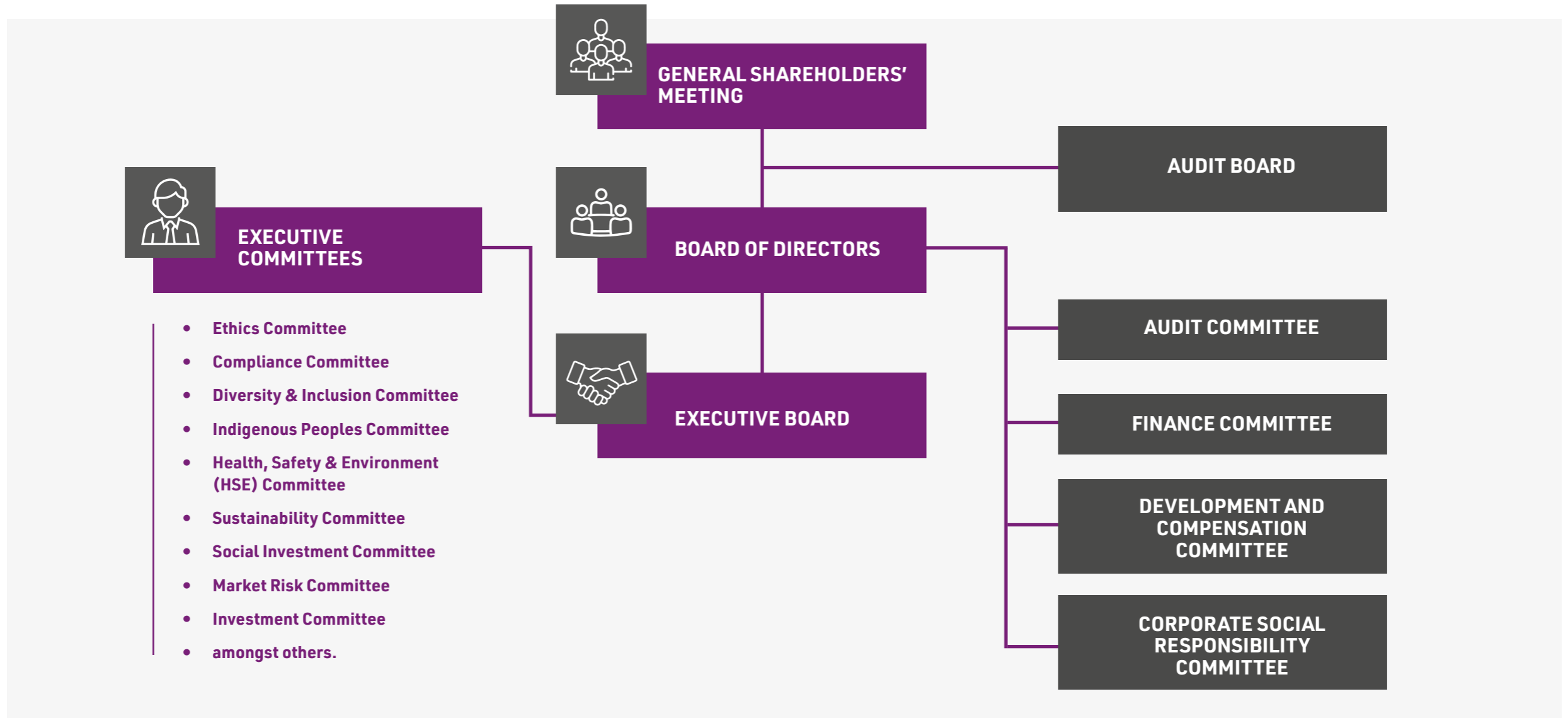


IN LINE WITH BEST GOVERNANCE PRACTICES, WE HAVE ADOPTED:

- **Segregation** of leadership duties (chairman of the Board of Directors and CEO). **| GRI 2-11 |**
- **Board of Directors** has eight members, 25% of whom are female independent members.
- **Transparent and timely investor communications**, including annual events to present our strategy and results; earnings calls; material facts disclosed concurrently in English and Portuguese, among other communication practices
- **Financial statements** independently audited and prepared in accordance with international financial reporting standards.
- **Voluntary compliance with the US Sarbanes-Oxley Act**, which requires that companies adopt mechanisms to ensure that financial reporting is readily verifiable with traceable source data.

GOVERNANCE STRUCTURE

[GRI 2-9; WEF – Governance Pillar - Governance body composition]



Ownership Structure

RAÍZEN S.A. SHARES						
SHAREHOLDER	NUMBER OF COMMON SHARES	% OF COMMON SHARES	NUMBER OF PREFERRED SHARES	% OF PREFERRED SHARES	TOTAL NUMBER OF SHARES	% TOTAL SHARES
Control Group	8,993,572,584	100.0%	121,621,650	8.9%	9,115,194,234	88.0%
Executives	0	0.0%	15,462,721	1.2%	15,462,721	0.2%
Treasury	0	0.0%	34,284,534	2.5%	34,284,534	0.3%
Other Shareholders	0	0.0%	1,187,567,995	87.3%	1,187,567,995	11.5%
Total	8,993,572,584	100%	1,358,936,900	100%	10,352,509,484	100%



GENERAL SHAREHOLDERS' MEETING

It meets ordinarily within the first four months after the end of each fiscal year, and extraordinarily whenever convened, in accordance with the requirements of the Brazilian Corporations Act, to decide on the election or removal of members of the Board of Directors, approve the company's accounts and financial statements, the aggregate and overall compensation of members of the Board of Directors and Executive Board, among other matters as set out in applicable laws and regulations and our Bylaws, which can be viewed [here](#).



WOMEN ON BOARD (WOB)

With **two female independent members**, we maintain the Women on Board (WOB) seal, an independent initiative that aims to recognize, value and promote the existence of corporate environments with the presence of women on boards of directors or advisory boards. We are thus striving to promote a corporate environment aligned with global trends towards gender equity in senior leadership.





BOARD OF DIRECTORS

The ultimate decision-making body, the Board of Directors meets quarterly and is responsible for providing recommendations to shareholders on overall strategy and priorities, providing general business guidance, developing and amending key policies, appointing and removing members of the Executive Board, approving the annual budget, approving material and related-party agreements, deciding on significant investments, among other duties described in our Bylaws, available [here](#).

The Board of Directors is composed of eight members, including two independent female executives and one LGBTQIAP+ member, highlighting **diversity within the board**. All members serve renewable terms of two years.

When selecting and appointing members of the Board of Directors, we always aim to ensure that the interests of different stakeholders are duly represented. We are also increasingly focused on diversity and inclusion in the selection of new members, aiming to provide representation for marginalized groups in society. In addition, the **composition takes into account qualifications such**

as prior board or executive experience, and proficiency in one or more of: finances and accounting, domestic and international markets, corporate governance, sustainability, compliance, internal controls, information security, risk management, and people management. Further information about the appointment and selection criteria can be found in our Reference Form, available [here](#). **|GRI 2-10|**

We are developing a performance assessment program for Board of Directors members, which will convey the expected skills of the directors and measure the board's performance in overseeing management and governance issues. The program will also consider the management of the impacts of our operations on the economy, the environment and people, among other ESG factors. With the support of an independent consultancy firm, the first evaluation will be conducted in 2023 and will be reassessed annually. **|GRI 2-18|**

Composition of the Board of Directors at 3/31/2023:

NAME (click on each executive's name to learn more about them)	TITLE	START OF TENURE
Rubens Ometto Silveira Mello	Chair	July 28, 2021
Luis Henrique Cals de Beauclair Guimarães	Director	July 28, 2021
Marcelo Eduardo Martins	Director	July 28, 2021
Huibert Hans Vigeveno	Director	July 28, 2021
Istvan Kapitany	Director	July 28, 2021
Brian Paul Eggleston	Director	July 28, 2021
Luciana de Oliveira Cezar Coelho	Independent member	July 28, 2021
Sonat Burman-Olsson	Independent member	July 28, 2021



AUDIT BOARD

In line with Brazilian Corporation Law, our Audit Board is an independent body separate from our management and external auditing, whose responsibility is to review management activities and financial statements, reporting its observations to the shareholders. Members of the Board of Directors, Executive Board or our employees, as well as spouses or relatives of our administrators, cannot serve on this board.



ADVISORY COMMITTEES

The Board of Directors may create statutory and non-statutory committees to provide advice on matters relevant to business conduct. These committees include members of the Board of Directors and invite the participation of representatives of our shareholders and members of our Executive Board as guests. See below a number of example.



Audit Committee: a statutory committee that ensures the quality and integrity of the independent audit; internal controls and internal audit functions; ensuring compliance with legal, statutory and regulatory requirements; and following up on action plans developed for identified risks, including climate-change risks.



Finance Committee: oversees and reviews the operational results in financial terms and evaluates the quality of financial reports.



Development and Compensation Committee: supports issues related to the Remuneration Policy, and is also responsible for overseeing and reviewing the results of operations regarding financial issues and the quality of our financial reports, among other functions.



Corporate Social Responsibility Committee: responsible for supervising our operations' performance in relation to Raízen's ESG Agenda. The committee meets quarterly and is composed of shareholder representatives who provide technical support to the Board of Directors. **|GRI 2-12|**

Audit Board Members at 03/31/2023:

Chair



Start of tenure : 07/22/2022

SERVING MEMBER



Start of tenure : 07/22/2022

SERVING MEMBER



Start of tenure : 07/22/2022

Through these committees, relevant topics related to our business and our Raízen ESG Agenda are brought to the attention of the Board of Directors, deepening deliberative discussions. Examples of this include the climate crisis framework and discussions on decarbonizing the economy, which were presented by the Corporate Social Responsibility Committee during the financial year. |GRI 2-17|



EXECUTIVE BOARD

The executive board is responsible for overall business management and for implementing the general policies and guidelines established from time to time by the Board of Directors. The management of our impacts on the economy, environment and society is an executive responsibility shared by all Executive Board members, especially the Vice President of Strategy and Sustainability, established in 2022. All members, including the CEO, are elected by our directors for renewable two-year terms.

Executive Board is responsible for overseeing our day-to-day operations

Executive Board Members at 03/31/2023:

NAME (click on each executive's name to learn more about them)	TITLE	START OF TENURE ²
Ricardo Dell Aquila Mussa	CEO	04/23/2021
Carlos Alberto Bezerra de Moura	CFO & Investor Relations	06/01/2022
Francis Vernon Queen Neto	Executive Vice President of Ethanol, Sugar & Bioenergy	04/23/2021
Jose Antonio Porteiro Cardoso	Executive Vice President, Downstream Commercial	12/01/2021
Frederico Barbosa Saliba	Vice President, Energy & Renewables	4/23/2021
Rodrigo César Caldas de Sá	Vice President, Legal	4/01/2022
Paula Carvalho Benevides¹	Vice President, Human & Organizational Development	-
Fabio Mota¹	Vice President, Business Services & Technology	-
Paulo Corte Real Neves¹	Vice President, Trading	-
Claudio Borges Teophilo Gaspar Oliveira¹	Vice President, Corporate Relations	-
Juliano Tamaso¹	Vice President, Supply Chain	-
Paula Kovarsky¹	Vice President, Strategy & Sustainability	-
Philippe Pierre Vincent Casbas¹	Vice-President of Safety and Environment	-

¹ Nonstatutory officers.

² All were re-elected on 04/01/2023.



EXECUTIVE COMMITTEES

Employees from different functions and organizational levels (including top management) meet on the following **executive committees** to discuss matters relevant to improving corporate practices:

- Ethics Committee
- Compliance Committee
- Diversity & Inclusion Committee
- Indigenous Peoples Committee
- Health, Safety & Environment (HSE) Committee
- Sustainability Committee
- Social Investment Committee
- Market Risk Committee
- Investment Committee

Each business also has a Governance Committee composed of the vice president of the business, their direct reports and the internal controls function, whose role is to address issues related to process improvements, internal controls, and internal audits.

Executive committees serve as the foundation for advisory committees, which help deepen the discussions that are later referred to the Board of Directors.



SUSTAINABILITY COMMITTEE

In order to further bolster our ESG governance structure we set up a Sustainability Committee in 2021. This committee is mainly composed of executives from our Executive Board and their direct subordinates who have significant involvement in at least one of our material topics.

The Sustainability Committee's main responsibility is to monitor and ensure the proper evolution of Raízen's ESG Agenda, which includes managing each of the material topics for the business. Each topic has a dedicated thematic discussion forum. The group is therefore responsible for advancing key practical actions that align with our medium and long-term commitments and the major global agendas for sustainable development.

MANAGEMENT COMPENSATION

[GRI 2-19, 2-20; WEF – Governance Pillar - Remuneration]

According to our Bylaws, available [here](#), the **overall remuneration of the Board of Directors and the Executive Board is established annually at the Annual General Shareholders' Meeting**, taking into account their respective roles and responsibilities, including the time dedicated to them, their professional capabilities and reputation compared to the standard of other executives and professionals, and the teams' collective performance of operational and profitability goals.

Historically, only the Chairman of the Board of Directors receives compensation, which includes a fixed and variable portion. The compensation is determined by the scope of the Chairman's assigned activities, the uniqueness of their role, and consequently the value that the shareholders believe the executive adds to our image. The fixed portion is paid monthly and adjusted annually, while the variable portion is determined based on the effective fulfillment of their responsibilities and the achievement of established goals. The executive is also entitled to a refund of expenses shown to have been incurred during their executive duties.

As more independent members have been appointed to our Board of Directors, we have established compensation commensurate with this position, namely monthly fixed remuneration aligned with our peers, based on evaluations conducted by external compensation consultancies.

Statutory officers, however, are part of our employee roster and subject to the same salary administration practices that govern the guidelines for other professionals on our team. This corresponds to the salary management guidelines for hiring, promotions and other movements at all levels. We also have a salary table that determines the salary and short- and long-term incentives, according to hierarchical level, that an employee may receive. However, the details of this practice are not available for external consultation as they are considered strategic.

Both statutory and non-statutory officers receive:

- Monthly fixed compensation determined according to market practices for positions of similar complexity.
- Long-term variable compensation, consisting of a Share-Based Compensation Plan.
- A benefits package, including medical and dental assistance plans, life insurance, an Employee Assistance Program (psychological support, social service, legal advice and financial consulting), vehicle financing and participation in a private pension plan which we also pay into (Short-Term Variable Compensation).

The Executive Board earns performance-related variable compensation.



The Short-Term Variable Compensation is triggered by minimum corporate performance targets and adjusted by individual performance, the performance of the areas under management and strategic deliverables. The core objective is to index a portion of total compensation to individual and collective short- and long-term goals in different areas, not just in ESG. These goals are distributed among different groups of executives to ensure broad coverage and application. The main topics include: diversity in hiring; environmental measures, such as reducing greenhouse gas emissions; health and safety; proper use of energy and conservation of natural resources; and community development in our geographies.

In accordance with Corporation Law, Oversight Board Members receive compensation amounting to at least 10% of the average paid to each Officer.

Members of our committees do not currently receive specific compensation, except for the coordinator of the Statutory Audit Committee, who is an independent member and does not serve in any other of our governance bodies. This executive receives monthly fixed compensation aligned with the market, based on surveys conducted by external compensation consultancies.

We conduct salary surveys to keep up with best market practices.

We rely on the support of a human resources consultancy firm to define salary ranges, and compensation is generally kept within 80% to 120% of these ranges. We conduct salary surveys to align ourselves with best market practices and other studies with consultancies to assess the competitiveness of our compensation package and understand market trends.

Further information about our compensation practices can be found in our Reference Form, available [here](#).



ETHICS AND INTEGRITY

| GRI 2-23, 2-25, 2-26, 3-3 (Ethics & governance); WEF - Governance Pillar - Protected ethics advice and reporting mechanisms, Governance Pillar - Anti-corruption |

We maintain a robust Ethics and Compliance Program, which encompasses actions, documents and procedures aimed at promoting and demanding ethical and integrity-driven behavior from all members of our team - regardless of position or hierarchical level. This program should permeate all our activities and underpin our relationships with stakeholders.

We are committed to best integrity and anti-corruption practices in and are signatories of the Business Pact for Integrity and against Corruption, a joint initiative of Instituto Ethos, the United Nations Development Program (UNDP), the United Nations Office on Drugs and Crime (UNODC), the World Economic Forum and the Brazilian Global Compact Committee, among other organizations. Throughout the 2022/2023 crop season we also participated actively in the Collective Action of the agribusiness sector promoted by the UN Global Compact, Brazil

Brazil, and contributed to the creation of an Anti-Corruption Best Practice Guide for Agribusiness.

Available [here](#), our Code of Conduct is the main reference for our employees, executives and contractors to make the right decisions, ensuring that we stay true to our values and business principles. The document addresses issues related to anti-bribery and corruption, competition ethics, asset and intellectual property protection, respect for individuals, promotion of diversity and inclusion, conflicts of interest, government relations and political activities and disclosure of relevant information, among other topics. A series of policies and procedures, available [here](#), clarify responsibilities and provide specific guidelines that must be observed by everyone involved in our operations, including partners. In 2022/2023, we launched the Raízen Supplier Code of Conduct and specific online training for them.

Part of our Ethics and Compliance Program is to raise awareness about combating fraud and illegal acts, which is done through robust communication and engagement actions and by training employees on the contents of our Code of Conduct and internal policies. Compliance training is available on an online platform and must be completed within 30 days after each employee joins our team, with periodic reapplication. Specific

training is provided tailored to the position or activity. Examples include high-risk professionals, who must also undergo in-person and/or live online training on anti-corruption and/or competition compliance - these trainings are refreshed every two years.

We work to align our business partners around expected conduct through communications, the Raízen Supplier Code of Conduct, contractual clauses and agreements with the team they are involved with, as well as Integrity Audits (due diligence), especially for hired contractors who will deal with government officials.

Violations of laws, the Code of Conduct, or any internal policies must be reported. To do this people can use an Ethics Channel accessible by phone in Brazil (0800-772-4936), Argentina (0800-345-1701), Paraguay (009-800-120-004), the United States (1 800 509-4201) and Switzerland (0800-898-773), or by using the link canalconfidencial.com.br/raizen and canaldeetica@raizen.com.





This channel is managed by an independent firm, ensuring whistleblower confidentiality and anonymity. Whistleblowing reports are aggregated before being submitted to the Ethics Committee, which reports to the Audit Committee, which in turn reports to the Board of Directors.

Employees who violate our Code of Conduct or any laws or internal policies will face disciplinary action, including termination of employment. Violations involving third parties may result in termination of the business relationship. Any violation involving a criminal act will be reported to the appropriate authorities and may result in criminal proceedings against those involved.

The internal integrity mechanisms and procedures are evaluated by Compliance, Internal Audit and Corporate Controls, which work in unison to ensure our Ethics and Compliance Program is effective. Corporate Controls reports to the Vice President of Finance; Internal Audit reports to the Audit Committee; and Compliance reports to the Vice President of Legal. Matters pertaining to these three areas can also be reported to the Audit Committee and the Board of Directors, or led by the Audit department, although less frequently.

Further information about our Ethics and Compliance Program can be found in our Reference Form, available [here](#).

CONFLICTS OF INTEREST

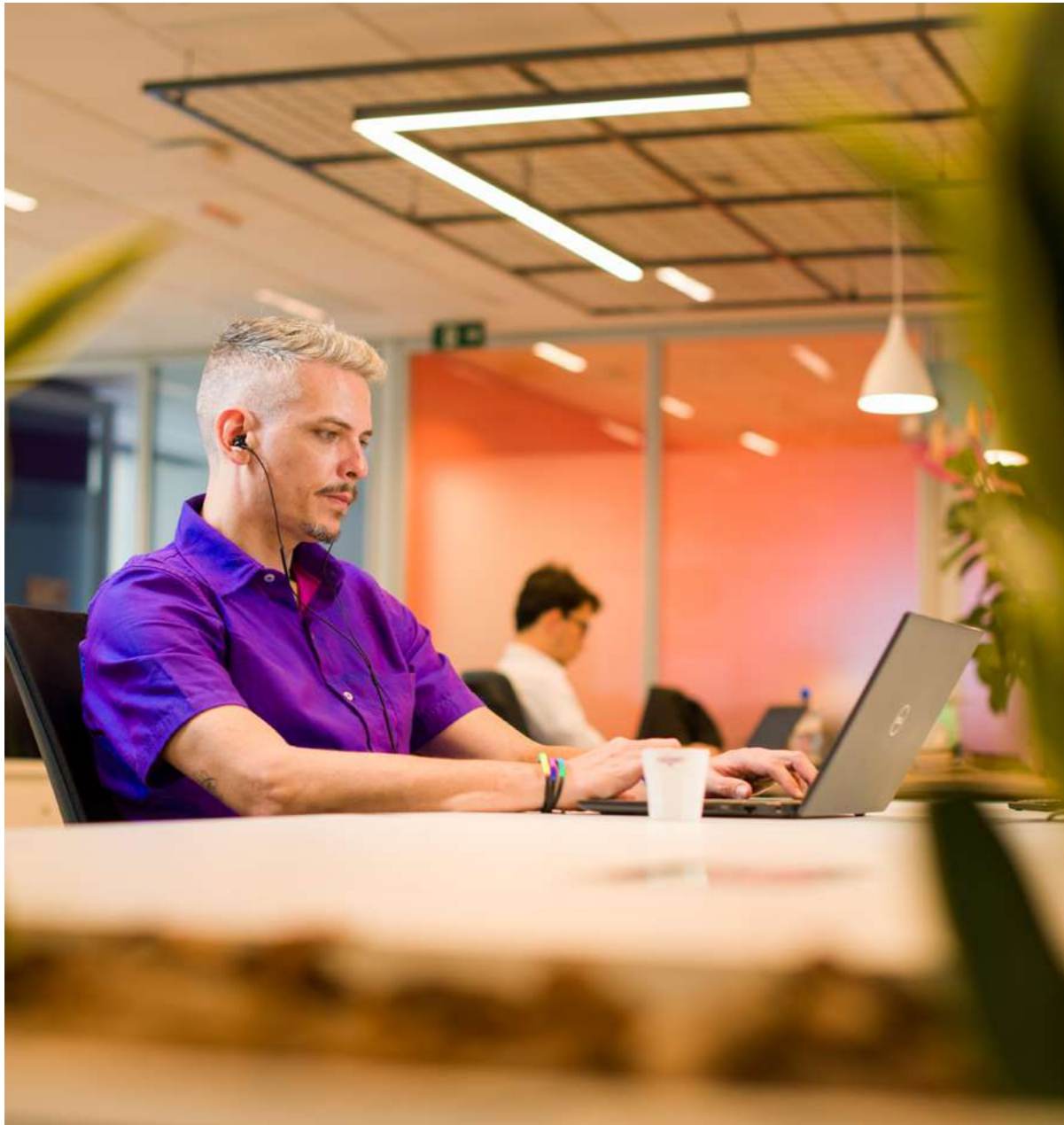
| GRI 2-15 |

We respect our employees' right to privacy in their personal activities. However, it is possible that personal interests may conflict with our corporate guidelines. In such cases, an employee who comes across an actual or potential conflict situation has to report the situation through a specific communication channel available on our intranet. This allows the necessary measures to be taken to protect all parties involved.

Board of Directors members must abstain from participating in discussions that may present a conflict of interest, especially if there is a risk of putting our administration

in a potentially disadvantageous position in terms of competition or violating applicable antitrust and competition laws.

All transactions with related parties are formalized in writing and referred to the Audit Committee to be included in the report for the Board of Directors. This is done to mitigate potential conflicts of interest. If a related-party transaction exceeds R\$ 50 million, we issue a public communication to the Brazilian Securities Commission (CVM).



INFORMATION PROTECTION

We maintain guidelines and general procedures to ensure that our entire team operates in line with rules regarding the treatment and protection of assets and information, and to **ensure our ability to detect, prevent and mitigate any such risks**. To achieve this, we follow best market practices, such as the ISO 27001 series standards and the NIST-CSF international framework, dedicated to enhancing controls, with periodic measurement of risk maturity scores accompanied by executive forums.

This topic is overseen by the Audit Committee and receives exclusive dedication from a central team and local teams - led by our Vice President of Business Services and Technology (SN&Tech) - who meet regularly to exchange experiences, share best practices and monitor indicators that assess the effectiveness of security controls for increasing maturity.

The main **Strategic Security Planning** initiatives are monitored, with a description of actions, deadlines, responsible parties and an indication of the maturity evolution status in each security control domain.

We also invest constantly in software upgrades to increase our ability to detect and rapidly respond to threats and attacks and correct vulnerabilities. We periodically perform tests as part of efforts to monitor and improve our networks and systems.

Internal campaigns hammer home the notion that everyone on the team is a guardian of the data they handle. Communications raised awareness about security risks outside the workplace in employee's daily lives with their families, and how to protect their personal data.

Specifically for suppliers engaged for data processing and storage we shared Information Technology and Security Requirements for Suppliers, available [here](#), a policy containing additional requirements on the minimum information technology and security controls required for the protection of our assets, systems and information.

RISK MANAGEMENT

| GRI 2-12, 2-16; WEF - Governance Pillar - Integrating risk and opportunity into business process |

Our Risk Management Policy, available [here](#), outlines principles, guidelines and responsibilities to be observed in the risk management process and to control or mitigate operational, strategic and regulatory risks.

Established based on the guidance of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) methodology, the document provides guidance for:

Risk management is an integral and fundamental part of our activities



IDENTIFYING, assessing, forecasting and monitoring the risks we face.



DETERMINING risk appetite for decisions and actions taken to achieve strategic and business objectives.



IDENTIFYING opportunities and threats.



COMPLIANCE with policies, standards and legal and regulatory requirements.



ENHANCING market information reporting.



PROTECTION our assets.



Applying the guidelines established by our policy is monitored by governance bodies, managers and owners of the operations, following the three lines of defense model (management, supervision and independent assessment, respectively). Risk management is therefore an integral and fundamental part of our daily activities, contributing to the structured and sustainable growth of our financial results and profitability and cementing our position as a sound, efficient and socially responsible company.

Based on the established guidelines, we maintain an updated risk matrix, which is monitored at all levels of the team and at various stages within corporate processes and by senior management. Our matrix is reviewed frequently, and is subject to approval by the Audit Committee, which advises the Board of Directors.

Both the Board of Directors, the Audit Committee, the Risk Management and Internal Controls department have the role of: reviewing and approving the general definitions of risk strategies, including our Risk Management Policy; setting risk appetite levels based on strategic objectives; and periodically evaluating whether our risk management processes are enabling us to achieve our strategic objectives.

IDENTIFIED RISKS ARE ALSO GROUPED INTO SIX CATEGORIES:

- Strategic** – the risk that decision making by senior management could result in substantial financial losses.
- Operational** – the risk of losses (of production, assets, customers, revenues) occurring as a result of gaps, deficiencies or weaknesses, or climate factors (see more in the next page).
- Financial** – includes market risks to our financial position and cash flows from volatility in commodities prices, foreign-exchange rates, inflation rates and energy costs; and/or credit risks, or the risk that our counterparties may not be able to honor their financial obligations
- Regulatory, Legal & Compliance** – the risk of noncompliance with the laws and regulations issued by central and local governments, and regulations issued by regulators or internally
- Information** – the risk of losses of, inappropriate use of, access to or unauthorized disclosure of the personal data of internal or external stakeholders, posing a threat to our business.
- Reputational** – the risk of damaging our reputation and losing credibility. Corporate risks are managed so that they are consistent with the risk appetite established by Top Management, providing reasonable assurance of our ability to meet business goals.



ESG variables and factors also inform the definition of our risk matrix. We have also adopted complementary formal policies aimed at managing our risks, such as the Donations Policy, Trading Policy, Treasury Policy, Related-Party Transactions Policy, Integrity Policy, and the Audit Committee's Rules of Procedure. Our policies and internal regulations of our bodies and departments can be consulted [here](#).

Risks related to our operations are duly identified, classified and monitored.

CLIMATE OPPORTUNITIES AND RISKS

[GRI 201-2, 11.2.2, 11.2.2]

We have an integrated multidisciplinary process for managing different types of risks. For this purpose, a mapping study was conducted to identify and assess the risks and opportunities arising from climate change using a methodology based on global climate models that integrate CMIP5 data provided by the Program for Climate Model Diagnosis and Intercomparison (PCMDI) to analyze precipitation, air temperature, surface wind and relative humidity variables. To bring the outcome closer to our reality, we localized the data by cross-referencing it with the location of operations, including ethanol, sugar, and bioenergy production, fuel distribution (distribution terminals, airports and third-party distribution routes), and upstream transportation.

In addition to climate models and facility locations, the study included interviews with those responsible for business operations and our expansion strategy, and on global market trends in a low-carbon economy, together with our risk management methodology. Based on the intersection of these methodologies and information, the result was a mapping of the risks and opportunities

associated with all our operations, considering a future climate scenario in terms of physical impacts, reputation and the market.

The risks and opportunities identified and assessed were included in the business risk matrix and are managed according to our standard methodology, which prioritizes identified risks based on impact intensity and probability of occurrence. The matrix is reviewed annually, and the prioritized risks are aligned with business plans with the support of leadership.

After these definitions, the risks undergo several rounds of validation and action plans are put together. Throughout the year, the owners of each risk and action plan are prompted by the controls portal to report on the progress made by actions. Leadership also has access to this monitoring, and if action plans are not rolled out, the owners are notified.

To prevent operational disruptions in the event of contingencies, we have developed a Business Continuity Plan for Critical Business Processes, which is reviewed annually



by managers to identify critical processes. For every risk factor, we develop scenarios and work plans which are periodically simulated and the results reported to the Executive Leadership.

Leadership develops and monitors action plans for each risk factor identified.

THE MAIN IDENTIFIED RISKS AND OPPORTUNITIES ARE:



PHYSICAL RISKS

- Rising sea and/or river levels
- Higher average temperatures
- Extreme cold and/or heat events
- Extreme weather events
- Infeasibility of operating in port areas due to rising sea and/or river levels
- Need to adapt transportation conditions due to higher average temperature and extreme cold and/or heat events
- Deterioration of sugarcane juice, affecting the quality of sugar, due to higher temperatures, and
- Higher operational costs due to the occurrence of extreme weather events.



REGULATORY RISKS

- Taxation and price regulation associated with climate change mitigation policies
- Lowering demand for fuels due to urban transportation electrification
- Taxation on fossil fuels, leading to higher operational costs and a wave of divestments out of fossil fuels due to unfavorable regulatory measures
- Restrictions on international ethanol trading
- Regulations against fossil fuels
- Investment costs for implementing greenhouse gas mitigation plans
- Retrofit and fleet replacement projects due to policy changes
- Higher insurance costs; and
- Rising bioenergy market prices.



OPPORTUNITIES

- Higher sugar content in sugarcane due to temperature rises
- Improved efficiency in biomass burning
- Lower irrigation costs due to higher rainfall volume
- Increasing demand for biofuels
- Higher demand for second-generation ethanol (E2G) in international markets; and
- Increased availability of capital for renewable energy investments.

Risks and opportunities resulting from climate change are mapped and periodically monitored. For measurement purposes we estimate the financial impacts, as shown in the following table:

FINANCIAL IMPACTS OF CLIMATE CHANGE RISKS AND OPPORTUNITIES (R\$)	FINANCIAL IMPACTS OF RISKS AND OPPORTUNITIES (BEFORE MEASURES ARE TAKEN)	ESTIMATED COSTS OF MEASURES TAKEN TO MANAGE THE RISK OR OPPORTUNITY
Carbon pricing mechanisms	R\$ 498,152,940	R\$ 5,960,000
Changing rainfall patterns	R\$ 195,922,500	R\$ 800,000
Changing consumer behaviors	R\$ 43,750,000	R\$ 1,336,700
Higher demand for products and services	R\$ 495,000,000	R\$ 2,157,120
Carbon trading	R\$ 186,036,000	R\$ 2,640,000

For further information check the material we prepared according to the Task Force on Climate-related Financial Disclosures (TCFD), available [here](#).

Control measures are implemented to monitor the identified risks.



SECTORAL PARTICIPATION

[GRI 2-23, 2-24, 2-28; SASB RR-BI-530a.2]

We endorse public commitments to external initiatives as a way to reinforce our corporate responsibility while aligning ourselves with other global leaders in cultivating a more ethical, equal, fair and sustainable future. We joined the UN Global Compact, an initiative to engage the private sector around business practices related to human rights, labor, environment and anti-corruption. The **Principles of the Global Compact** and the **Sustainable Development Goals** (SDGs) are embedded in our Sustainability Strategic Plan, which spurs to accelerate initiatives during the Decade of Action (2020-2030) that aim to protect the environment and climate and ensure that people can thrive sustainably.

We are also signatories of the Business Pact for Integrity and against Corruption, a joint initiative of Instituto Ethos, the United Nations Development Program (UNDP), the United Nations Office on Drugs and Crime (UNODC), the World Economic Forum, the Brazilian Global Compact Committee, among other organizations; and support Instituto Combustível Legal, an organization created as part of a movement launched by Plural

(formerly Sindicom) to foster an ethical and fair business environment in which all players compliantly pay their taxes and engage in fair competition.

As a signatory to the Business Pact against Roadside Exploitation of Children and Adolescents, the leading program of the In the Right Hands Program proposed by Childhood Brasil and Instituto Ethos. The initiative aims to encourage companies to commit to this important cause.

We seek to enhance our international leadership by participating in important initia-

Global Compact Principles and SDGs are part of our Strategic Sustainability Plan.

tives such as Business20 (B20), the private sector representation in the Group of Twenty (G20 - group of the world's 20 largest economies), and the Conference of the Parties to the United Nations Framework Convention on Climate Change, also known as COP.

In 2022, we held the co-chair position of the B20 Energy Task Force and had the opportunity to jointly form policy recommendations delivered to heads of state and G20 leaders at the end of the year. These recommendations emphasized the importance of biofuels for the energy transition and the need for countries to commit to solutions such as biogas, biomethane and biofuels for the decarbonization of hard-to-abate sectors.

We also attended COP27 in Sharm-el-Sheik, Egypt, presenting the case of sugarcane as an agricultural crop with distinctive sustainable attributes in panels organized by the Brazilian government, foreign stakeholders and private sector representatives.



We also participate in the following organizations to discuss these and other issues:

GRI 2-28



IN BRAZIL

- Sugarcane Industry Association (UNICA)
- Brazilian Association of Port Terminals (ABTP)
- Bonsucro – a certification organization that promotes sustainable sugarcane production
- Brazilian Agribusiness Association (Abag)
- Brazilian Association of Biogas and Biomethane (ABiogás)
- National Association of Freight Transportation Users (ANUT)
- Brazilian Petroleum Institute (IBP)
- Brazilian Association of Self Generators (ABIAPE)
- Brazilian Association for Solar Power (ABSolar)
- Brazilian Bioinnovation Association (ABBI)
- Brazilian Corporate Network to Assess Lifecycles (Rede ACV)
- Ethanol Manufacturing Industry Trade Union of Goiás State (SIFAEG)
- Mato Grosso do Sul Bioelectricity Producers' Association (BIOSUL)
- Minas Gerais Sugar and Ethanol Industry Association (SIAMIG)
- Brazilian Downstream Association (ABD)
- Association for the Alcohol, Sugar and Similar Manufacturing Industry (UDOP)
- Forestry Certification and Management Institute (IMAFLORA)
- Brazilian Association of Listed Companies (ABRASCA)
- Brazilian Institute of Business Law and Ethics (IBDEE)
- Brazilian Wholesale Electricity Association (ABRACEEL)
- Center for Tax and Financial Studies (CCIF)
- Plural, for the Brazilian Union of Fuel Distribution Companies (Sindicom)



IN ARGENTINA

- Fundación de Investigaciones Económicas (FIEL)
- Cámara Argentina de la Energía (CADE)
- Consorcio del Puerto de Dock Sud; and Instituto Argentino del Petróleo y Gas (IAPG)
- Asociación Empresaria Argentina (AEA)
- Instituto para el Desarrollo Empresarial de la Argentina (IDEA)
- American Chamber of Commerce (AmCham)
- Cámara Argentina de Lubricantes
- Comisión Permanente del Asfalto
- Asociación Argentina de Carreteras
- Latin America Refining Technology Conference (LARTC)
- Asociación de Grandes Usuarios de Energía Eléctrica de la República Argentina (Aguera)
- Sociedad Argentina de Mejora Continua (SAMECO)
- American Petroleum Institute (API)
- Instituto Argentino de Normalización y Certificación (IRAM)
- Asociación de Higienistas de la República Argentina (ARHA)
- Corrosion Institute (NACE)
- Asociación de Corredores de Turismo Carretera (ACTC)
- Asociación de Empresas de Petróleo, Gas y Energía Renovable de América Latina y el Caribe (ARPEL)



INTERNATIONAL ASSOCIATIONS

- Advanced Biofuels Association (ABFA)
- US Grains Council (USGC)

We are spearheading the energy transition agenda in Brazil.

We also engage in advocacy work to influence the formulation of national public policies and decision-making processes and to raise awareness and mobilize stakeholders in strategic international markets, in order to expand our footprint and strengthen the development of the sugarcane and renewable energy sector, and society as a whole. This work is carried out in cooperation with various departments, such as Government Relations, responsible for relationships with national and international public authori-

ties; Trading and Sustainability, focusing on regulatory issues and sustainability criteria, particularly analyzing mandates from other countries; and other teams that contribute studies and technical inputs that support our advocacy efforts.

From a governmental perspective, the prominence of ESG as a priority for government and civil society is a reality. The increase in the number of legislative proposals aimed at regulating economic activities and their potential environmental impact currently making their way through the National Congress reflects these concerns:

- **Bill 2159/2021**, about environmental licensing.
- **Bills 2148/15 and 412/22**, which aim to create a regulated carbon market.
- **Bill 572/2022**, which among other points is proposing joint liability of the entire production chain (including investors) for alleged human rights violations.
- **Bill 1085/2023**, which addresses wage and salary equality between women and men doing the same job, through an amendment to the CLT (Brazilian Labor Laws).

- **Bill 1202/2017**, which regulates the activity of lobbying and the role of pressure or interest groups.

- **Bill 2.646/2020**, which aims to introduce infrastructure debentures in the Brazilian financial market, which are not unlike incentivized debentures.

These are just a few examples of initiatives that we monitor through the industry associations we are part of.

We believe the transition to more socially and environmentally responsible and inclusive business models involves certain risks, including the costs of complying with new regulations, increased transparency and the need to develop new technologies, state government subsidies and public funding for compliance with environmental requirements. We also envisage opportunities to leverage the Raízen ESG Agenda, as we have a diversified portfolio of renewable products and the potential to contribute to public policies that recognize and reward producers for the positive externalities they generate.



ESG MANAGEMENT

[GRI 2-12, 2-13]

With the support of the Social and Corporate Responsibility Committee and the Audit Committee, the Board of Directors monitors the performance of the **Raízen ESG Agenda** and strategically steers the action plans adopted in response to challenges and opportunities.

A part of the Executive Vice Presidency of Strategy and Sustainability, Sustainability Management provides technical support to the Audit Committee on climate-related issues and is responsible for mapping and managing the climate change risks and opportunities that should be included in the risk matrix.

Supported by the Sustainability Committee, the Executive Board foments actions that ensure the Raízen ESG Agenda moves forward, regularly reporting to the Board of Directors, bridging the gap between senior management and the parties responsible for the topics that make up our Strategic Sustainability Plan.

The impacts of our activities on the economy, environment and people are accordingly periodically reported to the Board of Directors. If there are any critical issues that have not yet been addressed, the Executive Board is engaged to ensure the practical implementation of the Board's recommendations.

Every two years, these impacts - both real and potential, positive and negative - are corporately consolidated through the materiality process (see the following page).

Each team directly responsible for managing at least one material topic has a specific engagement and monitoring action plan. The progress status of these initiatives must be reported to the Board at each Social and Corporate Responsibility Committee meeting, held quarterly, until full resolution.

The Raízen ESG Agenda is primarily managed by executives from HSE; Institutional Relations and Strategy and Sustainability departments - a Vice Presidency created to



bolster the connection between our business model and our Raízen ESG Agenda, bringing together the areas of Strategy, New Business, Mergers and Acquisitions (M&A) and Sustainability. It further incorporates environmental, social and governance into our strategy and decision-making processes, including those related to capital allocation.

We have maintained the governance of our Raízen ESG Agenda.

PRIORITY TOPICS

| GRI 3-1; WEF - Governance Pillar - Material issues impacting stakeholders |



We integrate environmental, social, economic and governance to create and share value with our stakeholders, ensuring the longevity, competitiveness and responsibility of our business and fulfilling our purpose of redefining the future of energy. The materiality process is an important step in this journey as it conveys a clear understanding of our impacts, both real and potential, positive and negative, and helps us understand stakeholder expectations around our ESG management.

The latest materiality review was conducted in late 2022 and included an assessment of the general context of our activities and business in terms of sustainability and identification of the groups we engage with. With the support of external consultants, over 30 documents were analyzed in this stage, including reports, sector studies, impact assessments, risk matrices and sustainability strategies of other companies in our sectors.

We subsequently mapped the most material impacts of our business on the economy, environment and people, including human rights impacts. This phase involved key areas of our team to identify, map and prioritize impacts.

In accordance with the double materiality concept, our aim was to identify both the impacts of our business on the economy, society and the environment and the impacts of externalities on our results and performance. The impacts were accordingly placed in a matrix, with the column depicting the view of employees and external stakeholders; and the row the insights of the players who steer our business: Vice-presidents, CEO and ESG Ambassadors, plus shareholders and investors.

We lastly identified the main stakeholders whose interests are affected by us. In-depth interviews and discussions were held with the representatives of priority groups and an online survey was sent to other stakeholders. There were a total of:



22 internal interviews with company leaders



1 discussion with staff in Brazil



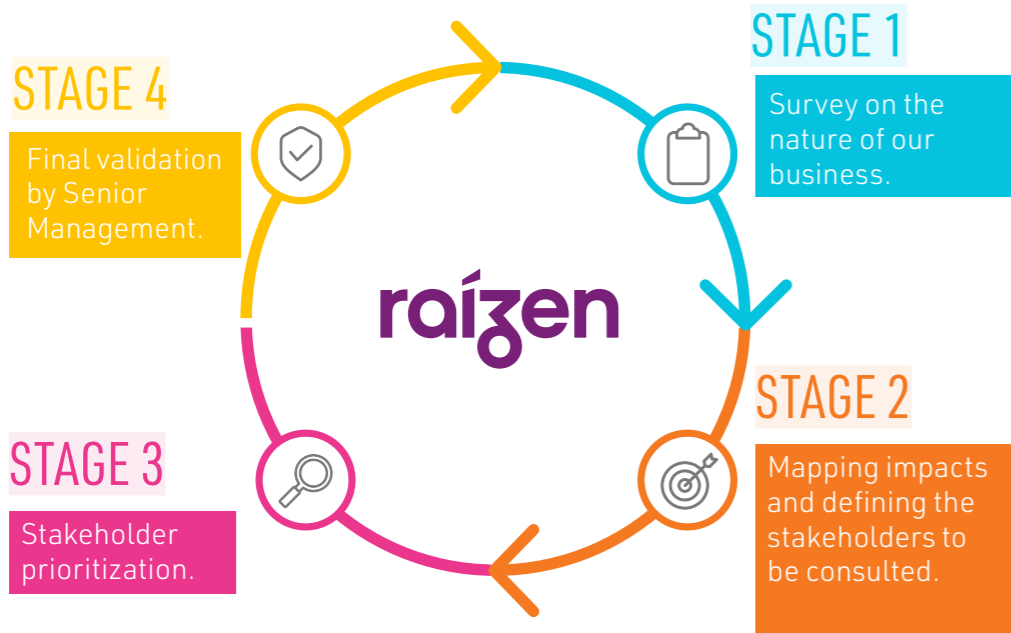
8 interviews with shareholders, investors, certain clients and a sector specialist, and

1,768 responses from different audiences to the online questionnaire, with a wider range of stakeholders (clients, suppliers, investors and shareholders, unions, NGOs, employees, press, government, among others).

In the final stage, the impacts weighted by stakeholder were grouped into material topics and the result was validated by Senior Management.



MATERIALITY REVIEW



Although it does not make significant changes o topics compared to the previous version, the new materiality reinforces important issues for our management that, in this case, gained significant relevance from this exercise and therefore gained more prominence among the topics. These are: maintenance of good agricultural practices and biodiversity management, maintenance of high standards of corporate governance and looking after the well-being of our employees, topics 2, 4 and 7, respectively.

Compared to the previous materiality, the topics "Health, safety and environmental management", "Innovation, development and circular economy" and "Financial-economic performance and business expansion" ceased to be material, as they were integrated into our management and are already part of the business strategy. Previously grouped with human rights, the topic "Diversity & inclusion" gained prominence and became a topic in its own right, and health, which remains material, was grouped with human rights to form the topic "Human rights & well-being".

Based on material topics, since the 2018/2019 harvest we have developed and kept our Strategic Sustainability Plan updated, which contains long-term goals and actions with direct involvement of our Vice Presidents and CEO. This endeavor has significantly enhanced the maturity of our Raízen ESG Agenda management and governance. Following the constant updates, in 2022/2023 the plan was revisited in light of the new materiality findings.

For each of the topics, we have set ambitions and objectives to be achieved by structured actions and conducted by technical working groups, which report indicators and progress to the Corporate Social Responsibility Committee.

In order to sell this ambitious Strategic Plan to our leaders, variable compensation was indexed to the teams' ESG performance. This is a strategy to keep executive management responsible for achieving not only their business goals but also those that comprise our Sustainability Strategic Plan.

A corporate goal was established that measures how much our renewable product portfolio avoids emissions compared to a fossil substitute, in tons of CO₂ equivalent. This goal is indexed to the variable compensation of all employees. One of the ways we meet this target is by expanding our portfolio of renewables and reducing the carbon footprint of our products.

Our Strategic Sustainability Plan also addresses some of the biggest challenges of the United Nations (UN), which shows our genuine intention to generate and grow positive impacts by 2030, while we strongly support society in redefining the future of energy through the development of high-value solutions for our main stakeholders.

This process identified the following material topics:

List of material topics | GRI 3-2|

- | | |
|--|--|
| 1. Climate change and emissions management | 5. Community engagement |
| 2. Agricultural management & biodiversity | 6. Sustainable sourcing |
| 3. Diversity & inclusion | 7. Human Rights and well-being, and |
| 4. Ethics and governance | 8. Water management. |

MATERIALITY 2022/2023 | GRI 3-1, 3-2, 3-3; WEF - Governance Pillar - Material issues impacting stakeholders |

We now present the findings of our materiality assessment, which was conducted by an external consultancy through a broad process of actively listening to multiple stakeholders. The results were evaluated and weighted, based on internal prioritization, to inform our short-, medium- and long-term planning. The results, however, do not necessarily convey the maturity status of the Raízen ESG Agenda.

For each of the following topics, we present relevant sub-topics, main related impacts, stakeholders that prioritized the topic, and the correlation with our Raízen ESG Agenda and Sustainable Development Goals (SDGs). All topics are material across our value chain: from our raw materials to our customers and consumers, except for the topics "Agricultural management & biodiversity", which is material in our operations and in the upstream activities of our value chain; and "Diversity & inclusion", which is material in our operations and in the downstream activities of our value chain.

CLIMATE CHANGE AND EMISSIONS MANAGEMENT

The sub-topics that make this topic material include spearheading the energy transition and global decarbonization, creating partnerships with customers and partners in the pursuit of new solutions, decarbonization targets and GHG emissions management (especially Scope 3), carbon market trading and climate adaptation.

Potential and real impacts that may be related:

- **Positive:** Promoting renewable fuels.
- **Negative:** Cost of implementing greenhouse gas mitigation plans; GHG emissions; Changes in the topic's regulatory framework at the national and international level.

Stakeholders consulted that prioritized the topic: Raízen leadership; Shareholders and investors; Trade associations/specialists; Customers; Suppliers; Service providers.

Raízen's 2030 Agenda commitments related to the topic: Increase renewable energy production by 80% by 2030; Reduce the ethanol carbon footprint by 20%, by 2030; 80% of Adjusted EBITDA will come from renewable businesses by 2030; Reduce carbon intensity of product usage by 10% by 2030.

Progress and related initiatives: At harvest onset we upscaled our ambition, with goals that reinforce our role as profitable decarbonization leaders for ourselves and our customers.

Related Sustainable Development Goals (SDGs):



AGRICULTURAL MANAGEMENT & BIODIVERSITY

Sub-topics that make this topic material include ecosystems preservation and conservation, commitment to zero deforestation, fire prevention and fighting, soil quality and the use of agrochemicals/pesticides.

Potential and real impacts that may be related:

- **Positive:** Biological control of pests and diseases instead of using agrochemicals; Ecological restoration practices; Minimum socio-environmental conduct requirements of agricultural certifications.
- **Negative:** Activities in agricultural operations (soil contamination, fires, soil erosion and damage to local fauna); Dwindling availability of natural resources; Risk of converting native vegetation into productive areas; Intensive use of natural resources in the supplier chain.

Stakeholders consulted that prioritized the topic:

Shareholders and investors; Trade associations/specialists; Customers; Surrounding communities; Media and press; Social organizations and NGOs; Service providers; Unions.

Raízen's 2030 Agenda commitments related to the topic: Increase the GJ/ha indicator by 15%; Maintain a traceability system covering 100% of

our sugarcane crush volume.

Progress and related initiatives: The efficient and sustainable use of land is one of our priorities in the sustainability agenda. That's why we invest in regenerative agriculture and circularity practices that allow us to aspire to producing 15% more energy products from the same harvested sugarcane area. This will be achieved through greater productivity in the field and better use of industrial waste. On the traceability issue, we are already very close to sourcing all our raw material from georeferenced farms, which has rewarded us with unprecedented growth in Brazilian agribusiness: we have pledged to processing sugarcane this is not only traceable, but also produced in areas free of illegal deforestation since 2008. With a cut-off date of 15 years, this commitment is unmatched in Brazil and affords us a prominent position, showing that sound environmental management is a business premise that fosters the preservation of natural resources and biodiversity.

Related Sustainable Development Goals (SDGs):



ETHICS AND GOVERNANCE

The sub-topics that make this topic material include combating and preventing corruption, anti-trust practices and competition advocacy; diversity in governing bodies; establishing clear ethical criteria for operations in new markets; corporate risk management framework; sustainability governance; corporate governance; and protecting noncontrolling shareholders' rights.

Potential and real impacts that may be related:

- **Positive:** Collaborating with other stakeholders towards common goals (e.g., through associations, forums); Influencing the ethical behavior of employees, by leveraging policies, procedures and training.
- **Negative:** Bureaucratization of processes; Changes in legislation related to product marketing in international markets; Non-compliance with legal requirements and risk of corruption cases.

Stakeholders consulted that prioritized the topic:

Raízen Leadership; Employees; Suppliers; Media and the Press.

Raízen's 2030 Agenda commitments related to the topic: To be an active member in multis-takeholder sector groups, leading at least one

group. To foster significant changes in relation to combating corruption and increasing transparency; To actively influence our counterparts, who must share Raízen's Ethics & Compliance values, through respecting and strictly following our policies.

Progress and related initiatives: Everything we do is guided by ethics and transparency, as we recognize the importance of trust-based relationships for the success of our partnerships throughout the value chain. We benchmark best practices in compliance and are signatories of the Business Pact for Integrity and against Corruption, a joint initiative of Instituto Ethos, the United Nations Development Program (UNDP), the United Nations Office on Drugs and Crime (UNODC), the World Economic Forum, the Brazilian Global Compact Committee, among other organizations.

Related Sustainable Development Goals (SDGs):



DIVERSITY & INCLUSION

The sub-topics that make this topic material include accessibility in the company's spaces and operations, attracting and retaining employees, fighting discrimination, growing organizational culture, promoting underrepresented groups (women, black people, LBGTQIAP+, PWD), retaining women and training and education.

Potential and real impacts that may be related:

- **Positive:** Including and retaining under-represented groups; Growing the company's intellectual capital (from training and education); Efficiency gains with teams (through job satisfaction);

Programs aimed at promoting diversity;
Easing social inequalities.

Stakeholders consulted that prioritized the topic: Raízen Leadership; Employees; Suppliers; Media and the Press.

Raízen's 2030 Agenda commitments related to the topic: Have at least 30% of leadership positions filled by women by 2025.

Progress and related initiatives: We have been striving hard to evolve our commitment to gender diversity in leadership roles linked to the variable compensation of the leaders of different teams - and in achieving the Women on Board (WOB) certification for gender diversity in our Board of Directors. In 2022/2023, we launched the second edition of the Diversity Census, with the aim of getting to know and understand the different profiles of our employees. Based on this information, we want to instill and assertively pursue a workplace that is even more diverse, healthy, respectful and inclusive for everyone.

Related Sustainable Development Goals (SDGs):



COMMUNITY ENGAGEMENT

The subtopics that make this topic material include the training and sourcing of local labor, managing negative social impacts across the entire value chain and various businesses, relationships with traditional and indigenous communities, and ongoing engagement and dialog with surrounding communities and other relevant stakeholders in the territory.

Potential and real impacts that may be related:

- **Positive:** Income generation in our geographies; Improving the quality of life for people benefiting from social programs and projects, and programs of Raízen and Raízen Foundation;
- **Negative:** Social and environmental impacts on communities near operations (air pollution, noise generation, traffic accidents, blockage of accesses and/or traffic on roads, and damage to public or private roads); Potential disputes for land and water use; Potential conflicts with traditional communities or indigenous peoples; Risk of child and/or female sexual exploitation in logistics operations.

Stakeholders consulted that prioritized the topic: Raízen leadership; Shareholders and investors; Trade associations/specialists; Employees, Local communities, Social organizations and NGOs;

Raízen's 2030 Agenda commitments related to the topic: Drive education initiatives in 100% of Raízen's geographies through Raízen Foundation programs.

Progress and related initiatives: We have carried out socio-economic assessments in 100% of our geographies, and 50% of our units have Community Engagement Plans. In 2022, we entered a partnership with BNDES which will help scale up Raízen Foundation's presence and leave a legacy in the field of education.

Related Sustainable Development Goals (SDGs):





SUSTAINABLE SOURCING

The subtopics that make this topic material include the assessment of socio-environmental impacts throughout the supply chain, expanding the Elos Program beyond sugarcane suppliers, developing local suppliers, competing for raw materials, diversifying means of transport, and relations with retailers.

Potential and real impacts that may be related:

- Positive:** Higher agricultural productivity; Training the local workforce; Strengthening the local economy; Promoting Human Rights in the sugarcane supply chain (through the Elos Program); Easing potential negative socio-environmental impacts in the supplier chain; Optimizing the use of natural resources; Reducing water intake; Reducing GHG emissions.

- Negative:** Collisions/accidents/injuries involving transport activities in the supplier chain; Occurrence of fatalities, accidents, work-related health issues; Risk of corruption cases; Risk of child and/or female sexual exploitation in the vicinity of our operations; Potential risk of violation of labor rights and irregular and/or informal work in the supplier chain; Intensive use of labor, high degree of outsourcing and possible precarious working conditions;

Stakeholders consulted that prioritized the topic: Raízen Leadership; Suppliers; Media and the Press; Social organizations and NGOs.

Raízen's 2030 Agenda commitments related to the topic: Monitor 100% of critical suppliers for ESG performance using a recognized methodology and develop them through Raízen Desenvolve, ensuring that everyone adheres to the minimum sustainability criteria; Ensure 100% of sugar cane sources¹ are covered by an internationally recognized sustainability standard; Achieve and maintain all bioenergy operations to an internationally recognized standard.

Progress and related initiatives: Even before we made commitments to the market, ten years ago, we were the first organization in the world to obtain Bonsucro certification and since then have remained firm in our evolution journey in terms of international sustainability standards to ensure that our operating units are covered by these sustainability standards. We are also improving the monitoring of suppliers through ESG criteria, which includes suppliers of inputs, services, critical suppliers, and suppliers of products ready to be marketed by us. This ensures an even broader view of our value chain with regard to ESG, especially in higher-risk segments in this regard.

Related Sustainable Development Goals (SDGs):



HUMAN RIGHTS AND WELL-BEING

The subtopics that make this topic material include combating moral and sexual harassment, the right to land use, eradicating child labor and slave labor, offering benefits, health and safety practices in the hybrid and telecommuting model, and mental health and workload.

Potential and real impacts that may be related:

- **Positive:** Better working conditions at operation sites due to the Elos Program; Offering programs aimed at well-being and improving the worker's quality of life; Nurturing a safety culture.
- **Negative:** Occurrence of fatalities, accidents, work-related health problems and injuries; Damage to the health and well-being of service providers; Potential risk of child, forced and/or slave-like labor in the supply chain.

Stakeholders consulted that prioritized the topic:

Shareholders and investors; Employees; surrounding communities; Suppliers; Social organizations and NGOs; Trade unions.

Raízen's 2030 Agenda commitments related to the topic:

Make progress in human rights in our operations and supply chain.

Progress and related initiatives: We take responsibility for eliminating human-rights risks and promoting equality and respect for the individual. In the Supply Chain, the ELOS Program encourages the adoption of core values in the economic, human rights, labor relations and environmental areas. In 2022, we established a partnership with a consultancy specialized in Sustainability and ESG to prepare the Human Rights Diagnosis, and the Human Rights Policy and the road-map of actions related to the topic.

Related Sustainable Development Goals (SDGs):



WATER MANAGEMENT

The sub-topics that make this topic material include water availability and access, presence in regions experiencing water shortages and water resilience, and reducing water use and effluent management.

Potential and real impacts that may be related:

- **Negative:** potential impacts on the quality of soil, air and water resources (waste-water leaks, lowering the water level and quality, contamination, among others); Impairing the health of the local population.

Stakeholders consulted that prioritized the topic:

Surrounding communities; Trade unions.

Raízen's 2030 Agenda commitments related to the topic:

Reduce by 15% the volume of water captured from external sources during the grinding period, favoring the use and reuse of water from the sugarcane itself and maintaining an annual mapping of the risk of water availability in our manufacturing facilities.

Progress and related initiatives: Everything

we do is guided by ethics and transparency, as we recognize the importance of trust-based relationships for the success of our partnerships throughout the value chain. We benchmark best practices in compliance and are signatories of the Business Pact for Integrity and against Corruption, a joint initiative of Instituto Ethos, the United Nations Development Program (UNDP), the United Nations Office on Drugs and Crime (UNODC), the World Economic Forum, the Brazilian Global Compact Committee, among other organizations.

Related Sustainable Development Goals (SDGs):



SUSTAINABLE FINANCE

Since we published our ESG commitments in the 2019/2020 crop season and began to disclose our sustainability strategy, we have been looking for investment opportunities to drive our expansion. We accordingly started to test different financial instruments, anticipating the trend of ESG instruments.

In 2021, we carried out our first green operation, which gave us sufficient maturity to present to the capital market our first ESG debenture, in April 2022, which was indexed to our goals of achieving and maintaining all bioenergy operations certified by an internationally recognized standard (Bonsucro) and to have at least 30% of leadership positions filled by women by 2025.

As early as September 2022 we had secured R\$ 2 billion through an Agribusiness Receivable Certificates (CRA) to be applied exclusively to the expansion of our second-generation ethanol (E2G) plants - a movement directly linked to our commitment to ensure that by 2030, 80% of our Adjusted EBITDA comes from renewable businesses.

For both operations, we prepared two Sustainable Finance Frameworks, ESG Linked and Green (available [here](#)), which were verified by a third party that attested to our ambition and materiality of the goals and green projects.



06



CREATED AND SHARED VALUE

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CONSERVING NATURAL CAPITAL

CLIMATE ACTION

| GRI 3-3 (Climate change & Emissions Management), 11.1.1, 11.2.3; SASB EM-MD-110a.2, EM-RM-110a.2, FB-AG-110a.2, FB-AG-440a.1 |

The climate agenda is part and parcel of our business, since spearheading the energy transition the way we do involves helping society phase out fossil fuels and products with biofuels and bioproducts. We do this by using traceable raw materials, from which we extract first-generation ethanol, which release 80% less emissions than gasoline; second-generation ethanol, which emits 30% less than traditional ethanol; also cogenerating electricity from sugar-cane bagasse.

Moreover, our renewables portfolio includes biogas and biomethane, solar energy and other sources that we are integrating into our ecosystem, with the goal of upscaling renewables production by 80% by 2030. Our renewable solutions currently supply the

market with more than 70 billion megajoules (MJ) of clean energy per year, demonstrating the high decarbonization rate boasted by our renewables.

We strive to identify the best opportunities for allocating our renewable products to markets that most value our smaller carbon footprint and our potential to reduce customers' emissions. For instance, the Ministry of Mines and Energy runs the domestic RenovaBio program, which grants a decarbonization credit (CBIO) for each cubic meter of biofuel marketed, on average. Another such example, this time in the foreign market, is the California Air Resources Board (CARB), which also prices fuels based on a carbon footprint calculation tool. Each market uses specific calculators, which our Trading and Sustainability teams study to guide the investments to be made in our bioenergy operations. This is how we strategically manage the CAPEX to be allocated, with an eye on the opportunities that will reward our



investments the most. These efforts show that good management and consequent reduction of GHG emissions can help achieve these countries and programs' sustainability goals.

Not only are we creating new ways for customers to consume clean energy but we are also committed to making our own operations more efficient, in line with our target of diminishing the carbon footprint of ethanol by 20%. This movement is directly related to the continuous improvement of our production processes, increasing sugarcane yields, advancing the circular economy, optimizing energy efficiency and streamlining our logistics. The SER+ (Raízen Excellence System) is being implemented and expanded to all our bioenergy plants since 2021/2022 (see [here](#)), and is one of our levers on this journey.

As we increase the offer of renewable products, especially ethanol with a smaller carbon footprint, we are adding to our portfolio the category of premium and higher value-added products, which afford us access to more demanding global markets. We expect that 80% of our adjusted EBITDA will come from renewable businesses by 2030. We will therefore demonstrate that the transition to a low-carbon economy is profitable and an opportunity worth investing in.

We are also reinforcing accountability for Greenhouse Gas (GHG) emissions outside of our operations (scope 3 emissions), committing to the goal of reducing the carbon intensity of the use of the products we sell by 10%.

Although the commitment to reduce GHG emissions is voluntary, we have taken measures to meet programs or regulations limiting emissions, making our products more competitive. These efforts demonstrate our leading role in global decarbonization, as these actions complement the huge potential to supply the world with low-carbon products that will drive down GHG emissions in Brazil and overseas. We also invest in research and development to pursue innovations that bring productivity gains and energy efficiency, resulting in a smaller carbon footprint for our products. All projects involving the main sources of the carbon footprint are assessed before implementation, estimating and projecting their emissions.



OUR COMMITMENTS TO THE CLIMATE AGENDA UNTIL 2030

1. **INCREASE RENEWABLE** power output by 80%
2. **REDUCE ETHANOL CARBON** footprint by 20%:
3. **80% EBITDA** deriving from renewable sources:
4. **REDUCE THE CARBON INTENSITY** of the use of sold products by 10%.

See all of our public commitments [here](#).



We measure our greenhouse gas (GHG) emissions to ascertain the true impact of our operations and devise effective reduction initiatives and strategies. Raízen has prepared Annual Emissions Inventories since it started operating, based on The Greenhouse Gas Protocol and its local version, the Brazilian GHG Protocol Program. The survey is carried out through an integrated system that automatically converts monthly operational data into emissions. The inventory is also audited by an independent third party, further enhancing the credibility of reported information, and is submitted to a sensitivity analysis by Shell for strategic cuts. In recognition of the quality of this endeavor, we were awarded the "Gold Seal" in the Brazilian GHG Protocol Program, which bolsters our commitment to measure and manage our greenhouse gas emissions, in addition to adopting sustainable practices in our operations.

Most emissions are Scope 3 (95.06%), which is mostly composed (99%) by the indicator of use of products sold both in Brazil and Argentina, especially the diesel, gasoline and ethanol that we sell. Expanding the offer of renewable products is therefore intrinsically related to reducing emissions in this scope.

Agricultural activity is the most representative source in Brazil in Scope 1, which represents 4.91% of total emissions. In the Bue-

nos Aires refinery in Argentina, emissions in this scope are divided into two large groups: stationary combustion and ventilated sources, with the former being the most representative. The largest emitting stationary combustion sources are heaters, the component responsible for heating crude oil.

Lastly, scope 2 emissions accounted for just 0.03% of total emissions and are directly related to the acquisition of electricity from the grid.

We were ranked as "Gold Seal" in the Brazilian GHG Protocol Program.

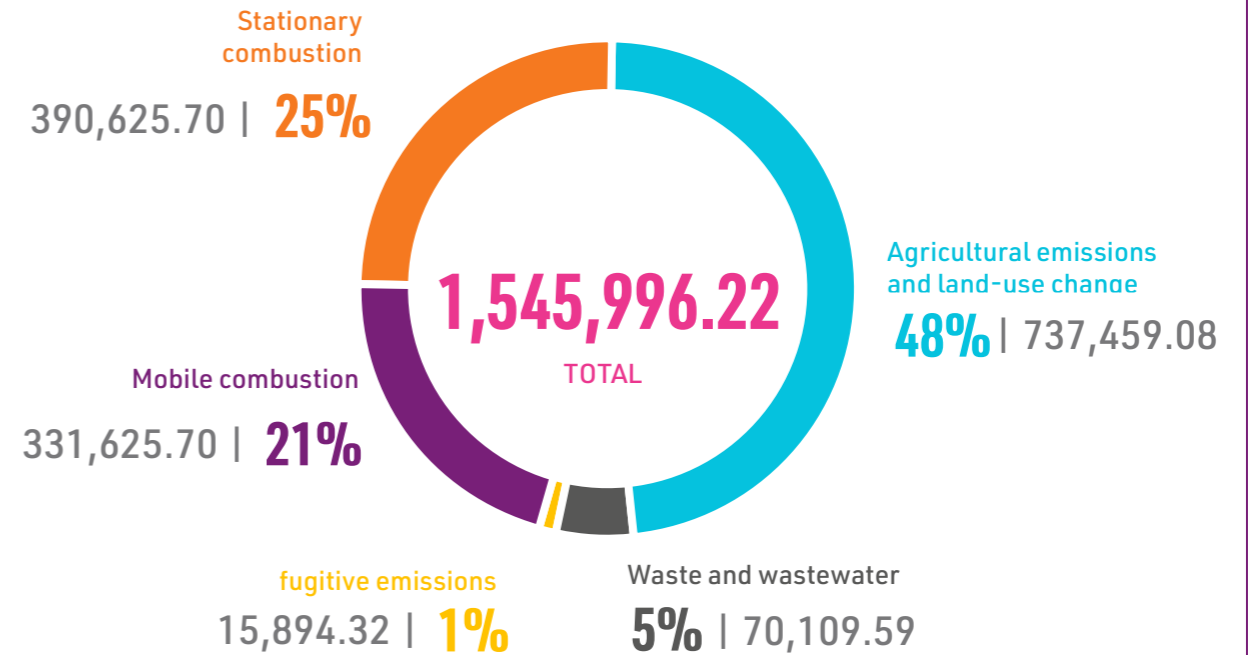
GHG EMISSIONS BY SCOPE (In tCO₂e) - BRAZIL AND ARGENTINA | GRI 305-1, 305-2, 305-3, 11.2.3; SASB FB-AG-110A.1, EM-RM-110A.1 |

	2020	2021	2022 ¹
Scope 1 (direct emissions from activities we control)	2,427,764.55	2,409,015.36	2,742,975.30
Scope 2 (indirect emissions from electricity purchased from the grid)	11,740.95	16,762.53	14,134.74
Scope 3 (other indirect emissions, especially from the supply chain)	44,582,401.48	49,282,716.66	53,110,338.32

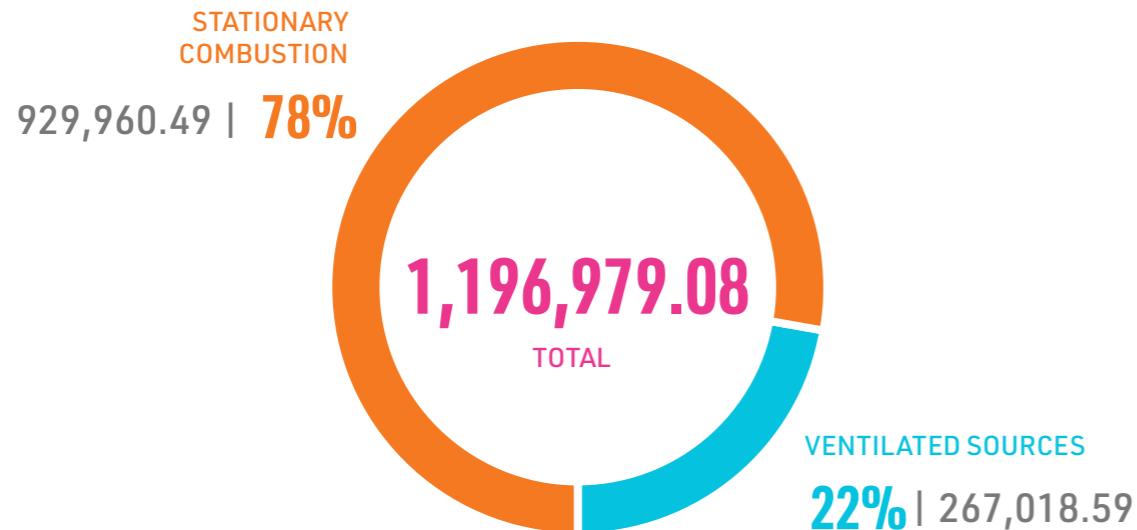
¹ For the first time it is including the assets acquired from the former Biosev, purchased in August 2021.

GHG EMISSIONS (2022)

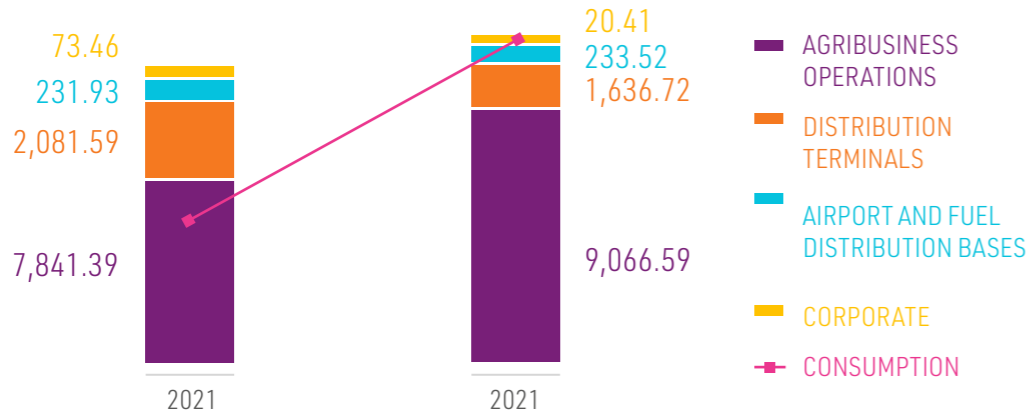
SCOPE 1 (IN tCO₂e) - BRAZIL | GRI 305-1 |



SCOPE 1 (IN tCO₂e) - ARGENTINA | GRI 305-1 |



SCOPE 2 (IN tCO₂e) - BRAZIL
| GRI 305-2 |

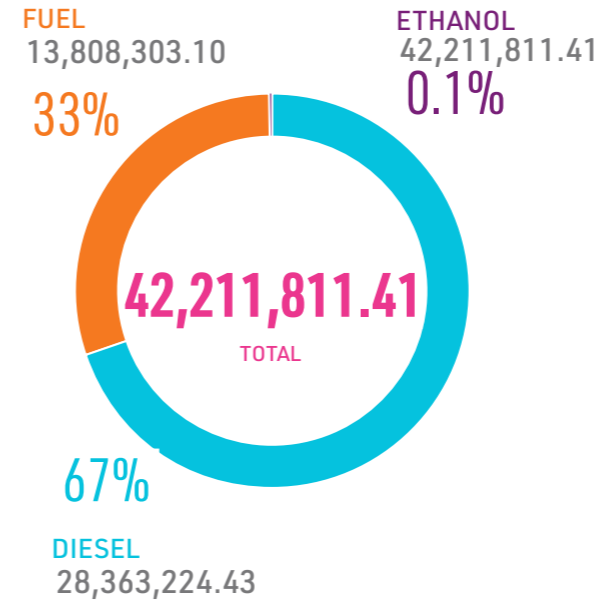


SCOPE 2 - ARGENTINA | GRI 305-2 |

	2021	2022
Scope 2 emissions in ktCO ₂ e	6.50	3.18
Electricity consumption in MWh ¹	12,213.00	11,188.33

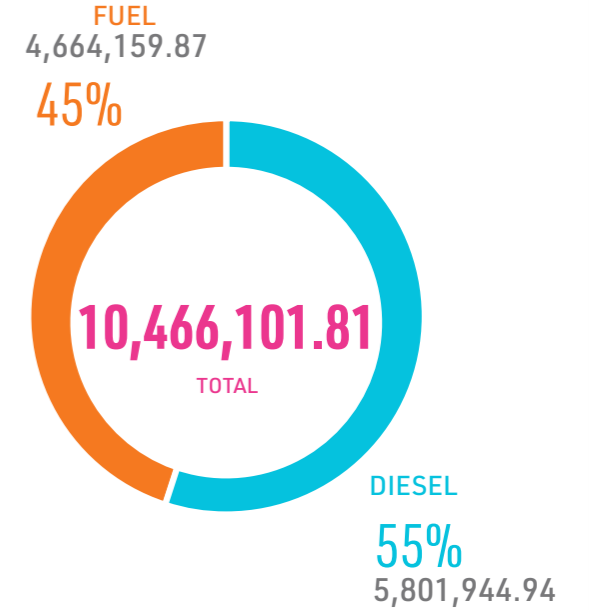
¹ In addition to our lower consumption, the Argentine GRID emissions dropped in 2022 compared to 2021.

SCOPE 3 (IN tCO₂e) - USE OF SOLD PRODUCTS (BRAZIL)¹ | GRI 305-3 |



¹ The sold product usage source represents 99% of our scope 3 emissions. The remaining sources such as purchased goods and services, upstream transportation and distribution, employee transportation, production of used fuel, operation-generated waste and franchises amount to a total of 432,425.1 tCO₂e.

SCOPE 3 (IN tCO₂e) - USE OF SOLD PRODUCTS (ARGENTINA)¹ | GRI 305-3 |



We also conduct an annual Life Cycle Assessment (LCA) of our products, which measures potential environmental impacts associated with the manufacturing and use of our key products (first- and second-generation ethanol and bioelectricity). The methodology we use accounts for all GHG emissions, cradle to gate.

To be more transparent, we respond voluntarily to questionnaires created by the Carbon Disclosure Project (CDP), a financial-sector initiative that is now the main global reporting system focused on issues such as climate change, water and forests, providing information on progress made on these topics by companies and cities. In 2022 we kept out place among the leaders, appearing alongside other top-scoring companies, crowning a journey of consistent progress.

We also joined CDP Supply Chain to assist our suppliers in managing emissions and climate-change risks, aiming to enhance the management of our value chain and continue evolving together in the decarbonization journey and climate-change management.

LAND USE & BIODIVERSITY

| GRI 3-3 (Agricultural management & Biodiversity), 304-2, 13.4.1, 13.13.1, 13.14.1; SASB EM-MD-160a.1 |

Brazil has massive native vegetation reserves and a highly dynamic agricultural sector, which poses significant challenges in reconciling conservation and production objectives. However, sugarcane cultivation occupies less than 1% of Brazil's landmass and takes place far away from deforestation hotspots resulting from the cultivation of other crops and high-pressure areas such as the Amazon. In general, **93% of the agribusiness sector is dedicated to food production, while only 7% of the land is used for biofuel production.** It is disproportionate to focus the debate on land use for food and biofuel production.

Specifically in the sugarcane industry, bioenergy is offered during the dry season, between April and October, when fossil fuel powered thermal power plants tend to operate at maximum capacity and are triggered due to the lower rainfall volume in Brazil. The sugarcane industry therefore plays a crucial role in supplying renewable energy and decarbonizing Brazil's energy matrix.

The production of second-generation ethanol from sugarcane bagasse, waste resulting from the production of sugar and first-gen-



eration ethanol (E1G), does not compete with food production. This solves the "food versus fuel" debate for this product, which is a hot topic in markets such as Europe, where the availability of cultivable land for food production is low, and the demand for energy products is high. Our products are becomingly increasingly compliant and arousing curiosity in this and other markets where the debate is taking place.

Through studies conducted in partnership with research institutions and consultancy firms, we have identified that our pres-

With only 1% of Brazil's landmass used for sugarcane cultivation, it is possible to generate a positive impact on the energy matrix, sugar production and the decarbonization of our customers at the national level.

ence in the vicinity of our active bioenergy operations, combined with our economic performance and environmental best practices, is directly related to increased forest areas. **Furthermore, we are one of the first companies globally to adopt standards that require deforestation-free supply chains in our sector, such as Bonsucro.** Each of our Bonsucro-certified sites has its own Environmental Management Plan (IMP) outlining measurable actions to minimize environmental impacts from our activities.

IMPs address ten topics: biodiversity, ecosystem services, air, water, climate change, burnt-cane harvesting, byproducts, noise, soil, and the use of chemicals. And we are guided by the Integrated Operations Management System (SIGO) and the Health, Safety and Environment Policy (HSE). Through these documents, we assess the impacts of sugarcane activity on biodiversity and ecosystem services by applying concepts of biodiversity conservation and landscape ecology.

Our leased properties are monitored by satellites and unmanned aerial vehicles (UAVs), which identify the best locations for planting, aiming to maximize soil conservation. We use only mineral and organic fertilizers, and use technology to manage crop growth and de-

tect issues early in order to mitigate damage. In the 2022/2023 crop year, we intensified the use of vinasse and filter cake in our fields to reuse as much of the waste as possible in the sugarcane plantations (see more in the following chapter).

Approximately one year after planting, our raw material is ready to be harvested, which is mainly done mechanically on over 99% of the land. Manual harvesting is only required in areas where mechanical harvesters cannot be used. We do not conduct prescribed burning on our properties as signatories of the Greener Ethanol Protocol and participants in the Mutual Emergency Response Plan (PAME)—a system in which companies cooperate with each other in responding to emergencies.



REGENERATIVE AGRICULTURE

While pursuing the conservation and regeneration of the natural ecosystems that make up our assets, we have also been focusing on expanding the **regenerative agriculture** agenda. This translates into implementing practices that mitigate climate change, optimize resource management, promote biodiversity, increase water availability and quality and provide social and economic benefits to our growers.

The regenerative initiatives already in practice in our sugarcane fields include the following:

- use of organic fertilizers (vinasse and filter cake provide phosphorus, nitrogen, potassium and organic matter for the soil)
- use of biological inputs, which in addition to reducing the use and environmental impact of agricultural pesticides, increase the microbial activity in the soil, helping recover degraded soils.



We also implemented crop rotation on approximately 65,000 hectares of land in the 2022/2023 season. This included cultivating crops with added commercial value (soybeans) and crops with plant health benefits (such as rattlepods and millet); measures are also taken to protect biodiversity, including managing a panel for wildlife sightings in farming areas and encouraging biodiversity preservation in critical regions.

For fighting accidental fires in our sugarcane fields, we have developed a Protocol—the first in the industry—with dozens of safety procedures in order to prevent fires and, when needed, ensure a safe fire response. We also **monitor our sugarcane fields using satellite systems to ensure early detection and a prompt response to any fire outbreaks** from unknown or accidental sources, such as bonfires or other sources (e.g. discarded cigarette butts) near areas with high traffic, especially cities and major highways. For the past three crop years, we have had an executive committee to deliver continuous improvement in this area. Among other advancements, we have been reinforcing our infrastructure with first responder vehicles and automated firefighting trucks for use by our fire brigades. **GRI 2-23, 2-25**

Our care extends to local communities, for which we maintain an exclusive hotline, especially for reporting fires on our land.

Throughout 2022/2023, we recorded 128 reported fire outbreaks, allowing us to respond even faster.

Firefighting and prevention initiatives also include education and community mobilization actions, which drive our social impact strategy. Through volunteering and informative campaigns, we raise awareness about prevention methods and alert employees and communities about the risks of fire incidents, especially during dry periods.

Respecting human rights, including those of indigenous peoples, **is essential for the sustainability of our business and relationships.** In the 2022/2023 crop year, we accordingly expanded our efforts to disseminate our Indigenous Peoples Relationship Policy (available [here](#)) through communication, engagement and literacy initiatives involving the relevant stakeholders. The policy must be observed by employees across all areas, units, and business sectors, and outlines general guidelines including: recognize, respect, and value the rights of indigenous peoples; promote the capacity building and improved management of businesses that involve indigenous lands and peoples; work with social and environmental responsibility regarding indigenous lands and peoples; foster procedures to consult and provide prior free and informed consent from indigenous peoples where applicable;

and help improve the quality of life of indigenous peoples.

With the aim of adopting an integrated vision of our lands, we conducted a rigorous georeferenced mapping process of areas that may undergo demarcation and mapping of indigenous peoples in our areas of influence.

In terms of governance on this topic, we have the Traditional Peoples Committee, composed of multidisciplinary leaders, serving as an executive body to establish operating principles and standardize the concepts related to the topics.

In 2022/2023, we disseminated our Indigenous Peoples Relationship Policy.





GOOD MANAGEMENT PRACTICES IMPLEMENTED IN OUR OPERATIONS.

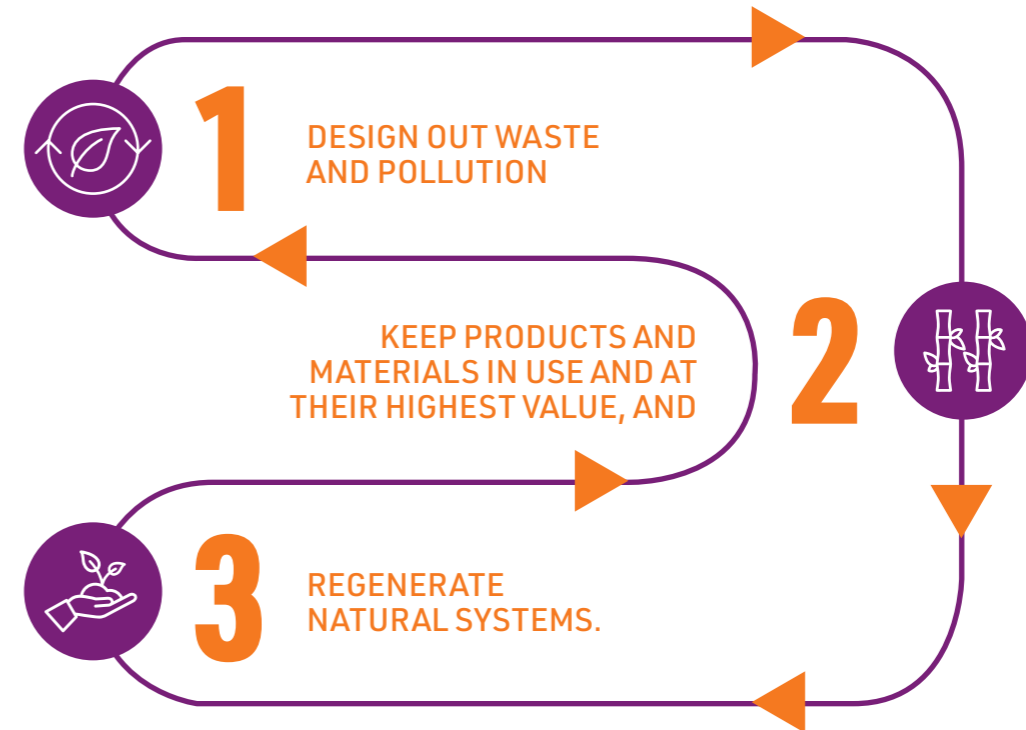
- Biological pest control
- Proper soil management and the responsible use of fertilizer and pesticides
- Eliminating the practice of burning sugarcane as a harvesting method
- Spreading vinasse and filter cake on crop land instead of fertilizers, in compliance with all regulations and legislation

CIRCULAR PRODUCTION

Since the very onset we have invested in improving our processes and production, particularly in using natural resources more efficiently. We are mindful of all available alternatives in the market that can positively impact our operation and contribute to the development of increasingly sustainable actions.

Our main ally is our raw material, sugarcane, whose by-products have higher added value compared to other commodities, such as corn, which is predominantly used in global ethanol production. In this context, our processes, products and businesses are increasingly aligned with the three core principles of the **Circular Economy**.

CIRCULAR ECONOMY PRINCIPLES



We have invested in a series of procedures to promote the circularity of our businesses.

In addition to utilizing by-products from the processing such as trash, bagasse, filter cake and vinasse for the production of renewable products (such as second-generation ethanol, biogas and pellets), we have using more industrial waste in the management of our sugarcane fields each crop year.

We spread vinasse, a byproduct from the sugarcane juice distillation process, and filter cake, which is derived from the filtration of the juice, as natural fertilizers in the fields. Reusing these inputs reduces the use of synthetic fertilizers and closes the nutrient cycle by returning them to the soil.

We have also structured a system that allows the use of composted filter cake enriched with minerals and microorganisms. This organic-mineral fertilizer replaces mineral- and fossil-based fertilizers. In the 2022/2023 crop year, this fertilizer was spread on 80% of our fields, resulting in a reduction of approximately 20% in fertilizers used in agricultural operations and a corresponding decrease of about 3% in our carbon footprint.

Another part of our circular approach is reusing water derived from sugarcane itself through the **ReduZa Program**. This initiative focuses on two main fronts: Reducing water intake per ton of crushed sugarcane, which is one of the main challenges in the sugarcane industry. decreasing the need to replenish



cold water in boilers, saving more bagasse for renewable energy generation, thereby combining water management with energy conservation and efficiency. The ReduZa Program harnesses various tools, including real-time monitoring systems, quality assurance of flow meters and sharing of best practices through internal and external benchmarks.

In the 2022/2023 crop year, the ReduZa Program enabled us to **save 1 billion liters of water¹, equivalent to the volume of 400 Olympic swimming pools or the annual water consumption of a city with approximately 25,000 inhabitants**, based on the

¹ This value is adjusted for milling to be consistent with process efficiency. The unadjusted value is 3.2 billion liters.

United Nations (UN) recommendation of 110 liters/day per person. These data encompass all our operational bioenergy operations for the year.

The program aligns with our sustainability agenda and contributes to the United Nations' Sustainable Development Goals (SDGs). Among the established goals, we commit to reduce water intake by 15% by 2030. Annual targets are also set to encourage teams to rationally use water resources.

In order to make ReduZa a benchmark in water management across all our sectors, in the 2022/2023 crop year we formed a working group dedicated to discussing new solutions that further reduce water consumption in our production processes. The committee

consists of 12 representatives from areas such as fuel terminals, energy, environment, agriculture, social performance and sustainability. These professionals meet quarterly to evaluate the strategic planning required to ensure the best progress in water management, from our lubricants plant to the work carried out with partner sugarcane growers.

WATER STEWARDSHIP

[GRI 303-1, 303-2, 3-3 (Water stewardship); SASB RR-BI-140a.2, FB-AG-140a.2]

Due to the importance of water for our operations, we have a Water and Water Management Committee that meets quarterly. This committee serves as a strategic forum with the presence of dedicated leadership from each business or operation directly involved in water-related matters. Our ambition is to become a benchmark in water management across all our sectors. We aspire to recognize, respect and value the rational use of water while promoting the sustainability of our business and relationships with stakeholders through water conservation, compliance with applicable requirements, and implementing best practices in water use and reuse, leveraging available technology and expertise.

In the 2022/2023 crop year, the Water and Water Management Committee conducted a materiality study on our businesses, assessing critical issues and priorities for action. The committee was also responsible for creating policies and procedures to guide our progress in this area. One notable document is the Water and Water Management Policy (available [here](#)), which aims to guide practices related to water use, reuse and conservation of water resources.

We also conduct assessments to identify social and environmental aspects and impacts in our business and assess direct and indirect risks to our communities, which we monitor using a Risk Matrix that factors the likelihood of occurrence and the consequences of identified impacts.

For potentially significant impacts, we develop action plans and controls to eliminate, replace and/or mitigate impacts. We also advertise direct communication channels, such as Customer Service (SAC) – find out more [here](#) –, and implement awareness and risk prevention campaigns.

We monitor applicable laws and requirements regarding the impacts of our activities through a management system that identifies, analyzes and monitors these requirements. We ensure regulatory compliance with our permits and licenses for water resource extraction and usage. We believe that meeting legal requirements is also a way of reconciling society's interests with environmental conservation.

We also attend meetings of Drainage Basin Committees to discuss water-related issues, strategies, management and proposals

from environmental agencies. During these meetings, critical issues such as availability perspectives and the renewal of basin plans are discussed and debated.

In respect of discharges, in Brazil we monitor effluent quality in accordance with applicable regulations and the technical requirements established in our environmental licenses.

We strive to improve effluent quality by investing in sewage treatment plants (ETEs) and wastewater treatment plants (ETARs) and technology projects for water reuse, monitoring and mapping of water usage by process, closed loops, water recycling and cooling towers, all of which reduce effluent generation.

In Argentina, effluents differ based on the operations conducted and can be classified as follows:



Industrial effluents, generated from equipment and facility cleaning and maintenance and the harvesting of rainwater from operational areas.



Sewage effluents, generated from the maintenance and cleaning of toilets, showers and kitchens.



Stormwater effluents, generated from the drainage of rainwater in establishments and non-operational areas. In certain cases, water is eliminated as waste, such as extraordinary effluents that cannot be treated by the treatment plant.

CHERISHING PEOPLE

OUR HUMAN CAPITAL

Our human capital is composed of 46,629 employees in Brazil and Argentina. We are united around a strong culture, our "RAIZ," which is underpinned by ethics, respect, safety, innovation and, most importantly, the purpose of redefining the future of energy.



OUR ROOTS

- R** (Realizamos) We get things done now, but with an eye on the future
- A** (Ampliamos) We bring out the best in each of us
- I** (Incentivamos) We encourage a questioning mindset
- Z** (Zelamos) We safeguard productive relationships



ATTRACTION

| GRI 3-3 (Diversity & Inclusion) |

We look for professionals who have the autonomy to participate in projects, can work as part of a team, respect diversity and are eager to be part of a dynamic and continuously learning environment.

Our Raízen Talents program encompasses various gateways to join our team, including: Apprentice, Internship, Technical Internship and Trainee positions. 1,170 job opportunities were created in the 2022/2023 harvest season. The selection process is entirely online, involving individual tests, challenges and interviews. We avoid limiting and exclusionary criteria, such as requiring knowledge of another language like English or Spanish. For internship, technical internship and trainee positions, there are no specific requirements regarding age, field of study or educational institutions. However, for the Apprentice program, participation in the selection process is limited to individuals up to 21 years and 11 months of age, in accordance with the Apprentice Law (No. 10.097).

The selection process is conducted every half and has been achieving increasingly significant results in terms of attracting talented individuals and promoting diversity. **In the last crop year, 65% of interns were hired permanently, of whom 56% were women.**

In the Trainee Program, these percentages are 100% and 89%, respectively.

Similar initiatives are in place in Argentina, with adjustments to comply with that country's labor laws. At the beginning of 2022, nine talented individuals were selected to join our Jóvenes Profesionales (Young Professionals) program. Additionally, five apprentices who graduated from technical schools in our community joined our team and will receive training and mentoring support. We also welcomed 30 university students into our Internship Program. Through the Operator Program, we incorporated 21 new operators in various areas of our refinery. They were welcomed with a comprehensive and structured training and learning program.

Pulse Hub has been running **"My First Tech Job at Raízen"** since 2021/2022, a program that seeks to partner with startups that focus on developing technology solutions for education (edtechs), promoting courses in programming and systems development for groups with limited access to this type of learning, such as low-income youth, women, immigrants and refugees. As they are trained, program graduates are invited to participate in the selection processes for our team, leveraging diversity on varied fronts.



In the 2022/2023 period alone we hired 59 talents (of whom 75% were women) for junior-level positions in teams such as Shell Box, CSOnline, information technology infrastructure, Shell AeroClass (a digital platform facilitating fuel scheduling at 68 Shell-operated airports throughout Brazil), among others. In the two crop years during which this initiative has been implemented, we have already hired a total of 99 graduates to join our team.

My First Tech Job at Raízen also received the Top LATAM Female Employer award from Laboratoria, an organization created in Lima, Peru that trains women for careers in tech-

nology, with programs in Peru, Chile, Mexico, Colombia and Brazil.

In the 2023/2024 crop year the initiative will be expanded to include full and senior positions, further leveraging diversity in our technology teams.

In addition to recruitment efforts, we encourage internal referrals through campaigns to achieve greater assertiveness in our hiring processes.



Raízen Learning aims to stimulate knowledge beyond traditional training methods.

DEVELOPMENT AND RETENTION

| GRI 404-2, 3-3 (Diversity & Inclusion) |

In a constantly changing world, we understand that it is not only our business that needs to adapt but also how we learn and share knowledge on a daily basis. In this context, **Raízen Learning** aims to go beyond formal training by fostering a collaborative learning network that values our diversity of flavors and promotes continuous learning for each employee.

Raízen Learning is comprised of the Nossa Raiz Center and six academies, four of which were created based on the nature of each business, and the other two focused on cross-sectional topics such as “Leadership” and “Innovation and Skills”, which are extremely important for team development and business expansion.

The Nossa Raiz Center encompasses development initiatives focused on Safety and Environment, Ethics, Diversity & Inclusion, Sustainability, and SER+ (see more [here](#)), which are elements of our culture and prerequisites for all employees, in addition to the Knowledge Disseminator Training, which is responsible for promoting our learning culture through knowledge sharing.

In 2022/2023, we organized the Learning Festival, which over 10,000 employees

took part in. The initiative's main focus was empowerment and its role in driving our purpose of redefining the future of energy. Throughout the event, we conducted discussions, lectures and workshops aimed at expanding our employees' awareness in areas such as self-awareness, self-development, leadership, career and business strategy.

At our bioenergy operations and the Production Academy, we took training, qualification and development actions to 36,000 employees, totaling over 60 hours of training per person. In preparation for the challenges of the next crop year, we highlight the Lay Off program, which provides technical and behavioral training during the work contract suspension period in the offseason. The initiative reached over 1,400 employees in 2022 with upskilling and reskilling activities. Another significant initiative was the development of the E2G and Biogas Learning Journey, which includes skills mapping, business onboarding, knowledge management and a training path to support the 2030 growth strategy.

Our corporate areas had the opportunity to invest in their self-development through various learning experiences offered by the Business Support Academy. In this regard

we launched the Executive Connection program, aimed at training leaders from the Vice Presidency of Business Services & Technology and developing employees' specific skills in operational excellence, customer success and digital transformation. We also promoted Raízen Tech Experience, an initiative for attracting and developing technology professionals at the mid-career level. The program received over 15,000 applicants, of whom 45 were selected to participate in hybrid training with content provided by Gama Academy and our internal team. Various other learning trails were offered to improve the performance of employees in their respective areas. The Entre a Gente program, focused on developing professionals in the People Vice Presidency, continued to strengthen a learning culture.

We further expanded the Innovation and Skills Academy, offering over 17 strategic skills trails, including project management, change and time management, and emotional intelligence. We formed more than 50 classes during the harvest year.

Additionally, we conducted learning activities in partnership with universities and junior companies, such as the E2G Knowledge Management Challenge, which received over 10 business project submissions. Another

important and impactful solution was the ESG journey offered to our sugarcane suppliers, which was the first ESG course dedicated to the sugarcane sector in Brazil.

Specifically for our executives, we piloted the Executive Leadership Development Program, which involved a detailed assessment conducted by a partner company, generating greater awareness of the leadership skills we need to hone. Individual development plans were designed, combined with actions such as mentoring, coaching, executive education and a collective development program aimed at developing skills such as strategic mindset, technological mindset, talent development and empowerment, risk management and self-awareness.

We also provided opportunities for continuous improvement in hard, soft and future skills and language scholarships and academic incentives to support the development of our employees, whether in Brazil or abroad.

In total, we provided over 2 million hours of training throughout the crop year and recorded over 650,000 participant engagements in our learning experiences.

We conduct Raízen Radar twice yearly, a pulse survey that ascertains employees' insights and helps define goals for the next half. The survey is only completed by professionals who have been with us for more than three months, and they have the option to respond anonymously. In the last cycle, 86% of eligible employees participated in Raízen Radar, with a total of 32,185 respondents.



From operations to leadership, everyone is trained to face the challenges in the sectors in which we operate.



PEOPLE MANAGEMENT CYCLE

In order to support the development of our team towards short-, medium- and long-term goals, we have structured the People Management Cycle, applicable to the entire team and which allows us to translate the elements of Nossa RAIZ into our practices and processes.

The People Management Cycle is divided into integrated stages: hiring, monitoring and goal setting, performance assessment, behavioral evaluations of our culture (Raiz Dialogs), career dialogs (Potential and Succession), and people planning and budgeting. Furthermore, throughout the entire cycle, we encourage constant feedback and learning maps from the teams to ensure that we have the right professionals in the right positions, guided and motivated for organizational challenges.

In both the retirement and contract termination stages, we offer programs to support our employees in their career transition: Outplacement and + Energia for the future.

Outplacement is offered to senior employees (managers and above) who are separated due to organizational restructuring. The main objective is to assist the employee in finding new job opportunities. The initiative is conducted by an external consulting firm and lasts for six months.

Energia for the Future is offered by RaizPrev and aims to encourage employees over 50, from the position of coordinator upwards, to not only pursue short-term goals but also develop sustainable plans for a successful future by restarting a new life journey. It is an invitation to reflect on and guide life and career interests (desires and needs) to build an action plan that considers planning for the next 20, 30 or more years of life.

We also offer our Raiz Retirement Plan in Brazil, a variable-contribution plan in which contribution amounts are pre-fixed but the future benefit will depend on the amount of contributions made, the accumulation period and return on investment, in addition

to risk benefits to cover invalidity and death. The plan operates like a savings account that participants contribute into throughout their career according to their needs and available funds.

In Argentina, the retirement plan takes the form of a Defined-Benefit Plan, which involves the recognition of a predetermined amount to be paid upon the cancellation of benefits, according to the terms and conditions established in the regulations.

DIVERSITY AND INCLUSION

| GRI 3-3 (Diversity & Inclusion) |

Our Strategic Sustainability Plan commits us to achieving a minimum of 30% women in leadership positions by 2025, from coordinator level upwards - a proportion that stood at 25%¹ at the end of the 2022/2023 crop year. In addition to being indexed to ESG-focused financial operations, this goal reinforces our support for the Women's 360 Movement, which includes more than 50 major companies committed to diversity and increasing female participation in the corporate world. To reach the desired level we invests in affirmative action from the very bottom of our business, with career mentoring and follow-up programs that prioritize female career development. Since the 2018/2019 crop year, we have also offered 180 days' maternity leave, going beyond the legal requirement, and we provide rooms where returning employees can express and store milk in a more comfortable environment, promoting breastfeeding.

Gender equity, however, is just one pillar of diversity that we seek to include. We have also been striving to promote other diversities, such as Persons with Disabilities (PwDs), LGBTQIAP+ and Race and Ethnicity,

¹ Biosev and Lubricants were not included in the calculation, they will be part of the scope of this commitment as of the next crop year.

through Transformers, which are affinity groups that work together with Diversity and Inclusion in project development. All this work is reported to the Diversity and Inclusion (D&I) Committee, which is composed of representatives from various departments, with quarterly reports provided to the board.

Our Code of Conduct includes clear guidelines for making decisions regarding employees, such as contracting, promotion, and termination based on the various journeys, qualifications, and performances.

We also respect the human rights of indigenous employees at our production plant in Caarapó (MS), providing information and assistance in their native language (Guarani), respecting their traditions and having a specific hiring process for this group.



Our goal is to achieve 30% women in leadership positions by 2025.



COMMITMENT TO SAFETY

| GRI 2-23, 403-1, 403-2, 403-3, 403-4, 403-7, 3-3 (Human rights & well-being); SASB EM-MD-540a.4 |



Ensuring zero accidents is a core element of our organizational culture and is closely linked to the performance of our businesses. In all our operations, we follow guidelines and procedures to ensure a safe working environment and the physical and mental well-being of our team members.

Our Health, Safety and Environment (HSE) Policy lays down the rules on this matter and is harnessed in awareness campaigns and training conducted by leaders who serve on the Health, Safety and Environment (HSE) Committee.

All operations - in Brazil, Paraguay and Argentina, and all national and international offices - are monitored by our Integrated Operations Management System (SIGO), which includes nine elements that cover the health and safety of our employees and allow for the distribution of responsibilities and systematic control of related indicators. SIGO has been developed in compliance with

international standards and practices that go beyond regulatory requirements, including ISO 45.001 for Health and Safety and ISO 14.001 for Environmental Management.

Our dedicated health and safety staff includes experts in occupational health and safety, process safety, occupational hygiene and speech therapists, among other professionals. We also have chemical engineers who are dedicated to process safety, and have developed occupational health risk and personal safety matrices describing risks inherent in each task and barriers to minimize risk exposure. We also carry out internal and cross audits to ensure the quality, effectiveness and efficiency of safety measures.

Each work team undergoes specific training, which is developed based on studies of processes, environments and tasks. Some of our key initiatives in this area include training on internal procedures and preventative tools, first aid, hearing and

respiratory protection, use of PPE, work at heights, confined space work and machine operation, and the training required under Brazilian Regulatory Standards.

The training is complemented by specific campaigns and documents that help disseminate a preventative culture. For employees involved in operations at distribution bases, airports and our bioenergy operations, we disseminate "Five Intervention Practices" for building a safe environment using proactive tools; and the "Five Habits of Safe Driving," aimed at professionals involved in commercial transportation operations. We also develop educational materials that we distribute to employees' and to business partners.

In addition, we organize events as part of our corporate calendar, such as "Safety Day", an event held two times a year to raise awareness about safe behavior not only among our own employees but also among our



suppliers, drivers and communities; and the “Responder Challenge”, an event organized to improve technical skills and synergies among emergency responders; safety talks, called Safety Tours; and other activities to promote safe behavior in operations.

Workers are consulted for continuous process improvement. They participate in CIPA (Internal Accident Prevention Committee) meetings and send feedback for the HSE team.

HSE technical committees, both in Brazil and Argentina, meet monthly. This is a space for employees to express their concerns about workplace safety.

We also provide a page on Workplace Raízen with updated procedures, guides and manuals, and we send bulletins via corporate email.

Before routine activities, "Task Safety Analysis" (AST) is conducted. The performance of non-routine activities requires a "Service Permit" (PS). In case of non-conformities, the task is suspended until the conditions have been verified. In addition, we have a system designed to develop safe behaviors (*Sistema Alerta*), including tools such as Safety Self-Assessments; Behavioral Observation; and a flow diagram to identify the causes of unsafe behavior, near misses and accidents. Feedback is also provided

from quality reviews and verifications and validations. These tools generate proactive indicators that are tracked by Senior Management and reported to the Sustainability Committee, to measure progress and continuous improvement toward our goal of zero accidents.

SIGO element 8 guides the preparation of emergency response plans at each of our units. The documents provide details on potential incidents and appropriate actions for each one, which may include conducting emergency drills and risk mitigation assessments. These emergency plans are reviewed annually to address any systemic deviations. Each emergency plan takes into account the specificities of each unit.



In 2022/2023 in Brazil, we entered into a contract with a specialized toxicology consultancy to assess potentially harmful agents and consequently develop protection guidelines for users handling chemical products. This information is available in technical documents prepared in accordance with the Globally Harmonized System (GHS), including procedures for the transportation of hazardous goods and authorization for the use of new chemical products. **GRI 403-7**

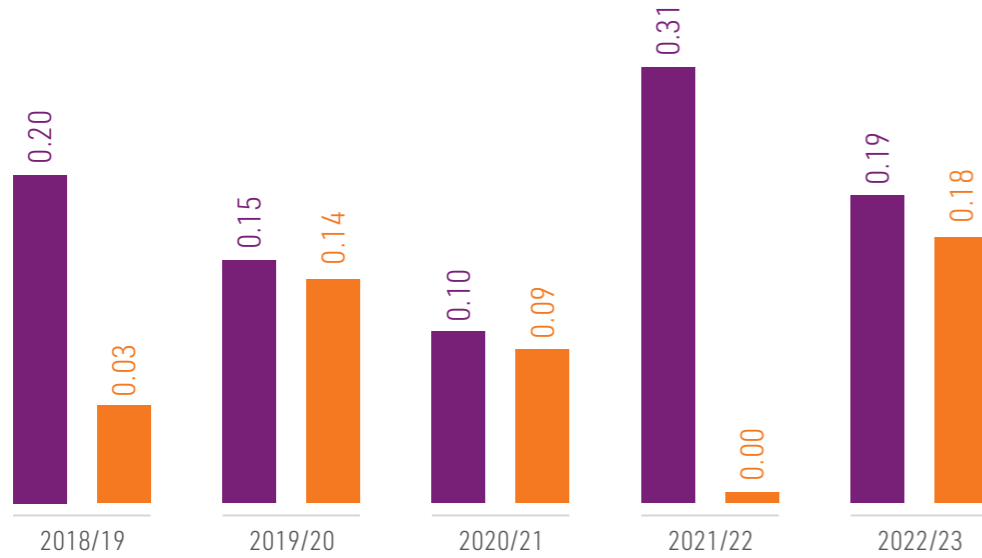
Quantitative indicators are also tracked by Senior Management: number of accidents resulting in Serious Injury and Fatality (SIF) per million hours worked, Lost Time Injury Frequency (LTIF), and Total Recordable Case Frequency (TRCF). The entire workforce is assessed on these indicators, which are factored into their variable remuneration.

SIGO element 7 outlines the guidelines for accident investigation, which is carried out by a multidisciplinary group composed of executive leaders, the HSE department and other experts. After the analysis, comprehensive and specific control actions are determined. In the case of comprehensive actions, the hazard and risk matrix is revisited, and necessary improvements for the overall management system are identified.

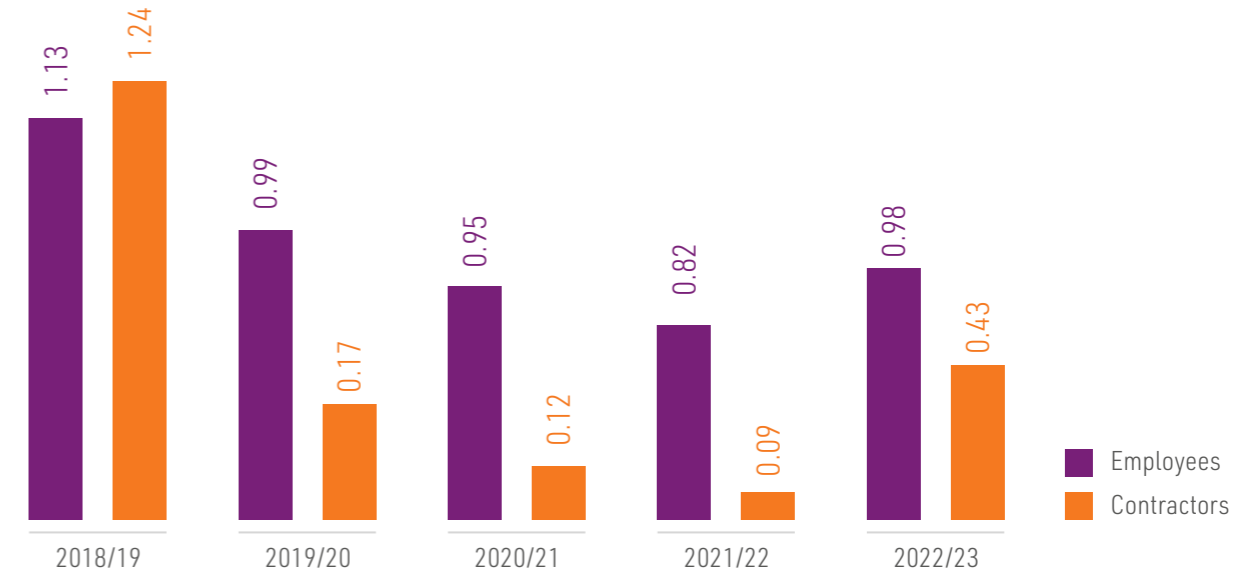
All operational procedures are planned with the goal of achieving zero accidents.



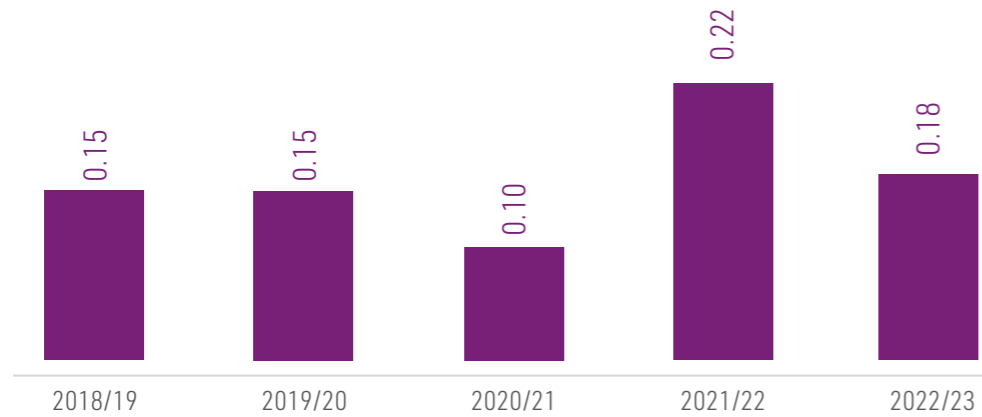
LTIF RATES | GRI 403-9; SASB FB-AG-320A.1, EM-RM-320A.1; WEF - Pillar People - Health and well-being |



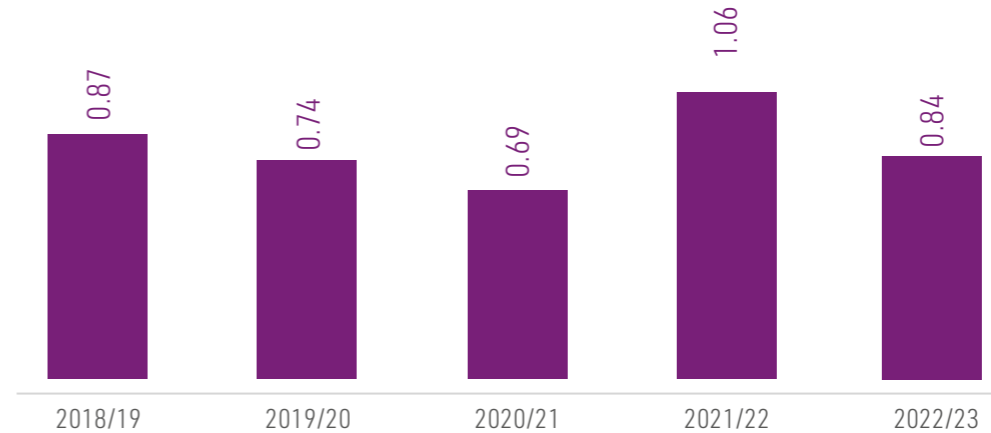
TRCF RATES | GRI 403-9; SASB FB-AG-320A.1, EM-RM-320A.1; WEF - Pillar People - Health and well-being |



CONSOLIDATED LTIF RATES



CONSOLIDATED TRCF RATES



1. The table above contains Raízen's consolidated LTIF rates, for operations in Brazil and Argentina, and from employees and third parties.

2. The former Biosev units began to be included in 2021/2022.

1. The table above contains Raízen's consolidated TRCF rates, for operations in Brazil and Argentina, and from employees and third parties.

2. The former Biosev units began to be included in 2021/2022.

HEALTH AND WELL-BEING

| GRI 403-6, 3-3 (Human Rights & well-being) |

In addition to safety-related issues, we offer health insurance plans to our employees and their families in Brazil and Argentina, covering consultations, exams, therapies and clinical and surgical hospitalizations, among other procedures. We maintain an internal team to provide support and act as an interface between the plan beneficiaries and the health insurance provider.

Some of our units, especially the main headquarters, have outpatient clinics with health care professionals who focus on primary health care, monitoring pregnant women and patients with chronic diseases (such as diabetes, hypertension, heart conditions, among others), and regular telephone follow-up for hospitalized employees. These health care professionals work within the scope of the **Well-being Program**, which also includes the following initiatives:



IN COMPANY NUTRITIONIST: diagnosis, treatment and personalized monitoring of different nutritional and metabolic conditions.



HEALTH TALK SERIES: facilitation of lectures and webinars on general health topics of interest, such as healthy habits, cancer prevention, sexually transmitted infections, women's comprehensive health, non-work-related ergonomics, metabolic diseases, quitting smoking and addictions, among others. The topic selection criteria take into account the recommendations of local and regional scientific associations and guidelines issued by the World Health Organization (WHO).



MENTAL HEALTH: we provide a free channel for all employees and their families, the Psychological and Emotional Support Channel (CAPE), where they can access a rapid diagnostic service and even receive short therapies for various emotional conditions or disorders they may present. The service is available 24/7, 365 days a year, and is staffed by specialized professionals. All information obtained through this channel is strictly confidential.

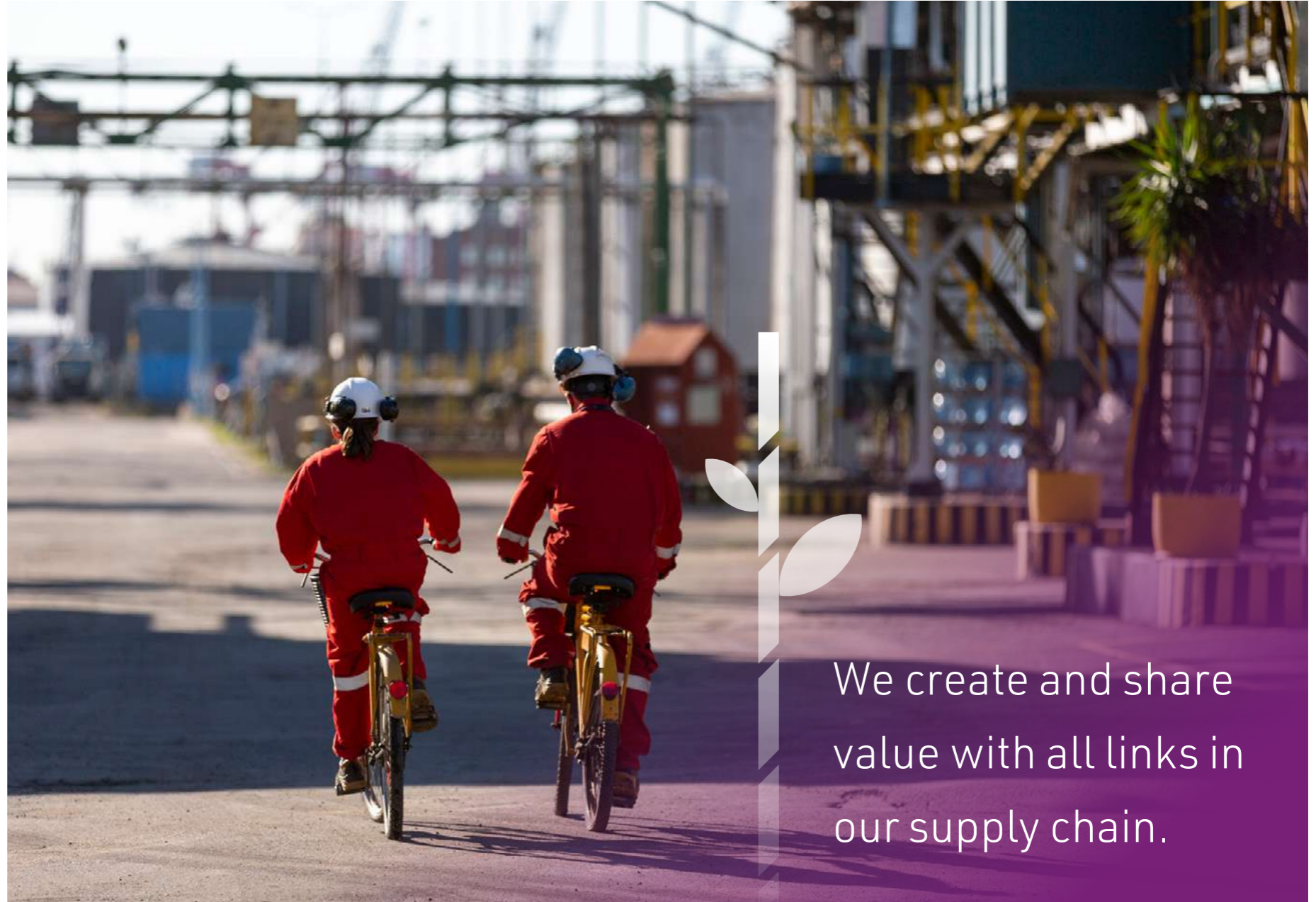


GYMPASS: offers discounts at gyms and fitness centers.

VALUED PARTNERS

| GRI 2-6, 2-29, 3-3 (Sustainable procurements) |

From the field to the fuel station, we mobilize sugarcane producers, transporters, retailers, suppliers and customers. We establish partnerships with these stakeholders and develop actions that aim for mutual gains and sustainable outcomes. Our business model includes embedding stakeholder capitalism in our management, a model whereby the interests of all those impacted by our operations are considered in our short-, medium- and long-term value proposition.



We create and share value with all links in our supply chain.

SUGARCANE SUPPLIERS

| GRI 3-3 (Sustainable procurements), 13.13.1, 13.22.1; SASB FB-AG-430a.3, RR-BI-430a.1 |



The Raízen Elos and Jornada Cultivar programs form an **integrated value proposition for 1,898 sugarcane suppliers**, who are responsible for supplying nearly half of the raw material we process in our bioenergy operations. These initiatives aim to offer products and services that guide them towards the sustainability of their properties, regardless of their size.

Elos Raízen, the result of a strong partnership we have established with two important civil society organizations - Solidaridad and Imaflore - since 2014/2015 this has helped sugarcane producers in transforming and continuously improving the management of their crops to become more sustainable,

avoiding improper work practices and any Human Rights violations.

Unprecedented in the global sugarcane production chain, the program has:

- Achieved recognition as "Farm Sustainability Assessment" (FSA) through the Sustainable Agriculture Initiative Platform (SAI Platform) as equivalent to the Farm Sustainability Assessment (FSA);
- Identified as a Big Push for Sustainability by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC); and

- Recognized by Bonsucro, the leading international certification for sustainable sugarcane production, as a program aligned with its principles and criteria.

From an environmental perspective, Elos guides producers on the protection of preservation areas and water resources, responsible use of agrochemicals, waste disposal and effluent treatment, soil management and conservation, and fire prevention and control.

From an economic perspective, producers are guided on business continuity, including land use rights, ethics and compliance, financial management and the importance of succession.

The **Jornada Cultivar** program, in turn, aims to offer solutions that can support suppliers, facilitate access to agricultural management support initiatives, cost reduction management, financial solutions, and stimulate

By the end of the 2022/2023 crop year, **93% of the sugarcane** coming in from third parties was covered by Elos and **82%** by Jornada Cultivar.

efficiency and productivity so that everyone is in constant development.

Amongst our strategic guidelines, Jornada Cultivar ensures better management and investments in sugarcane farms, which multiplies the financial benefits and helps producers manage and develop their business. Another guideline is the work to increase productivity, providing knowledge and access to more modern cropping techniques to control weeds, and improved sugarcane nutrition and soil utilization. The program's suppliers also get support to manage their operations and risks, and have access to strategic forums, training, and educational content. They also have contact with partner companies that can directly contribute to fostering the chain and help knowledge exchange.

Still focusing on the development of our raw material suppliers, through the pillar of Shared Knowledge, in 2022/2023, we formed a partnership with FIA Business School to create the first ESG course specifically designed for the sugarcane industry in Brazil.

Held in-person in Piracicaba (SP), the course was divided into three modules aimed at detailing how ESG practices can be implemented and how embracing this movement is associated with gains in productivity and quality in the sugarcane fields, providing

greater socio-environmental and economic security. In addition to lectures, the program included visits to a cultivation area for exchanging experiences among producers and to our Agroindustrial Intelligence Center.

Under the Governance pillar, Jornada Cultivar partner producers made purchases of inputs and machinery/equipment totaling R\$ 343 million and had access to R\$ 184 million in rural credit. Combined with support through the Productivity pillar, these solutions assist producers in the journey of improving their sugarcane fields, aiming for higher productivity at the lowest possible cost, along with enhanced management and shared knowledge.



FORCE OF THE FUTURE

We have partnered with Fundação SOS Mata Atlântica [Atlantic Forest] as part of the Forests of the Future since the 2021/2022 crop year. This initiative combines organized civil society, the private sector, landowners, and the government in participative projects to restore forests. Companies and individuals can contribute in two ways, by volunteering or through the state of São Paulo required compensation program by signing the TCRA, or Term of Commitment to Environmental Recovery. In this way, either by volunteering or through required compensation, companies bear the costs of reforestation performed by SOS Mata Atlântica on Permanent Conservation (APP) or Legal Reserve (RL) land provided by the farmer. As part of the initiative, the restoration of approximately 500 hectares (equivalent to about 700 soccer fields) has already been agreed upon, where around 1 million native seedlings will be planted.

~500 hectares
reclaimed

~1 million
of native saplings

TRUCKING COMPANIES

| GRI 3-3 (Sustainable procurements) |



Our relationship with both sugarcane and fuel transport companies, including river transportation, is primarily based on safety. To monitor the data from the wide array of onboard sensors used by third-party truck fleets, we have an Operations Control Center (CCO) that receives data 24/7 from monitoring cameras powered by artificial intelligence; fatigue sensors; trackers; and other devices, to help inform corrective, preventive and predictive action.

This camera, installed in 100% of our fleet vehicles, performs full facial recognition, providing more accurate assessments of signs of fatigue, inattention and risky behavior during driving. This allows for immediate intervention and correction actions, thereby preventing accidents and contributing to better quality of life for our drivers while ensuring safer traffic conditions.

A new initiative in the 2022/2023 crop year was the launch of the "Sigo Bem" campaign, aimed at all drivers in our team, which aims to raise awareness about the importance of health and well-being for safe work. The campaign's message emphasizes that to protect others, one must take care of oneself, encouraging each individual to prioritize their own health.

The safety data provided by these various systems and initiatives is used in selecting

drivers (trucks) and crews (tanker barges) for motivational reward campaigns, such as our Truck Rodeo—recognized as the largest road safety program in Brazil—and *Timão de Ouro* ("Gold Team"), which recognizes outstanding performance in tanker barge operations.

In the fuel distribution sector, we have implemented the "Melhores IQA's" (Indexes of Near Accidents) program, which is dedicated to recognizing truck drivers who have prevented serious accidents by defensive driving. This program acknowledges their proactive efforts in maintaining safety on the road. We also have the "Gestão 360°" program, which recognizes outstanding work done by transport companies, branch managers, HSE managers, and shipping companies throughout the crop year.

When it comes to hauling sugarcane specifically, we constantly invest in training the teams working with us. We therefore have two programs that encourage high levels of safety improvement: *TransMOV*, which analyzes and recognizes sugarcane operation partners based on performance, health, safety, and environment (HSE) indicators measured in half-yearly audits, and *Conduzir*, which uses safety indicators to assess the drivers in our fleet.

4TH NATIONAL ROAD SAFETY FORUM

In partnership with Trimble, a global technology firm, we organized the 4th edition of the National Road Safety Forum in September 2023. With the participation of Brazilian and international experts, the event promoted discussions on relevant topics in the industry, such as driver shortage, the need for women's inclusion in the market, the impact of higher fuel prices and ways to reduce workplace accidents, among others.

The forum provided an opportunity for us to showcase our investments in advanced technology tools and ongoing driver training, as they directly contribute to our operational results and accident prevention efforts.

RETAILERS



Through a network of over 8,000 Shell-branded service stations in Brazil, Argentina and Paraguay, we serve millions of customers daily on their journeys, offering maximum quality, cutting-edge technology, and personalized customer service that values personal connections in all areas of our operation.

Before joining our network, retailers undergo a rigorous selection process, which includes a commercial feasibility study and compliance with environmental requirements. Approved retailers also receive our Retail Operation Manual, which details the procedures to be followed in daily activities.

For this group, the main value proposition is the Integrated Offering, through which

we provide various benefits and develop a comprehensive business plan, including marketing and communication initiatives that enhance visibility, reputation and sales. Retailers also receive a service station handbook of operations, which outlines the day-to-day work, recommendations and procedures to be followed by professionals.

Contracts with retailers are qualified through evaluations of compliance with legislation and safety standards, which are periodically reassessed.

In 2022, a service station in Argentina was chosen as the best in HSE management among all Shell stations worldwide, and Raízen Argentina was selected by Shell as the best commercial partner.

PROCUREMENTS SUPPLIERS

[GRI 3-3 (Sustainable procurements), 13.20.1, 13.22.1]



Our supply chain includes companies supplying equipment, materials and services across both production and non-production processes. In 2022/2023 we spent approximately R\$ 9.66 billion on these suppliers, including R\$ 5.27 billion on services and R\$ 4.39 billion on materials suppliers.

Suppliers looking to do business with us undergo:

- **submitting basic and financial information;**
- **a document, reputational, labor, legal and financial background check;**
- **completion of questionnaires (anti-bribery and anti-corruption, Sustainability, Health, Safety and Environment); and**
- **approval of General Terms and Conditions (GTC) of Supply – note that approval in the qualification process does not guarantee contracting.**

After establishing the contract, service providers with third-party workers who meet our eligibility criteria for high-risk classification are included in the Third-Party Risk Management (TPRM) monitoring flow; and all approved suppliers are included in the monitoring process,

which includes periodic evaluations. If any issues are identified, our Consequences Plan is activated.

In addition to periodic evaluations, actions for supply chain development are addressed through the Supplier Development Program, Raízen Desenvolve. Key actions of the program include: shortening payment terms for micro and small suppliers to 21 days; consultancy services from the Brazilian Small Business Support Service (Sebrae) for pre-selected suppliers; waiving the qualification fee for micro and small suppliers, and providing an online training platform in partnership with Sebrae, which is available to all suppliers.

All actions are guided by our Sustainable Procurement Policy, which aims to ensure an efficient procurement process that is consistent with requirements on sustainability, compliance, fair competition and integrity.

In the 2022/2023 crop year, we launched the Contract Management Compliance Program. The initiative aims to form managers within our team to act as Health, Safety and Environment (HSE) ambassadors and to develop our suppliers in this area. A pilot program was initiated in June 2022, selecting 20 high-risk service companies (engineering and construction). By doing this, we are reinforcing

ing the movement of spreading our safety culture beyond our boundaries, positively impacting our supply chain.

Furthermore, based on supply chain evaluations, areas where harmful practices to the economy are occurring are identified. This may include identifying suppliers involved in unethical practices, purchasing products or raw materials at excessive prices, or using inefficient production practices. The identification is carried out through the Critical Category Matrix (CCM).

We therefore continue to align with our medium-term goals of the 2030 Agenda to monitor 100% of critical suppliers from an ESG perspective using a recognized methodology and develop them through Raízen Desenvolve, ensuring they comply with our minimum sustainability criteria.

To recognize suppliers demonstrating good practices in each topic, we regularly organize RAIZ Partner Awards involving all materials and/or services suppliers with active contracts in the crop year. The 2022/2023 edition included an exclusive category to recognize partners with the best practices and a high level of maturity regarding ESG topics that are relevant to any company, regardless of size, as well as Sustainable Development Goals (SDGs). The main products in this category include: Human Rights, Climate

Change, Diversity & Inclusion, Ethics & Compliance, amongst others.

Our Argentina operations, although similar, also include business relationships with local producers of crude oil and biofuels supplied to our production processes in the country; and crude oil, fuel and biofuels carriers. In the crop year our contracts with Argentinean suppliers amounted about USD 380 billion, or approximately R\$ 1900 billion at the US dollar to Brazilian real exchange rate of R\$ 6 at the end of the crop year.



The relationship with suppliers is guided by our Sustainable Procurements Policy.

SOCIAL PERFORMANCE

| GRI 3-3 (Community engagement) |

With a focus on social performance aligned with our business strategy, we promote local development and contribute to the energy transition through mobilization and education - two vectors that catalyze our actions.

In 2022/2023 we continued to leverage our management capacity and operational excellence in favor of local and global development, aiming for effective changes and continuously improving our relationship with communities.

We made progress in implementing Territory Relationship Plans (TRPs), which guide our social actions in each territory. These documents are developed based on local knowledge, qualified consultation with internal and external stakeholders, analysis of secondary socioeconomic data and indicators, identification and mapping of social risks and impacts, and finally, collaborative construction with a multidisciplinary team. Our goal is to have 100% of territories with TRPs being implemented by 2024/2025, and we are on track: in 2022/2023, 50% of the

territories where we operate already had TRPs being implemented.

The territory-specific Relationship Plans consist of social technologies developed to mitigate a social issue and/or promote positive social impacts. Among our social technologies, the VOAR program (Raízen Volunteers in Action) stands out - see more [here](#) -; and vocational courses, offered free of charge as a way to invest in the professional education of the communities living in our geographies, contributing to local development and paving the way for the energy transition and progress towards a low-carbon economy.

The vacancies for vocational courses are presented in an affirmative manner to promote gender diversity and the inclusion of people with disabilities (PwDs), supporting internal hiring demands. In 2022/2023 alone, we offered over 900 vocational training spots, with emphasis on the world's first E2G operating course (see more [here](#)). Even when individuals do not join our team, we believe that we expand the social and



human capital of the communities where we are present.

In our journey to enhance our community governance, we mapped over 60 Social Performance processes and reviewed our Policy and Procedures, further solidifying our actions.

In terms of data analytics, we store our Socioeconomic Maturity Assessment Tool (FAMS), a proprietary technology that shows the direction of social actions in the

territory based on a qualified query of our internal and external stakeholders, and on secondary gathering of socioeconomic indicators, in the cloud.

In the period we invested R\$ 34 million, directly and indirectly benefiting over 920 thousand people.



RAÍZEN FOUNDATION

Raízen Foundation is a Nonprofit Civil Society Organization (Oscip) that for 20 years has been mobilizing a network of partners committed to the future and developing educational programs for the formation of citizens with care and affection.

Raízen Foundation's leading activities are available in its activity report [here](#).

Among the initiatives, we highlight **Ativa Infância**, focused on the full development of infancy and early childhood, with all-day schooling and supplemental activities - which received the Best Sustainability Project award in the Elementary School category at the 2nd edition of the Schools for Climate Congress in 2022 - and **Ativa Juventude**, which, in a robust expansion movement, which encourages youth to discover their vocation and professional path, encouraging them to remain in school and learn throughout their life. In the 2022/2023 crop season, the **Ativa Educadores** program was also initiated, aiming to train education professionals and capacitate them in our methodology. We also announced the signing of a contract with the Brazilian Development Bank (BNDES), guaranteeing an investment of R\$ 16.2 million in a **new program that aims to benefit 405 public schools** in 90 Brazilian municipalities from 2023, indirectly impacting over 30,000 students.

VOAR

The VOAR program (Raízen Volunteers in Action) had a positive direct and indirect impact on 196,000 people and benefited around 200 institutions in 2022/2023. In total, nearly 40,000 hours¹ were dedicated to social and environmental impact actions in our geographies, with the mobilization of 5,625 volunteers.

This initiative is part of our social performance strategy and aims to provide meaningful experiences, empowering employees and society at large in broad movements that foster positive social impact. We believe that volunteering, as part of our strategy, enhances the journey of our employees, promoting well-being and learning.

As a program with high potential for positive impact on society and our employees, throughout the year VOAR mobilized people to foster local development and the energy transition.

² Figure reported by volunteers.

Click on the initiatives to learn more:



In 2022/2023, our employees contributed over 40,000 hours of voluntary work.



INITIATIVES IN ARGENTINA

[GRI 3-3 (Community engagement)]

In order to expand positive social impact, we have been conducting the Creating Bonds program for over 20 years, which nurtures relationships between public and private organizations - schools, community centers, clubs, parishes, among others - fostering a network for good. Since the program's creation by Shell in 2003, it has impacted around 152,000 direct and indirect beneficiaries, especially in the Avellaneda community.

We also held the 3rd edition of Lazos, a program aimed at promoting the entry of final-year students from technical secondary schools into the job market. The initiative consists of a training path in socio-emotional skills, after which the participants are guided to participate in selection processes within our team.

The monitoring of investment, growth and development projects is carried out through Social Performance Plans, in which we map the impacts on the neighboring community to work in advance with our stakeholders, such as the government and other public authorities, service providers, employees and the community. The goal

is to prevent or at least minimize potential conflicts and act transparently.

Our team is also prepared to respond to possible operational or external emergencies that may arise due to the proximity of our operations. In this sense, we play an important role, beyond social investment, in monitoring safety, access to public services and other benefits.





Even in a challenging and volatile environment, we concluded the 2022/2023 season with satisfactory results in all our businesses.

OPERATING PERFORMANCE

For the second consecutive year, the influence of drier weather throughout the season affected productivity, which reached 73.5 million tons of sugarcane. In response to this, we accelerated the establishment of our sugarcane fields, and the results of the first and second harvests demonstrated the competitiveness of our average productivity, with significant cost savings expected in the coming years.

In the Renewable Energy sector, we consolidated our strategy of marketing ethanol for various applications - both industrial and as a fuel - to global customers with differentiated pricing, offsetting higher costs and lower sugarcane milling.

80% of the ethanol volume we currently produce is priced differently and carries low-carbon premiums compared to hydrous ethanol sold in Brazil for industrial purposes (bioplastics, cosmetics, beverage industry, among others) and fuels. Our average price (R\$ 3,458 per m³) consistently

surpasses the local market reference price (Esalq basis).

Second-generation ethanol (E2G), one of our main products, exceeded operational capacity, reaching a record volume of 30,000 m³ produced this crop year, a 64% increase on the previous year. During the year, we agreed to market a record volume of E2G to Shell in contracts lasting up to 15 years, valued at over EUR 3.0 billion in minimum revenue, which will enable the construction of five new plants. Under this contract, we have a backlog of contracted volume exceeding 4.3 million m³, equivalent to a minimum contracted revenue of EUR 4.3 billion.

In the Power sector, we established ourselves as the fifth largest energy trader in Brazil, according to the Electricity Trading Chamber (CCEE), with over 24,000 connected customers and 52 operational renewable energy generation plants. With self-sufficient bioenergy operations, we continue to increase our own traded volume, reflecting

our investments in clean energy generation, particularly solar.

Precision and a sense of opportunity were the hallmarks of our Sugar business. The successful strategy of making direct sales to destination markets (100% of our own sugar volume and 60% of the total) provided better price fixation amid a more positive environment for the commodity. The volume of our own sugar traded in the year was similar to the previous sugarcane season, despite the lower availability of raw material. However, we increased our market share with a resale volume of over 6 million tons of sugar, double the volume operated last year and in line with our strategy of growing in the value chain of the global Sugar market.

In the Mobility division, we continued to expand our network of Shell-branded gas stations, either through aggregation or contract renewals. Throughout 2022/2023, we added 195 new stations, with the signing of new contracts equivalent to 1 billion liters of fuel sold to retailers. Despite market volatility, we delivered a strong result for the year, reflecting our focus on improving profitability and a return on capital.

In our Latin American operations, which include our activities in Argentina and Paraguay, volume growth was sustained by market share through a consistent differ-

entiation strategy, with a premium product mix and strong price differentials, especially in the aviation, lubricants and retail segments. Despite the sluggish economy and the planned refinery shutdown in Argentina, our operations expanded with robust market share growth, reaching a record market share (23.7%) and achieving positive results.

Lastly, in the convenience and proximity market, where we operate through Nós Group, we continued to expand our network according to our expansion plan, opening 252 OXXO mini-markets and Shell Select stores, totaling 1,603 stores in Brazil. These operations are gaining traction, with an increase in average sales (same-store sales) driven by higher average spending and store traffic.



FINANCIAL RESULTS



NET REVENUE

R\$ 246 bn

+25 % vs. 2021/2022



ADJUSTED NET INCOME

R\$ 3.9 bn

+41 % vs. 2021/2022



ADJUSTED EBITDA

R\$ 15.3 bn

+43 % vs. 2021/2022



INVESTMENTS

R\$ 11.3 bn

+47 % vs. 2021/2022
Focus on expanding the Renewables portfolio



PRIMARY CASH GENERATION

(adjusted ebitda less recurring capex)

R\$ 7.8 bn

+108 % vs. 2021/2022



LEVERAGE

(Net debt to adjusted EBITDA)

1.3x

Maintenance of liquidity and capital structure, in an investment cycle. Average debt term (+4 years)

The 2022/2023 crop year was marked by record global revenue and Adjusted EBITDA - in line with sustainable growth targets, including achieving 80% of Adjusted EBITDA from Renewable Businesses by 2030.

In the consolidated figures, the percentage indicator of net revenue showed a greater dilution compared to the previous crop year due to disciplined cost management, with a focus on matrix management, securing savings and mitigating inflationary effects.

Net profit of R\$ 3.8 billion, adjusted for the effects of IFRS 16 and the shutdown of the refinery in Argentina, grew by 41% compared to the 2021/2022 crop year due to operational performance and the recognition of tax credits (lower discount due to the acquisition of Neolubes - Raízen Lubricants).

We also ended the 2022/2023 crop year with net cash flow to shareholders (FCFE) totaling R\$ 2.7 billion, a higher level than the previous year; and with strong operating cash flow - reflecting the operational dynamics of the business; the sale of sugar and ethanol inventories produced, maintaining lower inventory levels; and working capital management, benefiting business generation, notably in the Sugar, Renewable and Mobility businesses.

For further information, please see our financial statements, available [here](#).

07



DISCLOSURES SUPPLEMENT

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ABOUT THIS SUPPLEMENT

Our Integrated Report for the 2022/2023 crop year has been prepared in accordance with internationally recognized best practices, including the 2021 Global Reporting Initiative (GRI 2021) Standards, the Sustainability Accounting Standards Board (SASB) Standards, the Stakeholder Capitalism Metrics developed by the World Economic Forum (WEF) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The report also draws guidance from the International Integrated Reporting Framework published by the Value Reporting Foundation. This Disclosures Supplement provides additional details on the disclosures in the Integrated Report.

ACTIVITIES AND WORKERS

ENTITIES INCLUDED IN THE ORGANIZATION'S SUSTAINABILITY REPORTING **GRI 2-2**

Interim consolidated financial information includes information for Raízen S.A (parent company) and its subsidiaries, joint ventures, affiliates and closed-end investment funds, in proportion to the parent's company's interest in each entity as of March 31, 2023. The same reporting scope has been used in the Integrated Report. The organizations included in the report are described in sections 2.2 and 11 of our Financial Statements, available [here](#).

ACTIVITIES, VALUE CHAIN AND OTHER BUSINESS RELATIONSHIPS **GRI 2-6**

Our operations include oil and gas storage and transportation, internal and external logistics, infrastructure, sugarcane production, and oil and gas refining and marketing. With the support of 68 approved business partners, during the 2022/2023 crop year we transported over 10,553,228 cubic meters of ethanol products and derivatives, covering a combined distance of more than 141,881 million kilometers (mkm) by road and river throughout Brazil. Our distribution network caters to end customers, internal bases and storage pools. We also import derivative products and export ethanol.

In Argentina, our network comprises over 860 service stations, including 42 directly operated by our subsidiary Deheza and the remainder owned by independent owners or resellers, spread across 21 provinces. We also serve over a thousand B2B customers, including distributors and companies of varying sizes, operating nationwide.



ACTIVITIES	PRODUCTS AND SERVICES	MARKETS SERVED
Internal logistics	Supplier relationships, raw material procurement, and service procurement.	Bases, Terminals
Operations	Operational fleet/equipment management.	Partners, Transportation Companies
External logistics	Product/service delivery to customers.	Customers
Sugarcane supply	Sugarcane	Bioenergy operations
Crude oil refining and production of oil derivatives	Gasoline, diesel, jet fuel, marine fuel, asphalt, and other oil derivatives.	Mining, oil and gas, agriculture, automotive, maritime shipping, transportation, chemicals and petrochemicals, building and construction, aerospace, and energy. Commercial service station network.
Production and distribution of lubricants	Manufacture of lubricants, greases, and specialty products for heavy vehicles, light vehicles, and motorcycles.	Automotive, transportation, agriculture, chemicals and petrochemicals, mining, and oil and gas.
Retail and wholesale	Retail and B2B marketing of fuels, lubricants, and other specialty products	Retail marketing to end consumers and wholesale marketing to industrial companies.

We have also developed an extensive supply chain in Brazil, comprising suppliers of equipment, materials, and services for all production and supporting processes. Our Level 1 supplier base comprises approximately 5,000 companies, with a higher

concentration in the Southeast, our main operating geography.

Our Procurement department comprises five divisions, each dedicated to a different procurement area:

- 1 Industrial:** responsible for procurement for projects, services, operations and industrial spare parts.
- 2 Logistics and Automotive:** responsible for procurement for logistics operations (including sugarcane and biomass haulage), agricultural operations, and vehicles.
- 3 Corporate and Human Resources:** responsible for procurement related to information technology, corporate functions, human resources, and marketing.
- 4 Agro-industrial Inputs:** responsible for procurement of agricultural inputs and industrial inputs for the production process.
- 5 Renewables:** responsible for procurement related to the expansion of our second-generation ethanol (E2G) and biogas plants, as well as solar power and electric mobility projects.

The Procurement team has two additional, separate functions: one dedicated to Logistics and Warehousing and another focused on Planning and Intelligence. The latter is responsible for managing supplier relationships, establishing metrics and policies, overseeing Procurement systems and tools, and gathering market insights.

In 2022/2023 we entered into 64 medium and long-term contracts with shipping suppliers in all regions of Brazil. All transportation services are outsourced, with an estimated cost of R\$ 2 billion.

We actively do business with approximately 2,000 sugarcane suppliers in São Paulo, Goiás, Mato Grosso do Sul, and Minas Gerais. Our sugarcane supplier contracts have an average term of five years. These suppliers are responsible for the entire production process, from planting to harvesting sugarcane, and often engage third-party labor for specific activities. Through our *Elos* program, sugarcane producers, their employees, and contractors receive technical support to adopt good social and environmental practices (learn more [here](#)).

In Argentina we had a total of 3,679 suppliers, of which 1,433 were onboarded in the 2022/2023 crop year.

EMPLOYEES GRI 2-7

NUMBER OF EMPLOYEES BY GENDER

	CROP YEAR 2020/2021			CROP YEAR 2021/2022 ¹						TOTAL
	Brazil and Argentina			Brazil			Argentina			
	Women	Men	Total	Women	Men	Total	Women	Men	Total	
Number of employees	5,190	24,901	30,091	6,870	34,261	41,131	220	958	1,178	42,309
Number of permanent employees	638	1,232	1,870	1,169	3,085	4,254	6	15	21	4,275
Number of temporary employees	4,552	23,669	28,221	5,701	31,176	36,877	214	943	1,157	38,034
Number of non-guaranteed hours employees	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	N/A
Number of full-time employees	4,842	24,645	29,487	6,207	33,762	39,969	220	958	1,178	41,147
Number of part-time employees	348	256	604	663	499	1,162	0	0	0	1,162

¹ As from crop year 2021/2022, our newly acquired Biosev assets have been included in the information for our Brazil operations.

WORKFORCE BY GENDER (CONTINUED)

	CROP YEAR 2022/2023 ²										TOTAL
	Brazil					Argentina					
	Women	Men	Other	Not disclosed	Total	Women	Men	Other	Not disclosed	Total	
Number of employees	7,644	35,977	0	0	43,621	242	967	0	0	1,209	44,830
Number of permanent employees	7,525	34,974	0	0	42,499	236	951	0	0	1,187	43,686
Number of temporary employees	119	1,003	0	0	1,122	6	16	0	0	22	1,144
Number of non-guaranteed hours employees	0	0	0	0	0	0	0	0	0	0	0
Number of full-time employees	7,632	35,963	0	0	43,595	242	967	0	0	1,209	44,804
Number of part-time employees	12	14	0	0	26	0	0	0	0	0	26

² As from crop year 2022/2023, the data for this disclosure is being restated for consistency with the updated edition of GRI 2: General Disclosures 2021. As part of the restatements, we have added the gender categories "other" and "not specified" and the employment contract category "non-guaranteed hours employees". Historical data for these categories is not available as it was not collected. The employee categories of Apprentices and Interns are now included under GRI 2-8 for operations in Brazil. There are no apprentices and interns in our operations in Argentina.

NUMBER OF EMPLOYEES BY REGION

	CROP YEAR 2020/2021 ¹						TOTAL
	Brazil					Argentina	
	North	Northeast	Midwest	Southeast	South		
Number of employees	177	260	2,559	25,700	245	1,150	30,091

¹ We use the IBGE regional divisions. Data for Argentina is not reported by region. For crop year 2020/2021, our newly acquired Biosev assets were not included in the information for our Brazil operations.

NUMBER OF EMPLOYEES BY REGION

	CROP YEAR 2021/2022 ¹						TOTAL
	Brazil					Argentina	
	North	Northeast	Midwest	Southeast	South		
Number of employees	199	292	5114	35,261	265	1,178	42,309
Number of temporary employees	13	13	423	3,787	18	21	4,275
Number of permanent employees	186	279	4,691	31,474	247	1,157	38,034

¹ We use the IBGE regional divisions. Data for Argentina is not reported by region. As from crop year 2021/2022, our newly acquired Biosev assets have been included in the information for our Brazil operations.

WORKFORCE BY REGION

	CROP YEAR 2022/2023 ¹						TOTAL
	Brazil					Argentina	
	North	Northeast	Midwest	Southeast	South		
Number of employees	199	421	5,567	37,165	269	1,209	44,830
Number of temporary employees	0	0	82	1,040	0	22	1,144
Number of permanent employees	199	421	5,485	36,125	269	1,187	43,686
Number of non-guaranteed hours employees	0	0	0	0	0	0	0
Number of full-time employees	199	421	5,563	37,143	269	1,209	44,804
Number of part-time employees	0	0	4	22	0	0	26

¹ We use the IBGE regional divisions. Data for Argentina is not reported by region. As from crop year 2022/2023, the data for this disclosure is being restated for consistency with the updated edition of GRI 2: General Disclosures 2021. As part of the restatements, we have added the employment contract category "non-guaranteed hours employees". Historical data for these categories is not available as it was not collected. The employee categories of Apprentices and Interns are now included under GRI 2-8 for operations in Brazil. There are no apprentices and interns in our operations in Argentina.

WORKERS WHO ARE NOT EMPLOYEES GRI 2-8

NUMBER OF WORKERS BY GENDER AND CONTRACT TYPE

	CROP YEAR 2022/2023 ¹		
	Brazil		
	Men	Women	Total
Apprentices	453	753	1,206
Interns	270	323	593
Total workers	723	1,076	1,799

¹ This disclosure has no historical data as it was first reported in crop year 2022/2023 for compliance with the 2021 edition of GRI 2: General Disclosures. In previous crop years, data on apprentices and interns included in disclosure GRI 2-7 (formerly GRI 102-8). This disclosure does not include data for our Argentina operations, where we have no apprentices or interns.

NUMBER OF WORKERS BY EMPLOYMENT TYPE AND BY REGION

	CROP YEAR 2022/2023 ¹	
	Brazil	
	Full time	Part time
North	13	7
Northeast	19	9
Midwest	92	70
Southeast	557	1,004
South	20	8
Total workers	701	1,098

¹ This disclosure has no historical data as it was first reported in crop year 2022/2023 for compliance with the 2021 edition of GRI 2: General Disclosures. In previous crop years, data on apprentices and interns included in disclosure GRI 2-7 (formerly GRI 102-8). This disclosure does not include data for our Argentina operations, where we have no apprentices or interns.



ACTIVITY METRICS BY SECTOR

BIOFUELS

This disclosure applies only to our operations in Brazil, to which it is material.

BIOFUEL PRODUCTION CAPACITY (million gallons - Mgal) [SASB RR-BI-000.A.](#)

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
687	1,050	901

¹ Data for Biosev has been included as from crop year 2021/2022.

PRODUCTION OF: (1) RENEWABLE FUEL, (2) ADVANCED BIOFUEL, (3) BIOMASS-BASED DIESEL, AND (4) CELLULOSIC BIOFUEL [SASB RR-BI-000.B.](#)

This disclosure applies only to our operations in Brazil, to which it is material.

PRODUCTION OF FUEL, BY TYPE (million gallons - Mgal)

	CROP YEAR 2020/2021	CROP YEAR 2020/2022 ¹	CROP YEAR 2022/2023
Production of renewable fuel	n/a	n/a	n/a
Production of advanced biofuel²	651	822	797
Production of biomass-based diesel	n/a	n/a	n/a
Production of cellulosic biofuel³	0	0	8

¹ Data for assets acquired from Biosev have been included as from crop year 2021/2022.

² This disclosure reports total ethanol produced, including first- and second-generation ethanol.

³ Production of lignocellulose biofuel.

AMOUNT OF FEEDSTOCK CONSUMED IN PRODUCTION [SASB RR-BI-000.C.](#)

AMOUNT OF FEEDSTOCK CONSUMED IN PRODUCTION (metric tons)¹

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
61,451,427	76,160,581	73,463,695

¹ Based on metric tons of crushed sugarcane. Data for Biosev have been included as from crop year 2021/2022.



AGRICULTURAL PRODUCTS

These disclosures apply only to our operations in Brazil, to which they are material.

PRODUCTION BY PRINCIPAL CROP – sugarcane (metric tons) | [SASB FB-AG-000.A](#)

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
4,354,241	5,183,608	4,785,383

¹ Data for Biosev has been included as from crop year 2021/2022.

NUMBER OF PROCESSING FACILITIES | [SASB FB-AG-000.B](#)

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
23	31	31

¹ Data for Biosev has been included as from crop year 2021/2022.

TOTAL LAND AREA UNDER ACTIVE PRODUCTION (hectares) | [SASB FB-AG-000.C](#)

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
789,291	1,075,261	995,574

¹ Data for Biosev has been included as from crop year 2021/2022.

COST OF AGRICULTURAL PRODUCTS SOURCED EXTERNALLY (million reais) | [SASB FB-AG-000.D](#)

CROP YEAR 2022/2023 ¹
159,000,000

¹ Agricultural products sourced (in millions of reais) by category are as follows: Soil amendments (R\$ 150); Fertilizers (R\$ 746); Pesticides (R\$ 694). There are no historical data as this disclosure was first reported in crop year 2022/2023.

REFINING THROUGHPUT OF CRUDE OIL AND OTHER FEEDSTOCKS AND REFINING OPERATING CAPACITY

[SASB EM-RM-000.A](#), [EM-RM-000.B](#)

These disclosures apply only to our operations in Argentina, to which they are material.

REFINING OPERATING CAPACITY (million barrels per calendar day (MBPD)) | [SASB EM-RM-000.B](#)

CROP YEAR 2021/2022	CROP YEAR 2022/2023
108.45	108.45

REFINING THROUGHPUT OF CRUDE OIL AND OTHER FEEDSTOCKS (barrels of oil equivalent (BOE)) | [SASB EM-RM-000.A](#)

	CROP YEAR 2022/2023 ¹
Refining throughput of crude oil	31,039,722.45
Refining throughput of other feedstocks	458,500.74

¹ No historical data is available as we began reporting this disclosure in crop year 2022/2023.



TOTAL METRIC TON-KILOMETERS OF: (1) NATURAL GAS, (2) CRUDE OIL, AND (3) REFINED PETROLEUM PRODUCTS TRANSPORTED, BY MODE OF TRANSPORT [SASB EM-MD-000.A](#)

TOTAL METRIC TON-KILOMETERS OF CRUDE OIL TRANSPORTED, BY MODE OF TRANSPORT IN ARGENTINA¹

	CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Tanker	1,775	1,746	1,836
Pipeline	2,291	2,850	2,570
Shuttle tanker (platform to pipeline)	530	800	764
Total	4,596	4,596	5,170

¹ The data are for Argentina only, as we do not transport crude oil in our operations in Brazil.

TOTAL METRIC TON-KILOMETERS OF REFINED PETROLEUM PRODUCTS TRANSPORTED, BY MODE OF TRANSPORT¹

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
Truck	135,245,681	1,874	243,419,411	2,377	247,448,605	2,714
Tanker barge	222,000	1,496	340,475	1,557	334,145	1,477
Total	135,467,681	3,370	243,759,886	3,934	247,782,750	4,191

¹ Transportation by truck includes the transportation of fuels (gasoline and diesel), and transportation by tank barge includes transportation of marine diesel oil (MDO), S10 diesel, S500 diesel and gasoline. Transported volumes decreased by approximately -1.57% in the 2022/2023 crop year, reflecting the non-renewal of our contract with thermal power plants in the north of Brazil and the exclusion of diesel exhaust fluid transportation.



GOVERNANCE

COMPLIANCE WITH LAWS AND REGULATIONS **GRI 2-27**

COMPLIANCE WITH LAWS AND REGULATIONS

	CROP YEAR 2020/2021 ¹	CROP YEAR 2021/2022 ²	CROP YEAR 2022/2023 ³
Monetary value of significant fines (R\$)	15,584,535	11,243,100	71,988,231
Number of fines for instances of noncompliance with laws and regulations	n/a	n/a	40
Total number of non-monetary sanctions	64	26	1
Monetary value of fines for instances of non-compliance with laws and regulations that occurred in previous reporting periods (R\$)	n/a	n/a	1,282,596

¹ In crop year 2020/2021, significant fines were defined as those exceeding R\$ 500,000. In crop years 2021/2022 and 2022/2023, significant fines were defined as those exceeding R\$ 1 million and/or significant sanctions falling outside the usual pattern of regulatory oversight. Following the recent revision of GRI 2: General Disclosures, the data for disclosure GRI 307-1 (Non-compliance with environmental laws and regulations) was consolidated with all other incidents of non-compliance within this disclosure during the reporting period. Data on fines and sanctions for crop years 2020/2021 and 2022/2023 refer only to incidents related to environmental non-compliance. Information previously not available (n/a) has been reported for crop year 2022/2023 after the disclosure was updated. (GRI 2-4)

² We received two significant fines in crop year 2021/2022, both relating to sugarcane field fires, which are currently being appealed on in technical and legal proceedings. The fine amounts were respectively R\$ 2,271,225.00 and R\$ 8,971,875.00.

³ Data for assets acquired from Biosev have not been included for crop year 2022/2023. During the period, we incurred: i) 4 environmental fines totaling R\$ 9,642,507.75, imposed by the environmental regulator, IBAMA, for marketing jet fuel alleged to be non-compliant with the regulations of the oil industry regulator, ANP. The fines are pending review by the Adjudication Body on appeal; ii) 1 fine in the amount of R\$ 61,713,350.08 imposed by the Brazilian antitrust regulator, CADE, in the Gran Petro case (08700.001831/2014-27), which is currently pending litigation. CADE imposed two separate sanctions: a pecuniary fine and an obligation to publish Terms of Access to Infrastructure (PAA) for Guarulhos Airport; and iii) a fine of R\$ 632,372.82 imposed by the Brazilian maritime transportation agency, ANTAQ, for late payment of lease fees (lease agreement 01-2019 STM05), with payment pending adjudication on an administrative appeal.

COMMUNICATION OF CRITICAL CONCERNS **GRI 2-16**

Our approach to strategic management addresses known risks that can cause financial or reputational impacts affecting our ability to achieve strategic objectives.

Risks and related risk monitoring or improvement procedures are established and reviewed by risk owners as part of an Annual Risk Matrix Exercise. They are then submitted to the Audit Committee, an advisory body to the Board of Directors that monitors progress on and the completion of action plans throughout the year, using a proprietary tool.

Risk owners are responsible for monitoring risks and reporting to the Risks Management & Controls function and the Audit Committee on any changes or concerns in the risk environment and on the effectiveness of action taken to manage those risks. If necessary, the Audit Committee is responsible for informing the Board of Directors on decisions taken.

Our most recent Risk Matrix, approved and communicated to the Audit Committee in 2022, contains 21 critical concerns related to operational, regulatory, information, strategic, financial and reputational risks. Risks are identified and addressed on an annual basis.

COLLECTIVE BARGAINING AGREEMENTS

GRI 2-30; WEF - PEOPLE PILLAR - FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

PERCENTAGE OF EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023 ¹	
Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
100%	32%	100%	33%	98%	33%

¹ In Brazil, no collective bargaining agreements were in force with two unions; however, negotiations are ongoing and we are currently applying the economic and social provisions under the most recent collective bargaining agreements with these unions. In Argentina, for employees not covered by collective bargaining agreements, the provisions of our employment contracts are compliant with the labor contract and labor market regulations of the regions where we operate.

ECONOMIC

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED (R\$ THOUSAND)

GRI 201-1, 13.22.2; WEF – ECONOMIC CONTRIBUTION

REVENUE	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
Sales of goods and services	203,423,877.00	257,802,116.00
Gross revenue	205,344,396.00	260,461,986.00
Returns	-1,340,697.00	-2,044,376.00
Other deductions	-579,822.00	-615,494.00
Other operating revenue	389,969.00	580,144.00
Revenue relating to construction of company assets	0.00	0.00
ADA – Reversal / (recognition)	-12,148.00	-29,142.00
Revenue - total	203,801,698.00	258,353,118.00
INPUTS PURCHASED FROM THIRD PARTIES	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Costs of goods sold	-173,606,956.00	-220,402,503.00
Material, electricity, outsourced services and other	-3,318,229.00	-4,420,211.00
Changes in the fair value of inventory	-55,876.00	5,145.00
Changes in the fair value of and realization of gains or losses on biological assets	1,374,524.00	-188,809.00

INPUTS PURCHASED FROM THIRD PARTIES (CONTINUED)	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Asset impairment / recovery	0.00	0.00
Other	-40,531.00	22,693.00
Inputs purchased from third parties – total	-175,647,068.00	-224,983,685.00
Gross value added	28,154,630.00	33,369,433.00
Depreciation, amortization and depletion	-6,369,468.00	-8,653,478.00
Depreciation and amortization	-6,369,468.00	-8,653,478.00
Amortization of exclusive supplier rights	0.00	0.00
Net added value produced by the entity – total	21,785,162.00	24,715,955.00
TRANSFERRED ADDED VALUE	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Finance revenue	575,473.0	819,660.0
Fair value of financial instruments	0.00	0.00
Foreign exchange gains (assets)	3,267,417.00	909,428.00
Gains on derivatives	1,029,781.00	438,570.00
Equity in income of associates	-63,050.00	-130,092.00
Other transferred added value	132,287.00	157,328.00
Transferred added value – total	4,941,908.00	2,194,894.00
Total added value to be distributed – total	26,727,070.00	26,910,849.00

DISTRIBUTION OF ADDED VALUE	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
Personnel	3,425,437.00	4,543,957.00
Direct compensation	2,810,703.00	3,563,642.00
Benefits	457,815.00	752,864.00
FGTS	156,919.00	227,451.00
Taxes, charges and contributions	13,210,888.00	12,873,147.00
Federal	9,933,488.00	10,282,699.00
State	3,260,520.00	2,559,977.00
Municipal	16,880.00	30,471.00
Other taxes and duties	0.00	0.00
Interest on third-party capital	6,841,182.00	6,990,419.00
Finance expense	1,812,955.00	3,938,084.00
Foreign exchange losses (liabilities)	1,411,786.00	1,581,901.00
Losses on derivatives	3,616,441.00	1,470,434.00
Rent	0.00	0.00
Other	0.00	0.00
Return on equity	3,249,563.00	2,503,326.00
Interest on equity	741,682.00	0.00

DISTRIBUTION OF ADDED VALUE (CONTINUED)	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
Dividends	25,541.00	154,156.00
Non-controlling interests	75,004.00	38,206.00
Retained earnings / loss	2,407,336.00	2,310,964.00
Distribution of added value - total	26,727,070.00	26,910,849.00
BACKUP DIVIDENDS AND INTEREST ON EQUITY	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
Interest on equity	741,682.00	0.00
Dividends	25,541.00	154,156.00
Dividends and interest on equity on net income for the fiscal year - total	767,223.00	154,156.00
PAYMENTS TO PROVIDERS OF CAPITAL	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023
Payments to providers of capital	0.00	0.00
Payments to government	0.00	0.00
Community investment	0.00	0.00
Payments to providers of capital - total	0.00	0.00

¹ As from crop year 2021/2022, the figures reported in this disclosure are no longer comparable with the figures reported in crop year 2020/2021 due to our recent corporate reorganization, which included a capital increase with the entirety of RESA shares on June 1, 2017, implemented by shareholders Shell and Cosan; and the acquisitions of Biosev, the Barcos & Rodados S.A. service station network in Paraguay, and Grupo Gera, completed on August 10, 2021, November 1, 2021, and January 5, 2022. For historical information, click [here](#).

RATIO OF STANDARD ENTRY LEVEL WAGE BY GENDER COMPARED TO LOCAL MINIMUM WAGE GRI 202-1; WEF - People Metrics - Wage Level

RATIO OF STANDARD ENTRY-LEVEL WAGE BY GENDER COMPARED TO LOCAL MINIMUM WAGE¹

	CROP YEAR 2020/2021	CROP YEAR 2021/2022		CROP YEAR 2022/2023	
		Brazil	Argentina	Brazil	Argentina
Men	101%	103%	184%	101%	222%
Women	107%	112%	266%	103%	196%

¹ This disclosure has only been compiled in Argentina since the 2021/2022 crop-year, and therefore historical information is only available for Brazil. In Brazil, this data is for wages proportional to 220 monthly hours of work and is consistent with the requirements for GRI 2-7. The data is for CLT (registered) workers only, and excludes those terminated or on leave. Base wages for 2022 were agreed in a collective bargaining agreement. In Argentina, employees' wages are agreed under a Wage Market Collective Bargaining Agreement, with "Wage Market" being a benchmark group of first-rate peer companies. Raízen Argentina does not compile data on wages paid to contractors.

INFRASTRUCTURE INVESTMENTS AND SERVICES SUPPORTED GRI 203-1;

WEF - Prosperity Metrics - Infrastructure investments and services supported

Our approach to territorial management begins with a social and economic assessment of the locations where we operate, in which we identify the social and economic context and communities' needs. The assessment findings are consolidated in a Social and Economic Assessment Tool

(FAMS), an analytics system for managing risks and opportunities that informs our social initiatives in the locations where we operate, drawing on consultations with internal and external stakeholders and secondary social and economic indicators.

We also listen to the views of stakeholders who might be impacted by our operations via our Consumer Service Center (CSC), which is equipped to receive and address a wide range of inquiries including questions,

complaints, suggestions, and compliments from the communities around our operations; and via our *Café com Comunidade* ("Coffee with the Community") program, a participatory initiative to engage communities and other stakeholders in the locations where we operate.

Collaborative reviews of data generated by FAMS and other systems informs the development of Community Relationship Plans (PRTs) that guide our social initiatives in each location. We have selected a number of priority sites and ended crop year 2022/2023 with Community Relationship Plans in place in 100% of our bioenergy operations and 50% of our distribution bases. Through these plans, we track performance indicators and the effectiveness of initiatives planned and implemented in each location. These plans are revised on an annual basis based on previous outcomes. At the corporate level, our Social Performance function periodically reviews our strategy against global trends, sustainability indexes and market developments.

We track indicators such as the number of people benefited, projects supported,

locations impacted, consumer service cases, and post-initiative satisfaction surveys. Based on FAMS pulse assessments, we track indicators describing perceptions of our performance. Acting with respect and transparency, we address local needs and strengths to foster development in our communities and accelerate the energy transition.

At the Raízen Foundation, we track indicators such as: number of children, youth and communities benefited; attractiveness; beneficiary satisfaction; and impact on the development of social and economic skills.

In crop year 2022/2023, we invested more than R\$ 34 million in social programs and projects, including tax-deducted funding, donations, volunteering, sponsorship, and other forms of support. The number of people directly and indirectly benefited was 921,881. In the 2020/2021 crop year, the number of people benefited was 2,246,890, particularly through our pandemic response programs focused on social inclusion and health. In the 2021/2022 crop year, a total of 797,555 people were benefited.

RAÍZEN BRAZIL SOCIAL INVESTMENT (R\$ THOUSAND)

	CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Tax-deductible Project Sponsorship ¹	13,807	7,737	7,279
Raízen Foundation ²	7,165	11,709	11,458
Sponsorships and Social Partnerships ³	3,583	4,930	12,583
Social Offsets (BNDES)	239	0	0
Volunteering	232	651	290
Donations ⁴	n/a	2,517	518
Company initiatives ⁵	n/a	n/a	1,936
Total	25,026	27,544	34,064

¹ Projects funded under incentive laws: FUMCAD, PRONON, PRONAS, FMI, ROUANET, PROAC, PIE and ICMS/RJ.

² Early childhood and youth education and development projects offered to the community free of charge.

³ Company-funded projects focused on education, culture, sports and industry events.

⁴ Reported as of the 2021/2022 crop-year.

⁵ Reported as of the 2022/2023 crop-year. Company funding provided for company-led projects focused on local development and energy transition.



We provide funding to maintain rural roads so they are in good condition for transporting our crops, while additionally benefiting surrounding communities. We also actively work to prevent and respond to cropland fires, through initiatives ranging from awareness raising in surrounding communities about fire prevention and risks to providing fire response capabilities such as fire trucks, light vehicles and dedicated fire responders. In Brazil, total funding allocated to road maintenance and fire response amounted to R\$ 157 million in the 2022/2023 crop year.

In Argentina, we also continued our social investment programs, with a total of R\$ 113,270 in community investments in the

2022/2023 crop year. Our social investments include both institutional support, such as sponsorship and educational grants, in-kind donations to social projects and charities in our communities through our *Creando Vínculos* ("Forging Bonds") program, fuel donations, and toy and food donations; as well as direct funding and support for neighboring communities in addressing infrastructure needs with the relevant authorities.

SOCIAL INVESTMENTS IN ARGENTINA

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023 ¹
	US\$	R\$	US\$	R\$	US\$
Creando Vínculos ["Creating Links"] (development of social organizations)	48,000	258,194	48,000	256,080	48,135
Lazos Program (Youth Employability)	7,500	40,343	7,500	40,013	7,028
A campaign to donate food to communities close to our operations (COVID-19)	95,600	514,235	0	0	0
Donations of hospital supplies and ambulance fuel (COVID-19)	35,300	189,880	27,500	146,713	8,920
Contributions to national business campaigns for the COVID-19 emergency	73,000	392,669	0	0	0
Contributions to purchasing two tanks for <i>Villa Inflamable</i> (Dock Sud)	6,000	32,274	0	0	0
Scholarships	27,000	145,234	33,400	178,189	19,364
<i>Juntos para Ayudar</i> ["Helping Together"] Campaign in different parts of the country	300,000	1,613,710	0	0	0
Fuel donations for fire-fighting trucks and aircraft to fight fires in Corrientes¹	n/a	n/a	19,800	105,633	0
Campaigns to donate 1,200 mattresses to families in Dock Sud (refinery community) and Barracas (lube plant community)¹	n/a	n/a	32,600	173,921	0
Other collaborations with diverse social organizations¹	n/a	n/a	37,150	198,195	29,823
Total	592,400	3,186,539	205,950	1,098,743	113,270

¹ Other contributions to social organizations in the 2022/2023 crop year included small donations to foundations or charities for specific purposes, such as the Power Chair Foundation, and Children's Day donations.

SIGNIFICANT INDIRECT ECONOMIC IMPACTS GRI 203-2; WEF - Prosperity Metrics -

Significant indirect economic impacts

We support more than 40,000 direct jobs as well as an extensive supply chain of sugarcane suppliers, shippers, resellers, and suppliers of materials and services. This contributes to economic development in different regions of Brazil and Argentina.

Our bioenergy operations, for example, are located in areas where there are limited employment opportunities and relatively small populations. Here, our presence contributes significantly to local development. However, the establishment or decommissioning of operations can have diverse impacts depending on the scale of the operation and the municipality's level of economic dependence. To mitigate risks and impacts from new and decommissioned operations, we have tools in place for assessing the context and social and economic impacts, supporting decision-making.

We also assess internal and external scenarios, trends and benchmarks to inform our strategies for engaging with local

communities. We use proprietary systems such as FAMS, an analytics, risk, and opportunity management tool that informs our social initiatives in the locations where we operate, drawing on consultations with internal and external stakeholders and secondary social and economic indicators to support business decisions. Whenever possible, we align our social investments with collective agendas and public policies to maximize their effectiveness.

In Argentina, the indirect economic impacts of our operations include 2,500 direct jobs and over 20,000 jobs within our service stations. In addition, we do business with more than a thousand local small and medium-sized enterprises. We are also the largest taxpayer in the municipality of Avellaneda, where our refinery is located.

PROPORTION OF SPENDING ON LOCALLY-BASED SUPPLIERS GRI 204-1

In the 2022/2023 crop year the proportion of spending on local suppliers in Brazil was 11%, in line with the previous crop year. In absolute terms, however, spending on local suppliers increased substantially from R\$ 477 million in the 2021/2022 crop year to R\$ 960.3 million in the previous crop year. The overall increase in supplier spend is primarily due to expansion, including the construction of new Second Generation Ethanol (E2G) and biogas plants.

To calculate this percentage, we identify the relevant Raízen cost center and the micro region in which the supplier is located as classified by the Brazilian Institute of Geography and Statistics (IBGE). A supplier is deemed local if it is located in the same microregion as the operation that engaged it. This disclosure is reported on a consolidated basis and includes our bioenergy operations, distribution terminals, administrative units, offices, warehouses, and terminals.

In Argentina, the proportion of spending on locally-based suppliers increased from 8% in the previous crop year to 33% in the 2022/2023 crop year. This increase is a result of improvements introduced in our operations, which resulted in higher overall spending on suppliers. In Argentina, suppliers domiciled in the same province as the operational unit where goods are delivered or services are provided are considered local suppliers.

For reporting purposes, all our operations in Brazil and Argentina were considered as significant locations of operation.



OPERATIONS ASSESSED FOR RISKS RELATED TO CORRUPTION **GRI 205-1**

100% of our operations in the 265 locations where we are present underwent corruption assessments and provided access to a Whistleblowing Channel in the 2022/2023 crop year. In crop year 2021/2022, 100% of our operations in the 257 locations where we were present in the year underwent corruption risk assessments.

Our 1st Global Compliance Week addressed subjects such as preventing fraud and other unlawful activities and competitive ethics.

COMMUNICATION AND TRAINING ABOUT ANTI-CORRUPTION POLICIES AND PROCEDURES **GRI 205-2; WEF - Governance**

Metrics - Anti-corruption

In Brazil, during the 2022/2023 crop year, compliance and anti-corruption topics were communicated to 100% of employees through campaigns and to 100% of newly onboarded suppliers via our *G-Certifica* program (involving a total of 2,858 suppliers). These topics were also included in the agendas of governance bodies. All employees, including the Senior Leadership team, receive training on these topics, including refresher training every two years.

During the crop year, we organized our 1st Global Compliance Week event and launched a Communication Plan as part of our #DescomplicaCompliance campaign, addressing subjects such as preventing fraud and other unlawful activities; anti-harassment and diversity and inclusion; competitive ethics; conflicts of interest, and more.

We utilized multiple communication channels, especially Workplace, email, and Toolbox Talks involving operations and field teams.

For business partners, we used email notices to communicate, for example, the need for on-site teams to agree to and comply with the Raízen Supplier Code of Conduct (launched in the 2022/2023 crop year), contractual clauses, and agreements, as well as the requirement to undergo Integrity Audits and due diligence, especially for suppliers interacting with government officials.

In Argentina, 100% of employees received communications about our anti-corruption policies and procedures in the period. Training was offered to 789 employees, with a participation rate of 99% (784 employees). In addition, all executives completed training as eligible participants.

Our anti-corruption policies and procedures are available on our company website and within our internal systems.



COMMUNICATION AND TRAINING ABOUT ANTI-CORRUPTION POLICIES AND PROCEDURES (CONTINUED) GRI 205-2; WEF - Governance Metrics - Anti-corruption

COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES FOR GOVERNANCE BODY MEMBERS¹

	CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Brazil	Argentina	Brazil	Argentina
Total number of members who received communications ¹	14	11	14	11
Governance body members who received communications	100%	100%	100%	100%
Total number of governance body members who were trained	14	11	14	11
Percentage of governance body members who were trained	100%	100%	100%	100%

¹ In Brazil this disclosure includes statutory members only. In Argentina, governance body members are considered to include the vice president of Raízen Argentina and 10 executives. No historical data is available for Argentina as we began reporting this disclosure in crop year 2022/2023.

COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES FOR WORKERS¹

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Brazil	Argentina	Brazil ¹	Argentina	Brazil ¹	Argentina ²
COMMUNICATIONS						
Total number of employees who received communications	28,941	1,150	29,721	1,178	43,621	1,198
Percentage of employees who received communications	100%	100%	100%	100%	100%	100%
TRAINING						
Total number of employees who were trained	4,896	814	6,117	823	43,621	784
Percentage of employees who were trained	56%	26%	99%	70%	100%	99%

¹ In Brazil, all direct employees were deemed to be eligible for Code of Conduct training. Beginning in crop year 2022/2023, this disclosure no longer includes apprentices, consistent with GRI 2-7.

² In Argentina, the data are reported using the same criteria as for GRI 2-7, with 100% of employees receiving communications about anti-corruption policies and procedures. Training was offered to 789 employees, with a participation rate of 99% (784 employees). There are no apprentices and interns in our operations in Argentina.

COMMUNICATION AND TRAINING ABOUT ANTI-CORRUPTION POLICIES AND PROCEDURES (CONTINUED) GRI 205-2; WEF - GOVERNANCE METRICS - ANTI-CORRUPTION

COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES, BY EMPLOYEE CATEGORY AND BY REGION IN BRAZIL¹

EMPLOYEE CATEGORY	CROP YEAR 2022/2023									
	Brazil									
	Midwest		Northeast		North		Southeast		South	
	Total number	Percentage	Total number	Percentage	Total number	Percentage	Total number	Percentage	Total number	Percentage
CEO	0	0%	0	0%	0	0%	1	100%	0	0%
Vice presidents	1	100%	0	0%	0	0%	12	100%	0	0%
Executive Board	1	100%	5	100%	0	0%	72	100%	1	100%
Middle managers	11	100%	23	100%	4	100%	434	100%	9	100%
Heads/coordinators	75	100%	61	100%	8	100%	1,521	100%	14	100%
Administrative	587	100%	296	100%	157	100%	7,489	100%	224	100%
Operational	4,865	100%	0	0%	0	0%	27,451	100%	0	0%
Technicians/supervisors	27	100%	36	100%	30	100%	180	100%	21	100%
Trainees	0	0%	0	0%	0	0%	11	100%	0	0%

¹ Historical data is not available for this disclosure, as we began reporting on training and communication about our Code of Conduct (which includes anti-corruption) by employee category and by region in crop year 2022/2023. We have no employees in regions reported as zero. The data were reported using the same criteria as for GRI 2-7.

COMMUNICATION AND TRAINING ABOUT ANTI-CORRUPTION POLICIES AND PROCEDURES (CONTINUED) GRI 205-2; WEF - GOVERNANCE METRICS - ANTI-CORRUPTION

COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES, BY EMPLOYEE CATEGORY AND BY REGION IN ARGENTINA¹

EMPLOYEE CATEGORY	CROP YEAR 2022/2023			
	Argentina			
	Informed		Trained	
	Total number	Percentage	Total number	Percentage
CEO	n/a	n/a	n/a	n/a
Vice presidents	1	100%	1	100%
Directors	10	100%	10	100%
Managers	75	100%	75	100%
Coordinators	104	100%	104	100%
Specialists	21	100%	21	100%
Administrative	258	100%	258	100%
Technicians	324	100%	324	100%
Operational	405	100%	0	0%
Trainees	11	100%	11	100%

¹ Historical data is not available for this disclosure, as we began reporting on training and communication about anti-corruption by employee category and by region in crop year 2022/2023. Data for Argentina is not reported by region. Out of a total of 789 employees eligible for training, 99% (784 employees) attended training. Employees categorized as "Operational" do not meet the criteria set by Raízen Argentina's legal department, which requires Anti-Corruption training for: employees interacting with third parties (external customers, suppliers, government officials, etc.); roles related to price negotiation and procurement or that have a financial impact on the company; and roles that provide technical support to different departments related to the above matters. There are no apprentices and interns in our operations in Argentina.

COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES FOR BUSINESS PARTNERS¹

REGION	CROP YEAR 2022/2023		
	Type of business partner	Total number	Percentage
Midwest	Suppliers	190	100%
Northeast	Suppliers	65	100%
North	Suppliers	32	100%
Southeast	Suppliers	2,346	100%
South	Suppliers	225	100%
Argentina	Suppliers	3,679	100%

¹ No historical data is available as we began reporting this disclosure for suppliers in crop year 2022/2023. We were unable to estimate data for customers, and therefore only suppliers are reported in this disclosure.



CONFIRMED INCIDENTS OF CORRUPTION AND ACTIONS TAKEN GRI 205-3; WEF – GOVERNANCE PILLAR - ANTI-CORRUPTION

During the 2022/2023 crop year, a total of 28 incidents of corruption were confirmed, including 13 incidents of misappropriation and theft, 12 incidents of fraud, and three incidents of bribery. Out of these confirmed cases, 17 incidents resulted in the dismissal of or disciplinary action against employees involved in corruption. Additionally, two cases led to the termination of contracts with commercial suppliers. No legal proceedings related to corruption were initiated. **| GRI 205-1 |**

A total of 128 corruption-related reports were received, representing 17% of our locations of operation (46 out of 265 locations). In the 2021/2022 crop year there were 100 reports, representing 10% of our locations of operation (26 out of 257 locations during the crop year).

CONFIRMED INCIDENTS OF CORRUPTION¹

	CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Total number of confirmed incidents of corruption	35	27	28
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	28	21	17
Total number of confirmed incidents where contracts with business partners were terminated or not renewed due to violations related to corruption	4	2	2

¹ The data are reported for our operations in Brazil and Argentina on a consolidated basis, including all employees and apprentices. Data for assets acquired from Biosev have been included as from crop year 2021/2022.

LEGAL ACTIONS FOR ANTI-COMPETITIVE BEHAVIOR, ANTI-TRUST, AND MONOPOLY PRACTICES 206-1

NUMBER OF LEGAL ACTIONS FOR ANTI-COMPETITIVE BEHAVIOR, ANTI-TRUST, AND MONOPOLY PRACTICES

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ¹	CROP YEAR 2022/2023 ²	
		Brazil	Argentina
0	10	1	1

¹ Of the ten cases, three involved our employees, including two criminal proceedings (criminal action and police investigation) and a freeze on assets related to the same case as the criminal action.

² Data for our operations in Argentina have been included as from crop year 2022/2023. The legal action reported in Brazil refers to a motion brought by Raízen S.A. challenging the decision of the antitrust authority, CADE, in Administrative Proceeding no. 08700.001831/2014-27. The legal action in Argentina is a commercial lawsuit brought on the grounds of unfair competition. These proceedings had not been concluded on the reporting date.

AMOUNT OF SUBSIDIES RECEIVED THROUGH GOVERNMENT PROGRAMS SASB RR-BI-530A.1

In the 2022/2023 crop year we received 33 tax incentives through government programs, covering the following taxes across all our activities:

- **Value Added Tax on Sales and Services (ICMS):** A tax on the interstate and inter-municipal movement and transportation of goods and communications.
- **Excise Tax (IPI)**
- **Social Integration Program (PIS)**
- **Tax for Social Security Financing (COFINS)**
- **Services Tax (ISS):** A tax on services of any kind
- **Income Tax**



(1) TOTAL CAPITAL EXPENDITURE (CAPEX) LESS DEPRECIATION (2) SHARE BUYBACKS AND DIVIDEND PAYMENTS

WEF - Prosperity Metrics - Employment and wealth generation

Our CAPEX expenditure in the Renewables and Sugar segments involves expenditure on sugarcane planting and crop management to improve yields, as well as other recurring expenditure. It also includes expenditure to accelerate expansion projects in Renewables, especially the construction of E2G plans, our second Biogas plant, and solar farms. In crop year 2022/2023 we also acquired the lubricants businesses of Shell Brasil Petróleo Ltda, Payly Holding S.A. and Payly Soluções S.A.

FINANCIAL INVESTMENT CONTRIBUTION – CAPEX (R\$)

	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Total capital expenditure (CapEx)¹	6,242,543,000	10,657,276,000
Depreciation	0	0
Total	6,242,543,000	10,657,276,000

¹ CapEx is calculated as the sum of "Additions to biological assets" and "Additions to property, plant and equipment and intangible assets", on page 38 of the most recent financial statements we published.

ECONOMIC CONTRIBUTION – RETURN ON EQUITY (R\$)

	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Share buyback	40,083,000	185,077,000
Dividend payments	2,740,490,000	2,437,316,000
Total	2,780,573,000	2,622,393,000



ENVIRONMENTAL

ENERGY CONSUMPTION WITHIN THE ORGANIZATION GRI 302-1; SASB FB-AG-130A.1

Our energy consumption in Brazil was 184,289,380 GJ in 2022. The increase compared to 2021 was primarily driven by the inclusion of mills acquired from Biosev in the scope of the disclosure. In the previous year we were also affected by crop failure, which reduced our production output and, consequently, the amount of sugarcane bagasse available for use in power generation. In Argentina our energy consumption was 17,607,504 GJ.

TOTAL ENERGY CONSUMPTION¹ BY TYPE OF FUEL (GJ)

ENERGY SOURCES	2020	2021	2022 ²		
	Brazil and Argentina	Brazil and Argentina	Brazil	Argentina	Total
RENEWABLE ENERGY SOURCES					
Sugarcane bagasse	156,077,521.60	118,500,585.48	185,629,445.92	0	185,629,445.92
Hydrous ethanol	128,805.19	124,386.43	176,208.35	0	176,208.35
Anhydrous ethanol	175.59	199.93	126.1	0	126.1
Biodiesel	301,148.76	272,113.61	451,109.48	0	451,109.48
Total energy from renewable sources	156,507,651.14	118,897,285.46	186,256,889.85	0	186,256,889.85
NON-RENEWABLE ENERGY SOURCES					
CCU coke	2,215,922.00	2,789,715.28	0	2,525,273.00	2,525,273.00
Diesel	2,901,646.81	2,621,885.57	4,346,557.40	0	4,346,557.40
Natural Gas	6,689,929.90	6,693,499.67	0	6,994,179.00	6,994,179.00
Refinery fuel gas	6,390,636.10	7,499,046.86	0	7,624,467	7,615,498.00
"C" Gasoline	684.53	779.41	491.57	0	491.57
LPG	6,209.11	6,180.24	6,904.89	0	6,904.89
Heavy fuel oil	1,578,994.62	2,155,435.97	312,666.21	999,959.00	1,312,625.21
Total energy from nonrenewable sources	19,784,023.07	21,766,543.00	4,666,620.07	18,143,878	22,801,529.07



ENERGY CONSUMPTION WITHIN THE ORGANIZATION (CONTINUED) GRI 302-1; SASB FB-AG-130A.1


ENERGY SOURCES	2020	2021	2022 ²		
	Brazil and Argentina	Brazil and Argentina	Brazil	Argentina	Total
Purchased electricity	342,509.48	342,509.48	455,331.42	1,758.00	457,089.42
ELECTRICITY SOLD					
Electricity	n/a	n/a	7,089,461.17	346,853.00	7,436,314.17
steam sold	n/a	n/a	0	182,310.00	182,310.00
Total energy sold	9,017,486.83	8,978,283.64	7,089,461.17	529,163.00	7,618,624.17
Total energy consumption	176,288,680.93	372,668,832.39	184,289,380.17	17,616,473	201,896,884.17

¹ For our Brazil operations, the conversion factors published in the National Energy Balance were used. The information used to calculate emissions is compiled using the GHG Protocol methodology and taken from our Greenhouse Gas (GHG) Emissions Report. We do not measure total energy consumed and sold for heating, cooling and steam. In our Argentina operations, we carry out a mass balance for the refinery using the Solomon Energy Intensity Index (EII); the conversion factors used in 2022 were as follows: Lower calorific value (LCV) for fuels: Lower calorific value (LCV) for fuels: Natural Gas: 48,086 kJ/kg; refinery fuel gas: 47,866 kJ/kg; heavy fuel oil: 41,130 kJ/kg; CCU coke: 39,330 kJ/kg; steam conversion: 2.79 GJ/tHPS. For figures reported as zero, the relevant fuels are not applicable to the corresponding operation.

² Beginning in 2022, the data on our operations includes our Biosev acquisitions.



ENERGY CONSUMPTION OUTSIDE THE ORGANIZATION GRI 302-2

Energy consumption outside the organization in Brazil primarily relates to fuel consumption by third-party vehicle fleets. In 2022, third-party transportation companies consumed 7,253,887 GJ of fuels. Total energy consumption outside the organization was 7,893,315 GJ in 2022, compared to 6,608,613 GJ in 2021.

ENERGY CONSUMPTION¹ OUTSIDE OF THE ORGANIZATION (GJ)

	2022
Nonrenewable sources	6,428,397.29
Diesel	6,428,397.29
Renewable sources	825,489.31
Ethanol	158,315.105
Biodiesel	667,174.20
Total	7,253,886.59

¹ This disclosure currently excludes data on our operations in Argentina. The conversion factors published in the National Energy Balance (BEN) were used. The information used to calculate emissions is compiled using the GHG Protocol methodology and taken from our Greenhouse Gas (GHG) Emissions Report. Data for assets acquired from Biosev have been included as from crop year 2022/2023. Historical data segregated by renewable and nonrenewable sources is not available (n/a), as we began reporting this data in 2022.

ENERGY INTENSITY GRI 302-3

Energy intensity in our Brazil operations was 2.61 GJ per metric ton of crushed sugarcane in the 2022/2023 crop year. The data used to calculate this disclosure include energy consumed within and outside the organization. Energy intensity within the organization was 2.51 GJ, and energy intensity outside of the organization was 0.10 GJ. The types of energy included in the energy intensity calculation were fuels and electricity from scope 1 and 2 sources.

In Argentina, our energy intensity was 132.51 GJ. The calculation includes only the energy used within the Buenos Aires refinery.

ENERGY INTENSITY

	2020	2021 ¹	2022 ²
Energy intensity in Brazil (GJ/metric ton of crushed sugarcane)	2.65	6.77	2.61
Energy intensity in Argentina (based on the Solomon Energy Intensity Index)	130.70	129.85	132.51

¹ The higher rate in 2021 reflects crop failure and the resulting reduction in sugarcane crush and, ultimately, cogeneration output, significantly increasing our scope 2 emissions. In addition, due to the extended drought in Brazil, the average emission factor for the national grid rose by more than 100%. The water crisis led to increased dispatching of thermal power plants, increasing the emissions intensity of the national grid.

² Beginning in 2022, the data on our operations includes our Biosev acquisitions. Energy intensity in Brazil was calculated as energy consumption within and outside the organization divided by the total sugarcane crush in the 2022/2023 crop year, of 73,463,696.91 metric tons. In Argentina, the calculation includes only the electricity used on site at the Buenos Aires refinery and does not include our offices in Argentina outside the refinery. The rate is calculated based on the Solomon Energy Intensity Index (EII), an energy efficiency metric that compares an oil refinery's actual consumption (132,876.60 GJ) to the "standard" energy consumption of a refinery with a similar scale and configuration. The types of energy included in the energy intensity rate were fuel gas, fuel oil, asphalt, natural gas and CCU coke.

WATER WITHDRAWAL GRI 303-1, 303-3, 11.6.5; SASB FB-AG-140A.1, EM-RM-140A.1; WEF - Planet Metrics - Water consumption and withdrawal in water-stressed areas

In 2022/2023 we withdrew 67,836 ML of freshwater in our mill operations in Brazil. Compared to the 2021/2022 crop year, withdrawal volumes increased, in part because we accounted for produced water from sugarcane in Brazil. **We maintained our public commitment under the Raízen ESG Agenda to reduce our external-source water withdrawal volumes during the crush period by 15%.**

During the 2022/2023 crop year, our Water Stewardship Committee carried out several materiality and water intensity assessments in our operations in order to target our initiatives to water resources with the highest impact. As a result, monitoring water withdrawals by other agents in the supply chain has been included in the committee's medium-term plan.

In Argentina, total water withdrawal was 121,771 ML, which was below expectations due to a planned shutdown of approximately 50 days at the main crude oil distillation unit of the refinery.

WATER WITHDRAWAL BY TYPE OF SOURCE¹ (ML)

	CROP YEAR 2020/2021	CROP YEAR 2021/2022 ²	CROP YEAR 2022/2023 ³		
	Brazil	Brazil	Brazil	Argentina	Total
Surface water	45,384	54,626	55,413	121,771	177,184
Groundwater	5,816	9,225	10,279	0	10,279
Produced water	n/a	n/a	2,144	0	2,144
Total	51,200	63,850	67,836	121,771	189,607

¹ Our water withdrawals include freshwater only; no other types of water are consumed (total dissolved solids >1,000 mg/L). Based on the Köppen-Geiger climate classification, the most widely used classification in climate science, none of our operations are located in areas with water stress. Most sites are located in "Tropical Wet Climates" and in "Humid Subtropical Climates". However, there are different methods of evaluating areas with water stress. Using the World Resources Institute (WRI) Water Risk Atlas, as recommended by GRI, some of our operations would be deemed to be located in areas with water stress.

² The data for the 2021/2022 crop year now includes the assets acquired from Biosev, resulting in an approximately 25% increase in water consumption compared to the previous season.

³ Produced water from sugarcane in Brazil is being reported for the first time in the 2022/2023 crop year and, as a result, historical data is not available (n/a). This disclosure now includes data for operations in Argentina for the 2022/2023 crop year, and therefore historical data is not available.



WATER DISCHARGE GRI 303-1, 303-2, 303-4, 11.6.5; WEF - Planet Metrics - Water consumption and withdrawal in water-stressed areas

In the 2022/2023 crop year, water discharge in Brazil amounted to 5,166 ML (megaliters), with secondary treatment. The priority substances of concern in water discharge are defined in accordance with the relevant regulations of the state of São Paulo, as well as established discharge limits. Our primary focus is on organic load due to the characteristics of the effluent; this parameter remained compliant within discharge limits during the crop year. *No water was discharged in areas with water stress.

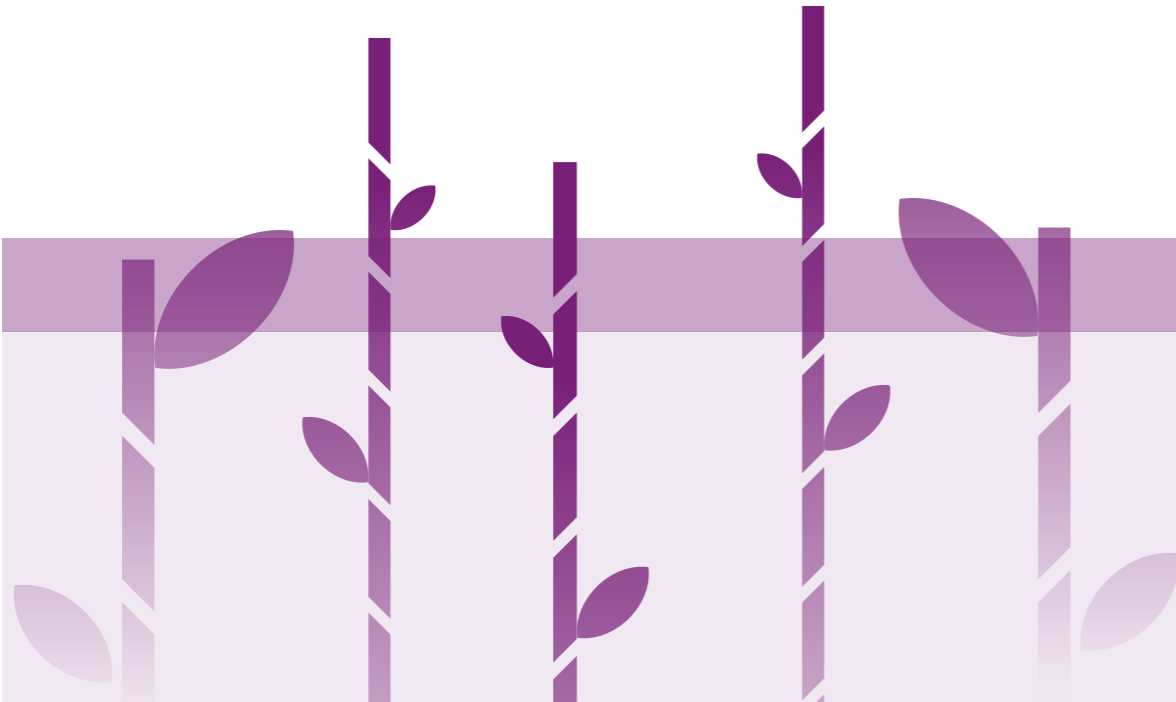
In Argentina, total water discharge was 136,313 ML. Primary-level physical treatment was applied to 134,609 ML, while secondary and tertiary physical-chemical treatment was used for 1,704.62 ML. The substance of concern in discharged effluents is hydrocarbon. The adopted limits are compliant with applicable legislation, and there were no incidents of non-compliance during the period.

TOTAL WATER DISCHARGE BY TYPE OF SOURCE¹ AND WATER (ML)

	CROP YEAR 2020/2021			CROP YEAR 2021/2022 ²			CROP YEAR 2022/2023		
	Brazil	Argentina	Total	Brazil	Argentina	Total	Brazil	Argentina	Total
Surface water	4,123	151,084	155,207	3,948	142,000	145,948	5,166	136,313	141,479
Total	4,123	151,084	155,207	3,948	142,000	145,948	5,166	136,313	141,479

¹ Water discharges include freshwater only; no other types of water are discharged (total dissolved solids >1,000 mg/L). Based on the Köppen-Geiger climate classification, the most widely used classification in climate science, none of our operations are located in areas with water stress. Most sites are located in "Tropical Wet Climates" (Am, Aw) and in "Humid Subtropical Climates" (Cfa). It is important to note, however, that there are different methods of evaluating areas with water stress. Using the World Resources Institute (WRI) Water Risk Atlas, as recommended by SASB, some of our operations would be deemed to be located in areas with water stress. Our operations in Argentina, and specifically the Refinery operations, our largest water consumer in the country, are not located in areas with water stress based on the World Resources Institute (WRI) Water Risk Atlas.

² Starting in 2021/2022 the data on our Brazil operations include our recent Biosev acquisitions. The data for crop year 2021/2022 has been restated for Argentina after a flow meter was determined to be defective; as a result, both water volumes for Argentina and the total consolidated water volumes were amended. **GRI 2-4.**



WATER CONSUMPTION GRI 303-5; SASB RR-BI-140A.1, EM-RM-140A.1; WEF - Planet Metrics - Water consumption and withdrawal in water-stressed areas

WATER CONSUMPTION (in ML)¹

CROP YEAR 2020/2021	CROP YEAR 2021/2022 ²			CROP YEAR 2022/2023 ³		
	Brazil and Argentina	Brazil	Argentina	Total	Brazil	Argentina ⁴
195,848	63,850	105,000	168,000	62,670	-14,542	48,127

¹ Based on the Köppen-Geiger climate classification, the most widely used classification in climate science, none of our operations are located in areas with water stress. Most sites are located in "Tropical Wet Climates" (Am, Aw) characterized by high rainfall, with wet summer seasons and dry winter seasons. In addition, we have some operations in "Humid Subtropical Climates" (Cfa), with dryer winter seasons than in tropical wet climates, but without causing a water deficit during the year. It is important to note, however, that there are different methods of evaluating areas with water stress. Using the World Resources Institute (WRI) Water Risk Atlas, as recommended by SASB, some of our operations would be deemed to be located in areas with water stress. Stored water volumes are constant, and there were no significant changes or impacts during the reporting period. Beginning in crop year 2021/2022, the data for our Brazil operations will include our recent Biosev acquisitions. In Argentina, water consumption is theoretically zero liters because there are no significant additions or losses of water in the production process. Therefore, we assume that the water entering the refinery is equal to the amount ultimately discharged into the recipient water body. In addition, the water discharge figures are estimates and may differ from one period to another, potentially showing negative values.

² The data for crop year 2021/2022 has been restated for Argentina after a flow meter was determined to be defective; as a result, both water volumes for Argentina and the total consolidated water volumes were amended. **GRI 2-4.**

³ Beginning in crop year 2022/2023, the scope of water consumption data was changed for both our Brazil and our Argentina operations. Water consumption was calculated as total water withdrawals less total water discharge. In the previous crop years, water consumption was assumed to be equal to the volume of water withdrawals.

⁴ For our Argentina operations, water consumption can potentially be negative as, although there are no significant water losses in the process, the flow meters used to measure discharge are unreliable.



NUMBER OF INCIDENTS OF NON-COMPLIANCE ASSOCIATED WITH WATER QUALITY PERMITS, STANDARDS, AND REGULATIONS SASB RR-BI-140A.3, FB-AG-140A.3, EM-RM-140A.2

In the 2022/2023 crop year we recorded five incidents related to water quality regulations. These are not necessarily incidents of noncompliance, as the decisions in these proceedings are appealable at the administrative level and/or in court.

NUMBER OF INCIDENTS OF NON-COMPLIANCE ASSOCIATED WITH WATER QUALITY PERMITS, STANDARDS, AND REGULATIONS¹

CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
7	10	5

¹Data for assets acquired from Biosev have been included as from crop year 2022/2023.

OPERATIONAL SITES OWNED, LEASED OR MANAGED IN OR ADJACENT TO PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS [GRI 304-1](#); [WEF - Planet Metrics - Land use and ecological sensitivity](#); [SASB EM-MD-160a.2](#)

We manage 555,728 hectares of third-party leased land for sugarcane cultivation in the same states where our bioenergy operations are located: São Paulo, Goiás, and Mato Grosso do Sul.

As of the end of the 2022/2023 crop year, we had 24 bioenergy operations certified by Bonsucro, an internationally recognized industry standard. Among the certification requirements is the absence of sugarcane fields in areas of high conservation value.

For each certified operation, an Environmental Management Plan (EMP) is established that articulates our commitment to minimizing environmental impacts from our operations. The EMP establishes objectives, goals, and measures addressing different environmental aspects, including biodiversity, soil, air, water, waste, and others. Specifically in the area of biodiversity, we have implemented a range of local initiatives within our mill and agricultural operations to preserve and promote fauna and flora. These initiatives include employee awareness and communication campaigns and wildlife studies.

HABITATS PROTECTED OR RESTORED [GRI 304-2](#), [304-3](#), [11.4.4](#)

In 2022/2023 we had the following standards and policies in place for our biodiversity-related initiatives:

- **Environmental Management Plan (EMP):** a document developed in accordance with the Bonsucro Standard, addressing 10 topics and establishing specific measures and targets for each topic. The objective of the plan is to ensure that each unit effectively mitigates or minimizes the impacts of its operations.
- **Strategic Biodiversity Monitoring Plan:** assessments of the impacts of our operations on biodiversity and ecosystem services based on biodiversity conservation and landscape ecology concepts, in accordance with Principle 04 of the Bonsucro Standard (Actively manage biodiversity and ecosystem services).

- **Mapping of the regeneration status of protected areas:** diagnostic assessments by a consulting firm to determine the regeneration status of protected areas; the assessment procedures include mapping the hydrographic network, the boundaries of the protected area (as defined by the Forest Code), and land use and cover within the protected area.

Biodiversity conservation measures are implemented in all leased sugarcane fields and have been approved by certification firms accredited by international sustainability standard-setting organizations, such as Bonsucro and International Sustainability & Carbon Certification (ISCC). As part of our initiatives in the 2022/2023 crop year, we:

- Used wildlife sighting dashboards in our sugarcane operations;
- Identified sugarcane field areas with a higher prevalence of wildlife and installed signage on the prohibition of fishing and hunting, and of the risk of roadkill;
- Completed strategic biodiversity monitoring plans in specific regions; and
- Mapped out the stage of regeneration in protected areas, and local reforestation initiatives.

IUCN RED LIST SPECIES AND NATIONAL CONSERVATION LIST SPECIES WITH HABITATS IN AREAS AFFECTED BY OPERATIONS [GRI 304-4](#)

In 2023 we will conduct an assessment of biodiversity and actual and potential impacts from our agricultural operations, in accordance with a new Bonsucro Certification requirement to map out all protected areas and habitat conservation areas.

GREENHOUSE GAS EMISSIONS INTENSITY GRI 305-4

In 2022, our overall greenhouse gas emissions intensity was 0.021 tCO₂e per metric ton of crushed sugarcane.

GHG EMISSIONS INTENSITY (tCO₂e/metric ton of crushed sugarcane)¹

2020	2021	2022
0.039	0.025	0.021

¹ Calculated as the sum of scope 1 (direct) and scope 2 (indirect) emissions divided by total sugarcane crushed in the period (73,463,697 metric tons). The GHG emissions included in the emissions calculations are those that are covered by the Kyoto Protocol: CO₂, CH₄, N₂O, SF₆, NF₃, HFCs and PFCs; emissions of NF₃, SF₆ and PFCs are not relevant to our activities.

EMISSIONS GRI 305-1, 305-2, 305-3; SASB FB-AG-110A.1, EM-RM-110A.1; WEF - Planet Metrics - Greenhouse Gas (GHG) emissions

In 2022, our direct gross greenhouse gas (GHG) emissions (scope 1) were a total of 2,742,975 tCO₂e, and indirect GHG emissions from purchased electricity (Scope 2) were a total of 14,135 tCO₂e. Other indirect (scope 3) greenhouse gas emissions—excluding indirect emissions from electricity, heating, cooling and steam purchased and consumed—were 53,110,338.32 tCO₂e.

Total biogenic emissions are computed separately from direct gross GHG emissions. Total biogenic emissions were 20,452,170 tCO₂e within scope 1 and 11,606,952 tCO₂e within scope 3 in 2022.

We have elected to use the operational control approach, with our inventory therefore including 100% of emissions from all organizations and production operations over which we have operational control, even if on a shared basis. The data include our operations in Brazil and Argentina. Emissions are calculated in accordance with the following standards:

- The Brazil GHG Protocol Program Specifications developed by the WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development) and managed in Brazil by FGV CES (Fundação Getulio Vargas Center for Sustainability Studies);
- NBR ABNT ISSO 14.064-1 Greenhouse gases Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals; and
- Where applicable, we follow the calculation guidelines established in the: 2006 IPCC Guidelines for National GHG Inventories, and in the Third National Inventory Benchmark Report.



GROSS OVERALL GREENHOUSE GAS (GHG) EMISSIONS, BY SCOPE¹ (tCO_{2e})

	2020	2021	2022 ²
Scope 1	2,427,764.55	2,409,015.36	2,742,975.30
Scope 2	11,740.95	16,762.53	14,134.74
Scope 3	44,582,401.48	49,282,716.66	53,110,338.32
Total	47,021,906.96	51,708,494.55	55,867,448.36

¹ The primary sources of conversion factors were the following: IPCC, 2006; Ministry of Science and Technology (MTC); US EPA Solid Waste Management and Greenhouse Gases, 2006; 2017 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting; Australian National Greenhouse Accounts NGA Factors; Greenhouse gases emissions in the production and use of ethanol from sugarcane in Brazil: The 2005/2006 averages and a prediction for 2020; GHG Protocol Agriculture Guidance; Third Brazilian Greenhouse Gas Emissions inventory: Reference Report on Nitrous Oxide Emissions from Agricultural Soil; and internal research. The global warming potential rates used as a reference were those given in the IPCC Fourth Assessment Report: Climate Change – Errata (2007), for a time horizon of 100 years. We use 2013 as a baseline year to better represent the scope of our activities.

² In 2022/2023 the data on our operations included our Biosev acquisitions. The inventory covered the greenhouse gases addressed by the Kyoto Protocol. Scope 1 emissions include the following gases: CO₂, CH₄, N₂O, SF₆, NF₃ as well as HFCs and PFCs. However, indirect emissions from purchased electricity include only CO₂, based on the calculation used and provided by the Brazilian Ministry of Science, Technology & Innovation. Within scope 2, the gas of concern is CO₂. Within scope 3, other indirect (scope 3) emissions include mobile-source emissions from sugarcane growing operations; employee commuting; franchises; use of products sold; and production of fuels. The activities included in the emissions calculation are: air travel; biomass burning and application of mill waste on third-party properties; fuel combustion by third-party vehicles; employee transportation in production operations (offices + mills + sugarcane fields), combustion of fuels marketed; production of fuels used in activities; and electricity consumption by Shell Select stores. The inventory covered the greenhouse gases addressed by the Kyoto Protocol, namely: CO₂, CH₄, N₂O, SF₆, NF₃, HFCs and PFCs; emissions of NF₃, SF₆ and PFCs are not relevant to our activities. In 2013 we included emissions from vinasse and filter cake in our emissions inventory.

BIOGENIC CO₂ EMISSIONS, BY SCOPE¹ (tCO_{2e})

	2020	2021	2022 ²
Scope 1	17,453,982	13,508,091.21	20,452,170.49
Scope 3	12,229,273	11,366,891.25	11,606,951.56

¹ The primary sources of conversion factors were the following: IPCC, 2006; Ministry of Science and Technology (MTC); US EPA Solid Waste Management and Greenhouse Gases, 2006; 2017 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting; Australian National Greenhouse Accounts NGA Factors; Greenhouse gases emissions in the production and use of ethanol from sugarcane in Brazil: The 2005/2006 averages and a prediction for 2020; GHG Protocol Agriculture Guidance; Third Brazilian Greenhouse Gas Emissions inventory: Reference Report on Nitrous Oxide Emissions from Agricultural Soil; and internal research. The global warming potential rates used as a reference were those given in the IPCC Fourth Assessment Report: Climate Change – Errata (2007), for a time horizon of 100 years. We use 2013 as a baseline year to better represent the scope of our activities.

² In 2022/2023 the data on our operations included our Biosev acquisitions. The inventory covered the greenhouse gases addressed by the Kyoto Protocol. Scope 1 emissions include the following gases: CO₂, CH₄, N₂O, SF₆, NF₃ as well as HFCs and PFCs. However, indirect emissions from purchased electricity include only CO₂, based on the calculation used and provided by the Brazilian Ministry of Science, Technology & Innovation. Within scope 2, the gas of concern is CO₂. Within scope 3, other indirect (scope 3) emissions include mobile-source emissions from sugarcane growing operations; employee commuting; franchises; use of products sold; and production of fuels. The activities included in the emissions calculation are: air travel; biomass burning and application of mill waste on third-party properties; fuel combustion by third-party vehicles; employee transportation in production operations (offices + mills + sugarcane fields), combustion of fuels marketed; production of fuels used in activities; and electricity consumption by Shell Select stores. The inventory covered the greenhouse gases addressed by the Kyoto Protocol, namely: CO₂, CH₄, N₂O, SF₆, NF₃, HFCs and PFCs; emissions of NF₃, SF₆ and PFCs are not relevant to our activities. In 2013 we included emissions from vinasse and filter cake in our emissions inventory.



GROSS OVERALL SCOPE 1 GREENHOUSE GAS (GHG) EMISSIONS, BY TYPE OF GAS¹ (tCO₂e) **GRI 11.1.5;** **SASB EM-MD-110A.1**

	2020	2021 ²	2022 ³
Carbon dioxide (CO₂)	1,401,702.77	1,564,693.64	1,699,596.88
Methane (CH₄)	198,875.40	171,695.38	238,730.24
Nitrous oxide (N₂O)	811,803.07	804,460.31	786,594.63
Total (scope 1)	2,427,764.60	2,554,181.33	2,742,975.30
Percentage of methane GHG emissions (CH₄)	8%	7%	9%

¹ The primary sources of conversion factors were the following: IPCC, 2006; Ministry of Science and Technology (MTC); US EPA Solid Waste Management and Greenhouse Gases, 2006; 2017 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting; Australian National Greenhouse Accounts NGA Factors; Greenhouse gases emissions in the production and use of ethanol from sugarcane in Brazil: The 2005/2006 averages and a prediction for 2020; GHG Protocol Agriculture Guidance; Third Brazilian Greenhouse Gas Emissions inventory: Reference Report on Nitrous Oxide Emissions from Agricultural Soil; and internal research. The global warming potential rates used as a reference were those given in the IPCC Fourth Assessment Report: Climate Change – Errata (2007), for a time horizon of 100 years. We use 2013 as a baseline year to better represent the scope of our activities.

² The reported data does not include assets acquired from Biosev as they were still being integrated into our systems. Emissions data including assets acquired from Biosev will be available on the Public Emissions Register (Brazilian GHG Protocol Program) and on the Raízen ESG Agenda website following third-party assurance of Biosev's assets. For the purpose of historical comparability, CH₄ and N₂O conversions use the GWP factors in AR-4 (IPCC, 2006). Other communications may use factors deriving from other IPCC reports, marginally changing the final CO₂e emissions value.

³ Data for assets acquired from Biosev have been included as from crop year 2022/2023.

REDUCTION OF GHG EMISSIONS **GRI 305-5**

Expanding irrigation and using organic fertilizers instead of synthetic fertilizers helps to reduce GHG emissions by improving crop yields with a reduced requirement for lime and increased fertility. In addition, fertigation—or applying fertilizers together with irrigation water—can be deployed using organic nitrogen fertilizer such as vinasse and filter cake in replacement of fossil-derived synthetic fertilizers. Organic fertilizers generate less greenhouse gas emissions such as N₂O during production and application, supporting emissions reductions. The methodology used is consistent with ISO 14064 and the GHG Protocol.

GHG EMISSIONS REDUCED AS A DIRECT RESULT OF REDUCTION INITIATIVES (tCO₂e)

	2022
Increased use of organics¹	14,980.00
Irrigation expansion²	2,504.00

¹ The Data include Scope 1 and 3 CO₂ emissions.

² The Data include Scope 1 CO₂ and N₂O, emissions.



NITROGEN OXIDES (NOX), SULFUR OXIDES (SOX), AND OTHER SIGNIFICANT AIR EMISSIONS GRI 305-7; SASB RR-BI-120A.1; EM-MD-120A.1, EM-RM-120A.1; WEF - Planet Metrics - Air pollution

SIGNIFICANT AIR EMISSIONS¹ (metric tons)

	Crop year 2020/2021 Brazil and Argentina	Crop year 2021/2022			Crop year 2022/2023		
		Brazil	Argentina	Total	Brazil ²	Argentina ³	Total
NOx	9,536.74	7,436.64	513.01	7,949.65	20,214.69	742.27	20,955.45
SOx	132,600.00	n/a	261,313.00	261,313.00	0.03	266,617.26	266,617.26
Persistent Organic Pollutants (POP)	0.00	n/a	0.00	0.00	n/a	0.00	0.00
Volatile Organic Compounds (VOCs)	2,742.40	n/a	2,977.00	2,977.00	n/a	3,100.36	3,100.36
Hazardous Air Pollutants (HAP)	0.00	n/a	0.00	0.00	n/a	0.00	0.00
Particulate Matter (PM)	9,265.39	8,917.97	65.00	8,982.97	18,631.84	68.00	18,699.54
Total	154,144.53	16,354.61	264,868.01	281,222.62	38,844.72	270,527.89	309,372.61

¹ Emissions of SOx, persistent organic pollutants (POP), volatile organic compounds (VOC) and hazardous air pollutants (HAP) are not applicable to our operations in Brazil as only emissions of Particulate Matter (PM) and NOx (nitrogen oxides) are required to be monitored for power generation facilities using sugarcane bagasse-fueled boilers. In Argentina, emissions data refers to the Refinery and has been calculated using the API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry August 2009 Refinery Gas.

² Emissions data for Brazil in the 2022/2023 crop year include assets acquired from Biosev and lubricant assets acquired from Shell Brasil Petróleo.

³ In Argentina, there were 0.01 tons of emissions in other significant emissions categories identified in laws and regulations. SOx emissions data for crop years 2020/2021 and 2021/2022 have been restated, and the consolidated figures for these periods have changed as a result (GRI 2-4). The significant increase in crop year 2022/2023 compared to crop year 2021/2022 reflects the higher production output in the period.



WASTE GENERATED GRI 306-3, 306-4, 306-5, 11.5.4; SASB EM-RM-150A.1

WASTE GENERATED (metric tons)¹

	CROP YEAR 2020/2021			CROP YEAR 2021/2022			CROP YEAR 2022/2023		
	Brazil	Argentina	Total	Brazil	Argentina	Total	Brazil	Argentina	Total
WASTE GENERATED									
Nonhazardous	17,804,144.91	4,143.86	17,808,288.77	24,540,605.21	4,337.11	24,544,942.32	26,296,377.82	1,847.10	26,298,224.92
Hazardous	1,071,115.27	6,743.48	1,077,858.75	140,623.63	13,672.86	154,296.49	70,025.93	10,713.27	80,739.20
Total	18,875,260.18	10,887.34	18,886,147.52	24,681,228.84	18,009.97	24,699,238.81	26,366,403.75	12,560.37	26,378,964.12
WASTE SENT FOR RECOVERY OPERATIONS									
Nonhazardous	17,801,819.00	76.42	17,801,895.42	24,536,321.12	160.22	24,536,481.34	26,290,620.00	99.44	26,290,719.44
Hazardous	1,068,830.00	5,559.07	1,074,389.07	136,316.03	12,154.56	148,470.59	64,820.00	7,094.44	71,914.44
Total	18,870,649.00	5,635.49	18,876,284.49	24,672,637.15	12,314.78	24,684,951.93	26,355,440.00	7,193.88	26,362,633.88
WASTE DIRECTED TO DISPOSAL									
Nonhazardous	2,325.91	4,067.44	6,393.35	4,284.09	4,176.89	8,460.98	5,757.82	1,747.66	7,505.48
Hazardous	2,285.27	1,184.41	3,469.68	4,307.60	1,518.30	5,825.90	5,205.93	3,618.83	8,824.76
Total	4,611.18	5,251.85	9,863.03	8,591.69	5,695.19	14,286.88	10,963.75	5,366.49	16,330.24

¹ Waste generated was calculated as the sum of waste sent for recovery operations and waste directed to disposal. Data for assets acquired from Biosev in Brazil have been included as from crop year 2021/2022.

WASTE DIVERTED FROM DISPOSAL GRI 306-4, 11.5.5; SASB EM-RM-150A.1

WASTE DIVERTED FROM DISPOSAL, BY RECOVERY OPERATION (metric tons)

		CROP YEAR 2020/2021			CROP YEAR 2021/2022 ¹			CROP YEAR 2022/2023		
		Argentina	Brazil	Total	Argentina	Brazil	Total	Argentina	Brazil	Total
Nonhazardous waste	Preparation for reuse	n/a	n/a	n/a	n/a	7.50	7.50	244,080.00	0.00	244,080.00
	Recycling	n/a	n/a	n/a	n/a	152.72	152.72	26,046,540.00	99.29	26,046,639.29
	Other recovery operations	n/a	n/a	n/a	n/a	0.00	0.00	0.00	0.15	0.15
	Subtotal	17,801,819.00	76.42	17,801,895.42	24,536,321.12	160.22	24,536,481.34	26,290,620.00	99.44	26,290,719.44
Hazardous waste	Preparation for reuse	n/a	n/a	n/a	n/a	0.00	0.00	0.00	7,079.64	7,079.64
	Recycling	n/a	n/a	n/a	n/a	52.70	52.70	64,820.00	0.00	64,820.00
	Other recovery operations	n/a	n/a	n/a	n/a	12,101.86	12,101.86	0.00	14.80	14.80
	Subtotal	1,068,830.00	5,559.07	1,074,389.07	136,316.03	12,154.56	148,470.59	64,820.00	7,094.44	71,914.44
Total	18,870,649.00	5,635.49	18,876,284.49	24,672,637.15	12,314.78	24,684,951.93	26,355,440.00	7,193.88	26,362,633.88	

¹ In crop year 2021/2022 the data on our Brazil operations included our Biosev acquisitions as well as waste disposal from other areas not included in previous crop years. Historical data by recovery operation is not available as it was first reported for Argentina in crop year 2021/2022 and for Brazil in crop year 2022/2023. All recovery operations are carried out outside the organization for both Brazil and Argentina.

WASTE DIRECTED TO DISPOSAL [GRI 306-5, 11.5.6; SASB EM-RM-150A.1](#)

WASTE DIRECTED TO DISPOSAL¹ (metric tons)

		CROP YEAR 2020/2021	CROP YEAR 2021/2022			CROP YEAR 2022/2023		
		Brazil and Argentina	Brazil	Argentina	Total	Brazil	Argentina	Total
Nonhazardous waste	Landfilling	1,562.74	2,289.66	0.00	2,289.66	5,461.73	0	5,461.73
	Other disposal operations	2,235.58	1,994.43	4,176.89	6,171.32	850.57	1,747.66	2,598.23
	Subtotal	2,340.91	4,284.09	4,176.89	8,460.98	6,312.30	1,747.66	8,059.96
Hazardous waste	Incineration (without energy recovery)	304.26	534.71	330.47	865.18	54.59	651.7	706.29
	Landfilling	88.51	22.67	7.81	30.48	18.55	0	18.55
	Other disposal operations	2,223.29	3,750.22	1,180.02	4,930.24	5,553.88	2,967.13	8,521.01
	Subtotal	2,616.06	4,307.60	1,518.30	5,825.90	5,627.02	3,618.83	9,245.85
Total	4,956.97	8,591.69	5,695.19	14,286.88	11,939.32	5,366.49	17,305.81	

¹ Data for assets acquired from Biosev have been included as from crop year 2021/2022. Data for crop year 2022/2023 includes lubricant assets acquired from Shell Brasil Petróleo. No hazardous or non-hazardous waste materials were incinerated with energy recovery, and no nonhazardous waste materials were incinerated without energy recovery. All disposal operations are carried out outside the organization for both Brazil and Argentina. The data for crop year 2021/2022 has been restated as all waste was disposed of outside the organization [GRI 2-4](#). The increase in waste volumes in Brazil from crop year 2021/2022 to crop year 2022/2023 primarily reflects carbon steel (iron) scrap generated in our bioenergy operations during maintenance.



WASTE GENERATION AND SIGNIFICANT WASTE-RELATED IMPACTS GRI 306-1

In Argentina, different types of hazardous and nonhazardous waste are generated depending on the location and operation. Hazardous waste is generated in facilities and equipment cleaning, maintenance and operation activities. These include hydrocarbons, catalysts, hydrocarbon-impregnated soil, mineral wool, asbestos, and other waste. Waste classified as non-hazardous includes organic waste generated in our offices; and recyclable waste such as glass, cardboard, paper and other waste.

Waste materials are managed, transported and disposed of in accordance with each site’s internal procedures and applicable regulations. Compliant management of waste—from generation to disposal—helps to reduce our impact on the environment.

We also have a Risk Assessment Matrix (RAM) by which we assess environmental impacts, including waste, as well as the likelihood of impacts and the magnitude of consequences.

This disclosure applies only to our operations in Argentina, for which it is material.



NEW SUPPLIERS THAT WERE SCREENED USING ENVIRONMENTAL CRITERIA GRI 308-1, GRI 414-1

All suppliers that the Procurement team transacts and does business with are selected against social, environmental, commercial and technical criteria. To assess social and environmental criteria, all suppliers undergo screening using a proprietary supplier onboarding system, called *G-Certifica*. As part of the screening process, suppliers complete an environmental self-assessment questionnaire consisting of criteria that are disqualifying if not met. We also perform environmental background checks, including environmental liability clearance certificates issued by the federal environmental regulator, IBAMA.

Of the 2,441 newly onboarded suppliers in the 2022/2023 crop year, 2,086 suppliers (85%) were approved on environmental criteria and 355 (15%) were not screened. Of the suppliers that were not approved, 8 (2%) were rejected over environmental criteria and 150 (42%) were rejected over social criteria.

All suppliers of equipment, materials and services, for both core and non-core processes, are screened on:

- labor-related certificates and blacklists, including certificates of timely payment of Severance Indemnity Fund (FGTS) contributions, federal social security liability clearance certificates (CND/INSS), labor liability clearance certificates (CNDT), child and slave labor blacklists, and other means of demonstrating decent working conditions and non-use of child or forced labor. In the 2022/2023 crop year, 148 prospective suppliers were rejected on the basis of the above criteria;
- reputational blacklists such as the National Register of Compliant and Suspended Companies (CEIS), the National Company Blacklist (CNEP), the Block-Listed Private Nonprofit Organizations List (CEPIM) and adverse media. These background checks help to ensure

that suppliers have ethical business practices and demonstrate transparency, integrity and honesty. In the 2022/2023 crop year, 2 prospective suppliers were rejected on the basis of the above criteria.

PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING SOCIAL CRITERIA¹

CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
100%	100%	85%

¹ Data for assets acquired from Biosev have been included as from crop year 2022/2023. This disclosure currently excludes data on our operations in Argentina.

Prospective sugarcane suppliers do not undergo environmental screening before onboarding. However, once they are onboarded, they are included in the *Elos* Program and undergo continuous monitoring to improve sustainability performance. The environmental pillar of our *Elos* program covers the following topics: protected areas, responsible use of agrochemicals, waste disposal and effluent treatment, fire prevention and response, and preservation of water resources.

This disclosure does not apply to our operations in Argentina.

NEGATIVE ENVIRONMENTAL AND SOCIAL IMPACTS IN THE SUPPLY CHAIN AND ACTIONS TAKEN¹ **GRI 308-2, 414-2**

In Brazil

SUPPLY CHAIN:

In the 2022/2023 crop year, out of the approximately 6,000 suppliers listed in our database, 703 were identified as causing environmental impacts based on our Critical Categories Matrix (MCC), an analytics tool. We encourage suppliers to report their greenhouse gas emissions within the Carbon Disclosure Project (CDP) and to implement measures to reduce their carbon footprint; we agreed on improvement measures with 163 respondents out of a total of 4,660 participating suppliers (3.5%). No business relationships were terminated as a result of environmental impact assessments.

In crop year 2021/2022, approximately 4,000 suppliers were monitored against our Supplier Index; of these, 1,538 were identified to *All identified impacts have been addressed within the contractual workflow. These impacts do not involve issues such as forced labor but mainly relate to missing documentation, legal claims brought by former employees, and undeclared fines and bills discovered during the supplier screening process.*

pose a risk in our Critical ESG Risk Matrix and were assessed in background checks. We terminated relationships with 1.1% of suppliers in the reporting period.

To identify suppliers having potential or actual environmental impacts, we have established procurement categories with potential environmental impacts, such as: soil amendments, fertilizers, and fuel-consuming equipment. Overall, all fertilizer suppliers, chemical shipping companies and construction contractors are deemed to be critical.

SUGARCANE SUPPLIERS

In the 2022/2023 crop year, we had 1,898 sugarcane growers enrolled in our *Elos* program, all of which were assessed on environmental and social impacts, representing 93% of our sugarcane suppliers. In the 2021/2022 crop year, out of a total of 1,955 growers, 1,903 were enrolled with the *Elos* program, and no negative social and environmental impacts were identified among these suppliers. In the 2020/2021 crop year, 2,000 growers (96%) were included in the *Elos* program.

Given the diversity and complexity of our supply chain, we have developed a risk

matrix that takes into account a variety of factors, including labor- and natural resource-intensive suppliers which could pose risks related to compliance with labor and environmental regulations. To mitigate these risks, we actively engage and monitor our suppliers through our *Elos* program. We have a dedicated team that provides technical support and advice to sugarcane growers on best agricultural practices, encompassing the three pillars of sustainability: environmental, social, and economic.

No business relationships were terminated as a result of environmental impact assessments.

SHIPPERS

In 2022/2023, 67 shippers underwent social and environmental impact assessments, including assessments against the requirements in our Trucking Manual (MTR), Health, Safety & Environment (HSE) controls, and legal requirements. Out of the shippers that were assessed, four suppliers (6%) were identified as having environmental impacts, including: spills involving flammable or contaminating products in urban areas; fire outbreaks in roadside vegetation or in environmental reserve areas, soil and water contamination, harm to flora and fauna,

and risks to human health from exposure to fuels and inhalation of gases released as a result of accidents. During the 2021/2022 crop year, 58 shippers were assessed for social and environmental impacts, and in the 2020/2021 crop year, 35 fuel shippers underwent similar assessments. No business relationships were terminated as a result of environmental impact assessments.

In Argentina

During the 2022/2023 crop year, a total of 180 suppliers were assessed using social criteria, and 11 suppliers were found to have actual or potential impacts. Improvement actions were agreed upon in all cases, and no business relationships were terminated. The total number of suppliers registered in our system was 3,679, and the 180 suppliers that were screened were assessed based on criteria such as supplier spend exceeding US\$200,000 and companies linked to government agencies.

PERCENTAGE OF BIOFUEL PRODUCTION THIRD-PARTY CERTIFIED TO AN ENVIRONMENTAL SUSTAINABILITY STANDARD [GRI 13.23.3; SASB RR-BI-430A.2, FB-AG-430A.1](#)

PERCENTAGE OF BIOFUEL PRODUCTION THIRD-PARTY CERTIFIED TO AN ENVIRONMENTAL SUSTAINABILITY STANDARD¹

	CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Total amount of biofuel produced (m ³)	2,457,992	2,220,715	3,003,513
Amount of biofuel produced that is third-party certified to an environmental sustainability standard (m ³)	1,921,260	1,722,400	1,999,253
Percentage of biofuel produced that is third-party certified	78%	78%	67%

1. Certified biofuels volumes are estimates based on the volume of certified sugarcane and production plans issued at the start of each crop year. Data for assets acquired from Biosev have not been included

NUMBER OF INCIDENTS OF NON-COMPLIANCE ASSOCIATED WITH AIR QUALITY PERMITS, STANDARDS, AND REGULATIONS [SASB RR-BI-120A.2](#)

In the 2022/2023 crop year, we received two notices of violations of air quality standards and regulations. These notices do not necessarily indicate non-compliance, as the decisions in these proceedings are appealable at the administrative level and/or in court. The alleged violations were related to the release of pollutants resulting from two incidents: smoke from a forest fire of unknown origin that spread into a sugarcane field, and odor during agricultural fertigation operations.

We are entitled submit a technical and legal defense in these proceedings, which do not have a materially significant impact. In all such incidents, we provide all necessary technical clarifications to the relevant environmental authorities. In addition, we:

- Have fire prevention and response measures in place in our agricultural operations, including:
 - Fire Prevention Plans;
 - Mutual Emergency Response Plans;
 - Regular clearing and maintenance of fire breaks; and
 - Social and environmental awareness campaigns in surrounding communities;
- Ensure our sugarcane fertigation operations are compliant through a Vinasse Application Plan that is filed with and approved by the appropriate environmental authority.

NUMBER OF INCIDENTS OF NON-COMPLIANCE ASSOCIATED WITH AIR QUALITY PERMITS, STANDARDS, AND REGULATIONS¹

CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
4	7	2

¹ Data for assets acquired from Biosev have not been included for crop year 2021/2022. This disclosure refers to the Biofuels segment and is not applicable to our operations in Argentina.



DESCRIPTION OF ENVIRONMENTAL MANAGEMENT POLICIES AND PRACTICES FOR ACTIVE OPERATIONS

SASB EM-MD-160A.1

The Environmental Management Plans (EMPs) for our bioenergy operations are implemented through our Integrated Operations Management System (SIGO), Element 3, which comprises the following main environment-related modules:

- Roles and responsibilities;
- Licensing processes, including for new developments;
- Industrial wastewater management;
- Waste management;
- Environmental liability management;
- Blackwater management;
- Environmental noise.

We also have an Occupational Health & Safety and Environment (HSE) Policy that provides guidelines on environmental topics, along with a dedicated policy addressing social and environmental aspects.

All potential risks are identified in a Risk Factors Matrix prepared for each site, which identifies activities and tasks involving risks. After identifying aspects and potential impacts, the risks are ranked, mitigation action is agreed, where applicable, an action plan for improvement is developed.



SOCIAL

NEW HIRE AND TURNOVER RATES GRI 401-1; WEF - Prosperity Pillar - Absolute number and rate of employment

TOTAL NUMBER AND RATE OF NEW EMPLOYEE HIRES BY GENDER¹

	CROP YEAR 2021/2022			CROP YEAR 2022/2023					
	Brazil			Brazil			Argentina ²		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Number of employees hired	9,534	2,649	12,183	9,858%	3,115	12,973	119	52	171
Hiring rate	78.26%	21.74%	100.00%	75.99%	24.01%	100.00%	69.59%	30.41%	100.00%
Number of employees terminated	9,412	1,811	11,223	7,682%	1,435	9,117	108	30	138
Turnover rate	83.86%	16.14%	100.00%	84.26%	15.74%	100.00%	78.26%	21.74%	100.00%

¹ New hire and turnover rates are calculated with the total number of employees hired and terminated, respectively, as the denominator. No historical data is available for Argentina as we began reporting this disclosure in crop year 2022/2023. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. There are no apprentices and interns in our operations in Argentina.

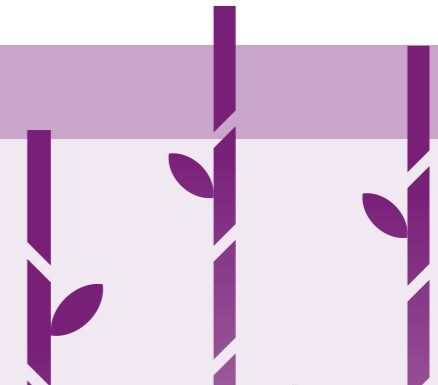


NEW HIRE AND TURNOVER RATES (CONTINUED) GRI 401-1; WEF - Prosperity Pillar - Absolute number and rate of employment

TOTAL NUMBER AND RATE OF NEW EMPLOYEE HIRES AND TURNOVER BY AGE GROUP IN BRAZIL¹

AGE GROUP	CROP YEAR 2021/2022				CROP YEAR 2022/2023			
	Brazil				Brazil			
	Number of employees hired	Hiring rate	Number of employees terminated	Turnover rate	Number of employees hired	Hiring rate	Number of employees terminated	Turnover rate
Under 20	1,497	12.29%	552	4.92%	1,112	8.57%	135	1.48%
21 to 30	3,830	31.44%	3,286	29.28%	4,275	32.95%	2,432	26.68%
31 to 40	3,630	29.80%	3,610	32.17%	4,036	31.11%	3,113	34.15%
41 to 50	2,250	18.47%	2,228	19.85%	2,520	19.42%	2,131	23.37%
51 to 60	920	7.55%	1,175	10.47%	940	7.25%	1,025	11.24%
Over 60	56	0.46%	372	3.31%	90	0.69%	281	3.08%
Total	12,183	100.00%	11,223	100.00%	12,973	100.00%	9,117	100.00%

¹ New hire and turnover rates are calculated with the total number of employees hired and terminated, respectively, as the denominator. No historical data is available for Argentina as we began reporting this disclosure in crop year 2022/2023. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. There are no apprentices and interns in our operations in Argentina.

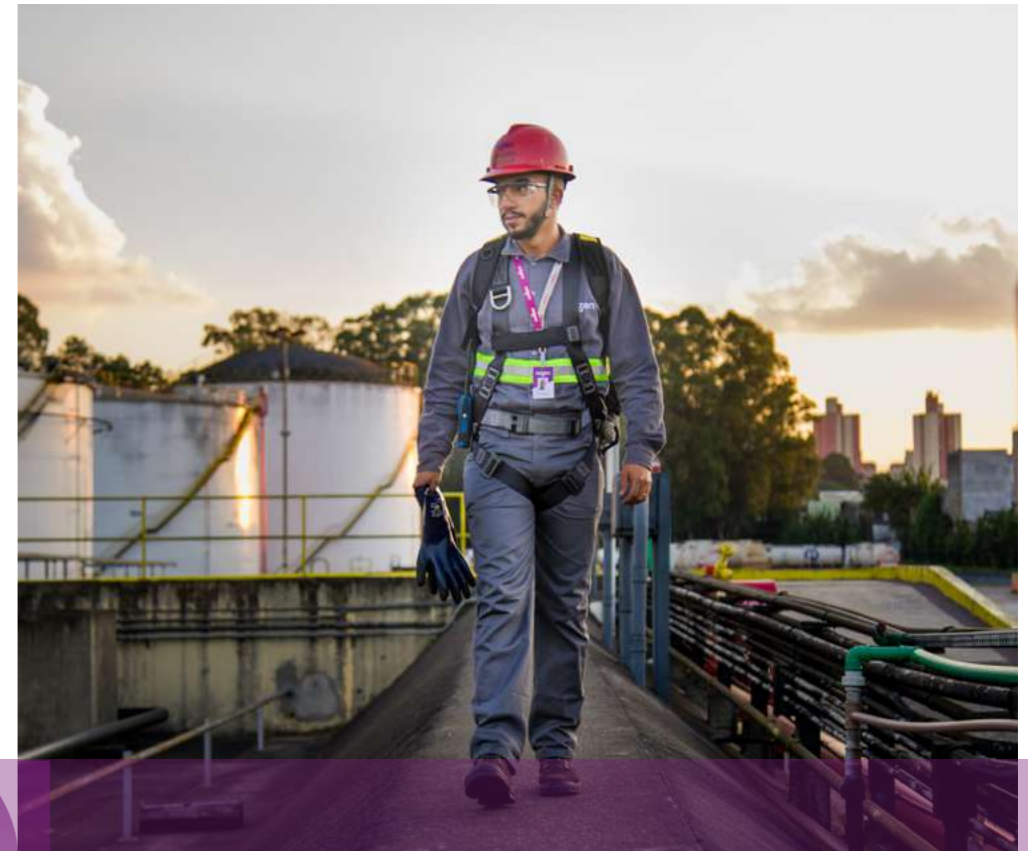


NEW HIRE AND TURNOVER RATES (CONTINUED) GRI 401-1; WEF - Prosperity Pillar - Absolute number and rate of employment

TOTAL NUMBER AND RATE OF NEW EMPLOYEE HIRES¹ BY AGE GROUP IN ARGENTINA

AGE GROUP	CROP YEAR 2022/2023			
	Argentina			
	Number of employees hired	Hiring rate	Number of employees terminated	Turnover rate
Under 30	72	42.11%	22	15.94%
30 to 50	94	54.97%	85	61.59%
Over 50	5	2.92%	31	22.46%
Total	171	100.00%	138	100.00%

¹ New hire and turnover rates are calculated with the total number of employees hired and terminated, respectively, as the denominator. Argentina has no historical data as this disclosure is being reported for the first time in the 2022/2023 crop year. The data is also being reported separately from Brazil, as our operations in Argentina use a different age group classification. The data are reported using the same criteria as for GRI 2-7, which includes the apprentice category. There are no apprentices and interns in our operations in Argentina.



NEW HIRE AND TURNOVER RATES (CONTINUED) GRI 401-1; WEF - Prosperity Pillar - Absolute number and rate of employment

TOTAL NUMBER AND RATE OF NEW EMPLOYEE HIRES¹ BY REGION

REGION	CROP YEAR 2021/2022				CROP YEAR 2022/2023			
	Number of employees hired	Hiring rate	Number of employees terminated	Turnover rate	Number of employees hired	Hiring rate	Number of employees terminated	Turnover rate
South	12	0.10%	15	0.13%	57	0.44%	29	0.32%
Southeast	10,298	84.53%	9,553	85.12%	10,903	84.04%	7,829	85.87%
Midwest	1,852	15.20%	1,643	14.64%	1,874	14.45%	1,191	13.06%
Northeast	10	0.08%	5	0.04%	102	0.79%	41	0.45%
North	11	0.09%	7	0.06%	37	0.29%	27	0.30%
Argentina	n/a	n/a	n/a	n/a	171	100.00%	138	100.00%

¹ New hire and turnover rates are calculated with the total number of employees hired and terminated, respectively, as the denominator. Data for our Argentine operations are not available for crop year 2021/2022, as we began reporting this disclosure in crop year 2022/2023. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. There are no apprentices and interns in our operations in Argentina.



PARENTAL LEAVE GRI 401-3

PARENTAL LEAVE¹

	CROP YEAR 2020/2021		CROP YEAR 2021/2022				CROP YEAR 2022/2023			
	Brazil		Brazil		Argentina		Brazil		Argentina	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Employees entitled to parental leave	24,883	5,197	24,159	5,687	958	220	35,135	7,380	967	242
Employees who took parental leave	631	258	656	187	16	13	966	223	23	10
Employees that returned to work after parental leave ended	624	182	661	202	16	13	949	201	23	9
Employees that returned to work and were still employed 12 months after their return to work	558	94	602	193	15	13	529	112	21	9
Return to work rate	98.80%	70.50%	101.00%	108.00%	100.00%	100.00%	98.24%	90.00%	100.00%	90.00%
Retention rate of employees that took parental leave	85.10%	61.10%	101.00%	110.00%	94.00%	100.00%	81.00%	73.00%	91.30%	100.00%

¹ The retention rate was calculated based on the percentage of employees who took parental leave in the current crop year and were still employed at the end of the crop year. As from crop year 2022/2023, our newly acquired Biosev assets have been included in the information for our Brazil operations. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. There are no apprentices and interns in our operations in Argentina.



WORKER TRAINING ON OCCUPATIONAL HEALTH AND SAFETY GRI 403-5

In Brazil, we provide first aid training to members of the Internal Accident Prevention Committee (CIPA) and the emergency response team, in addition to training in basic life support (SBV) for occupational nurses, physicians and safety representatives. We also provide training required by Regulatory Standards, including training on topics such as working at heights, confined space entry, and machine operation. Additionally, we perform routine Task Safety Assessments (AST) and Toolbox Talks.

In Argentina, we provided the following training in the year: emergency responder training, risk assessment and prevention, preventive self-control, safe and responsible driving, life-saving protocols, lifesaving rules, working at heights and in confined spaces, electrical hazard awareness, barricading procedures, accident investigation, and hazard identification.

WORKERS COVERED BY AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM GRI 403-8

ABOUT THE OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM¹

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
Workers who are covered by such a system	28,941	1,150	45,131	1,178	55,688	1,209
Percentage of workers who are covered by such a system	100%	100%	100%	100%	100%	100%
Workers who are covered by such a system that has been internally audited	28,941	681	45,131	1,178	55,688	1,209
Percentage of workers who are covered by such a system that has been internally audited	100%	60%	100%	100%	100%	100%
Workers who are covered by such a system that has been audited or certified by an external party²	26,172	681	38,017	1,178	52,625	1,209
Percentage of workers who are covered by such a system that has been audited or certified by external party²	90%	60%	84%	100%	94%	100%

¹ Data for assets acquired from Biosev have been included as from crop year 2022/2023. Data for Brazil includes employees as well as contractors and is compiled as an average, as the figures fluctuate during the course of the year. The data for Argentina does not include contractors.



OCCUPATIONAL INJURIES GRI 403-9; SASB FB-AG-320A.1, EM-RM-320A.1; WEF - People Metrics - Health and safety

In Brazil, we had a total of 111 reportable work-related injuries involving employees during 2022/2023. The main types of injuries were fractures and burns. There were also ten high-consequence work-related injuries and one fatality resulting from a traffic accident. For workers who are not employees, the primary types of injuries were cuts and fractures. We recorded 11 reportable work-related injuries, two high-consequence injuries, and one fatality resulting from a traffic accident.

Health and safety hazards were identified through a comprehensive risk mapping process, which included analyzing incident history, conducting inspections, implementing interventions, and behavioral observation. The key hazards that contributed to high consequence work-related injuries in the crop year were contact with hot fluids, interaction with rotating equipment and moving parts, and vehicle operations. Prompt action is taken for any severe, immediate risks; for moderate risks, we apply the Hierarchy of Controls (substitution and engineering controls); for low risks, we apply administrative

control measures and Personal Protective Equipment (PPE) requirements.

In Argentina there was one high-consequence injury involving direct employees, but no fatalities. Among workers who are not employees, there were three recordable work-related injuries in the crop year, but no high-consequence injuries and no fatalities. The main types of work-related injuries identified in Argentina included bruises, musculoskeletal trauma, burns, and pinched members.

We have implemented a risk-based management system in Argentina that employs different methodologies including Health Risk Assessment (HRA), Hazards and Effects Management Processes (HEMP), Personal Safety Risk Assessment (PSRA), Equipment Integrity (EI), Permits to Work and trade-specific risk analysis for electrical, mechanical and civil construction activities. The people who handle these documents are licensed in occupational health and safety or have equivalent credentials, including engineers for process safety and other trade-specific qualifications for electrical, mechanical and civil construction trades.

NUMBER AND RATES OF OCCUPATIONAL INJURIES INVOLVING OTHER WORKERS¹

	CROP YEAR 2020/2021	CROP YEAR 2021/2022		CROP YEAR 2022/2023	
		Brazil	Argentina	Brazil	Argentina
Number of fatalities as a result of work-related injuries	2	0	0	1	0
Rate of fatalities as a result of work-related injuries	0.02	0	0	0.01	0
Number of high-consequence work-related injuries (excluding fatalities)	8	26	1	10	1
Rate of high-consequence work-related injuries (excluding fatalities)	0.08	0.31	0.21	0.09	0.19
Number of recordable work-related injuries	72	126	3	111	1
Rate of recordable work-related injuries	0.69	1.49	0.62	0.98	0.19
Number of recordable near misses	n/a	n/a	2,403	n/a	2,542
Near-miss frequency rate (NMFR)	n/a	n/a	500.21	n/a	474.65

¹ The rates have been calculated based on 1,000,000 hours worked. In crop year 2022/2023, the number of employee hours worked was 113,051,882,60 in Brazil and 5,355,559.00 in Argentina. Data for assets acquired from Biosev were included for crop year 2021/2022. In crop year 2022/2023 the lubricant business acquired from Shell Brasil Petróleo was included in our reporting. Data on near misses are not available (n/d) for our operations in Brazil. In crop year 2021/2022, all high-consequence injuries were classified as "lost-time injuries." The Serious Injuries and Fatalities (SIF) disclosure was first reported in 2022/2023, under the designation of "high consequence incidents."

OCCUPATIONAL INJURIES (CONTINUED)

GRI 403-9; SASB FB-AG-320A.1, EM-RM-320A.1; WEF - People Metrics - Health and safety

NUMBER AND RATES OF OCCUPATIONAL INJURIES INVOLVING OTHER WORKERS¹

	CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Brazil	Argentina	Brazil	Argentina
Number of fatalities as a result of work-related injuries	0	0	1	0
Rate of fatalities as a result of work-related injuries	0	0	0.04	0
Number of high-consequence work-related injuries (excluding fatalities)	0	0	3	0
Rate of high-consequence work-related injuries (excluding fatalities)	0	0	0.11	0
Number of recordable work-related injuries	4	0	12	3
Rate of recordable work-related injuries	0.14	0	0.43	0.58
Number of recordable near misses	n/a	95	n/a	95
Near-miss frequency rate (NMFR)	n/a	24.39	n/a	18.51

¹ The rates have been calculated based on 1,000,000 hours worked. In crop year 22/23, the number of employee hours worked was 27,805,810.80 in Brazil and 5,131,947.21 in Argentina. Data for assets acquired from Biosev were included for crop year 2021/2022. Data on near misses are not available (n/d) for our operations in Brazil.

DISCUSSION OF MANAGEMENT SYSTEMS USED TO INTEGRATE A CULTURE OF SAFETY

EM-RM-320A.2; WEF - Governance Metrics - Protected ethics advice and reporting mechanisms

We have an Integrated Operations Management System (SIGO) comprising nine elements that include protecting the health and safety of our employees. The tool, which is applied across all operations in Brazil, Paraguay and Argentina, and in all our local and international offices, is used to assign responsibilities and maintain system-based control of health and safety indicators. The SIGO system is aligned with international standards and best practices that extend beyond minimum regulatory requirements.

In Argentina, our management system includes standardized processes for risk management, team interventions, high-risk tasks, permits to work, incident investigation and reporting, process safety, and compliance with legal requirements. Our operational sites are also certified to ISO 9001, 14001 and 45001.

We have implemented a Behavior-Based Safety Program that initially targeted our operational plants at highest risk. This process is based on the principles of promoting

safe behaviors and eliminating those that pose risks. In line with our commitment to safety as our foremost value, looking after our employees and fostering safe work practices across all levels of the organization, this process comprises the following steps:

- 1 Understanding concepts
- 2 Evaluating organizational maturity
- 3 Engaging people: senior, middle and lower management
- 4 Challenging a reassessing our approaches to working
- 5 Developing a roadmap of progress
- 6 Setting goals
- 7 Measuring outcomes: Selecting tools to measure progress

WORK-RELATED INJURIES GRI 403-10; WEF - People Metrics - Well-being

In crop year 2022/2023 there were no incidents of work-related ill health and/or fatalities involving direct employees in Brazil. However, there were some non-recordable temporary diseases during the reporting period. The primary work-related diseases in the crop year, classified according to the International Classification of Diseases (ICD-10), were: musculoskeletal disorders (CID M), trauma (CID S) and digestive system disorders (CID K).

During the reporting period, two Occupational Illness Reports (CAT) were issued due to a court decision. These CATs were issued in 2022 in relation to incidents that occurred on 5/26/2015 and 3/3/2022, which were outside the 2022/2023 crop year.

All job-related risks are mapped as part of our Risk Management Program (PGR) and/or Rural Occupational Risk Management Program (PGRTR), using the criteria defined in our Occupational Health Manual (OHM). The OHM takes into account national and international legislation, regulatory standards, and Occupational Hygiene Standards (OHSs). All

workers are covered by the PGR and PGRTR. Occupational illnesses are not managed for workers who are not employees. However, the risks associated with their specific roles are identified and shared with the relevant contractors to be included in their own PGRs and PGRTRs.

To mitigate risks, we provide training to employees, provide signage in work areas, implement engineering controls such as enclosures, ventilation, and enclosed systems, enforce the mandatory use of personal protective equipment, and take administrative measures as necessary.

In Argentina, we had one case of occupational illness among our employees during the reporting period, and there were no illnesses or fatalities involving contractor employees. Risks are mitigated through regular occupational health checkups, conducted once or twice a year depending on the level of exposure. The occupational illness identified during the crop year was epicondylitis, a musculoskeletal disorder of the upper limb, and the main identified cause was repetitive motions of the upper limb. To eliminate this hazard and mitigate risks, we performed a review of the relevant task

procedures and made ergonomic adaptations to the relevant workstations.

Worker data is monitored based on the information provided by these checkups, and is managed through our Occupational Risk Insurance (ART) provider.

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE GRI 404-1; WEF - People Metrics - Training provided

In crop year 2022/2023 we provided an average of 61.56 hours of training per employee in Brazil and 62.12 hours in Argentina.

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEES BY GENDER

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023 ¹	
	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
Men	39.59	11.83	46.91	48.52	66.30	61.35
Women	25.93	16.34	28.22	58.93	41.60	65.17
Total	37.24	12.7	43.35	50.47	61.56	62.12

¹ As from crop year 2022/2023, our newly acquired Biosev assets have been included in the information for our Brazil operations. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. For Argentina, the data are reported using the same criteria as for GRI 2-7, which includes the apprentice category.



AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE (CONTINUED) GRI 404-1; WEF - People Metrics - Training provided

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE BY EMPLOYEE CATEGORY

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023 ¹	
	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
CEO	0	n/a	9.00	n/a	3.00	n/a
Vice presidents	5.54	n/a	5.92	n/a	3.70	2.25
Executive Board	5.25	11.5	10.4	36.98	24.47	26.28
Middle managers	12.36	12.92	21.92	65.24	27.92	20.14
Coordinators	20.3	11.06	30.69	62.76	45.74	17.87
Specialists³	n/a	n/a	n/a	n/a	n/a	12.44
Administrative	38.3	14.11	6.13	52.93	44.71	16.21
Operational	39.16	9.52	108.11	39.89	68.48	141.77
Technicians/Supervisors	n/a	14.07	17.72	53.63	182.85	16.05
Trainees	n/a	93.25	15.47	0.00	41.63	400.14
Apprentices	6.06	n/a	9.02	n/a	15.71	n/a
Total	37.24	12.7	43.34	50.47	61.56	62.12

¹ As from crop year 2022/2023, our newly acquired Biosev assets have been included in the information for our Brazil operations. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. For Argentina, the data are reported using the same criteria as for GRI 2-7, which includes the apprentice category. The "Specialist" category was first reported for our operations in Argentina in crop year 2022/2023. For this reason, no historical data is available. This disclosure is not applicable to Brazil (n/a).

PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS, BY EMPLOYEE CATEGORY AND GENDER GRI 404-3

PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE REVIEWS

	CROP YEAR 2020/2021 ¹			CROP YEAR 2021/2022						CROP YEAR 2022/2023 ²	
	Brazil and Argentina			Brazil			Argentina			Brazil ²	Argentina
	Men	Women	Total	Men	Women	Total	Men	Women	Total		
CEO	100%	n/a	100%	100%	n/a	100%	100%	n/a	100%	100%	n/a
Vice presidents	100%	100%	100%	100%	100%	100%	n/a	n/a	n/a	100%	100%
Executive Board	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%
Middle managers	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%
Heads/coordinators	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
technicians/supervisors	n/a	n/a	n/a	100%	100%	100%	100%	100%	100%	100%	100%
Administrative	31%	57%	36%	27%	49%	77%	100%	100%	100%	72%	100%
Operational	7%	6%	7%	8%	8%	12%	0%	0%	0%	5%	0%
Trainees	n/a	n/a	n/a	0%	100%	100%	100%	100%	100%	100%	100%
Apprentices	5%	7%	6%	5%	9%	7%	n/a	n/a	n/a	7%	n/a
Total	n/a	n/a	n/a	25%	45%	27%	61%	93%	67%	24%	67%

¹ In crop year 2020/2021, the employee categories "trainee" and "totals" were not available, as this data had not been collected in that reporting period. The technicians/supervisors category was not reported in our reports prior to crop year 2021/2022, and therefore this information is not available (n/a). In crop years 2020/2021 and 2021/2022 there were no women in the CEO and vice president categories in Brazil and Argentina, and therefore the percentage is not applicable (n/a).

² As from crop year 2022/2023, our newly acquired Biosev assets have been included in the information for our Brazil operations. For Brazil, employees were accounted for using the same criteria as for GRI 2-7 and for apprentices reported under GRI 2-8. There are no apprentices and interns in our operations in Argentina. The data are no longer reported by gender, only by employee category.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES GRI 405-1, 13.15.2; WEF - People Metrics - Diversity and inclusion

PERCENTAGE OF WORKFORCE BY EMPLOYEE CATEGORY AND GENDER

	CROP YEAR 2021/2022				CROP YEAR 2022/2023 ¹			
	Argentina		Brazil		Argentina		Brazil	
	Men	Women	Men	Women	Men	Women	Men	Women
CEO	n/a	n/a	100%	0%	n/a	n/a	100%	0%
Vice presidents	100%	0%	83%	17%	100%	0%	85%	15%
Executive Board	80%	20%	86%	14%	80%	20%	82%	18%
Middle managers	78%	22%	80%	20%	75%	25%	75%	25%
Heads/coordinators	74%	26%	75%	25%	77%	23%	70%	30%
Specialists	n/a	n/a	n/a	n/a	71%	29%	n/a	n/a
Administrative	60%	40%	80%	20%	54%	46%	65%	35%
Operational	96%	4%	90%	10%	96%	4%	88%	12%
Technicians and supervisors	86%	14%	n/a	n/a	84%	16%	65%	35%
Trainees	68%	32%	6%	94%	64%	36%	9%	91%
Apprentices	n/a	n/a	43%	57%	n/a	n/a	n/a	n/a
Total	81%	19%	83%	17%	80%	20%	82%	18%

¹Beginning in crop year 2022/2023, employees are being accounted for using the same criteria as for GRI 2-7 and apprentices are being reported under GRI 2-8. There are no apprentices and interns in our operations in Argentina. The "Technicians and supervisors" category is relevant only to our operations in Argentina, while the "CEO" and "Apprentices" categories are not applicable in this country. The "Specialists" category was first reported in crop year 2022/2023, and is not applicable to our Brazil operations.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES (CONTINUED) GRI 405-1, 13.15.2; WEF - People Metrics - Diversity and inclusion

PERCENTAGE OF EMPLOYEES, BY JOB CATEGORY AND AGE GROUP¹

	CROP YEAR 2021/2022											
	Argentina						Brazil					
	Under 20	21 to 30	31 to 40	41 to 50	51 to 60	Over 60	Under 20	21 to 30	31 to 40	41 to 50	51 to 60	Over 60
CEO	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Vice presidents	0%	0%	0%	100%	0%	0%	0%	0%	0%	67%	33%	0%
Executive Board	0%	0%	0%	50%	50%	0%	0%	0%	24%	51%	19%	6%
Middle managers	0%	0%	23%	39%	30%	8%	0%	0%	50%	35%	13%	1%
Heads/coordinators	0%	1%	39%	32%	19%	9%	0%	11%	60%	23%	5%	1%
Administrative	0%	30%	39%	13%	14%	4%	1%	26%	35%	22%	12%	3%
Operational	0%	22%	45%	21%	10%	2%	1%	18%	31%	26%	17%	7%
Technicians and supervisors	0%	15%	41%	26%	13%	5%	n/a	n/a	n/a	n/a	n/a	n/a
Trainees	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Apprentices	n/a	n/a	n/a	n/a	n/a	n/a	79%	21%	0%	0%	0%	0%
Total	0%	19%	40%	23%	14%	4%	3%	22%	33%	23%	13%	5%

¹ The "Technicians and supervisors" category applies only to our Argentina operations and is not applicable (n/a) in Brazil. There are no apprentices and interns in our operations in Argentina.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES (CONTINUED) GRI 405-1, 13.15.2; WEF - People Metrics - Diversity and inclusion

PERCENTAGE OF PEOPLE WITH DISABILITIES (PWDS) BY EMPLOYEE CATEGORY

	CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Argentina	Brazil	Argentina	Brazil
CEO	n/a	0%	n/a	0%
Vice presidents	0%	0%	0%	0%
Executive Board	0%	0%	0%	0%
Middle managers	0%	0%	0%	0%
Heads/coordinators	0%	1%	0%	1%
Specialists	n/a	n/a	0%	n/a
Administrative	1%	5%	0%	2%
Operational	0%	2%	0%	2%
Technicians and supervisors	0%	n/a	0%	1%
Trainees	0%	0%	0%	0%
Apprentices	n/a	0%	n/a	n/a
Total	0%	3%	0%	2%

¹ For both Brazil and Argentina, employees figures were reported using the same criteria as for disclosure GRI 2-7. As from crop year 2022/2023, the apprentice category is no longer applicable (n/a) in Brazil and is only included for Argentina. The CEO category is not applicable (n/a) for Argentina. The "Specialists" category was first reported for our operations in Argentina in crop year 2022/2023. For this reason, no historical data is available. This disclosure is not applicable to Brazil (n/a). There are no apprentices and interns in our operations in Argentina.

PERCENTAGE OF EMPLOYEES, BY JOB CATEGORY AND AGE GROUP

	CROP YEAR 2022/2023 ¹					
	Argentina			Brazil		
	Under 30	30 to 50	Over 50	Under 30	30 to 50	Over 50
CEO	n/a	n/a	n/a	0%	100%	0%
Vice presidents	0%	100%	0%	0%	77%	23%
Executive Board	0%	50%	50%	0%	70%	30%
Middle managers	0%	59%	41%	0%	85%	15%
Heads/coordinators	2%	72%	26%	8%	85%	7%
Specialists	0%	52%	48%	n/a	n/a	n/a
Administrative	28%	57%	15%	32%	60%	8%
Technicians and supervisors	11%	71%	18%	51%	40%	8%
Operational	18%	69%	13%	20%	57%	23%
Trainees	100%	0%	0%	82%	18%	0%
Total	16%	66%	18%	22%	59%	19%

¹ Employee data for Brazil and Argentina have been reported using the same criteria as for GRI 2-7. The "Specialists" category was first reported in crop year 2022/2023 for Argentina, and is not applicable to our Brazil operations. In crop year 2022/2023, the age groups reported in this disclosure have been amended for consistency with the GRI Standards. As a result, the historical data are no longer comparable and are being reported in a separate table.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES (CONTINUED) GRI 405-1, 13.15.2; WEF - People Metrics - Diversity and inclusion

WORKFORCE BY RACE AND EMPLOYEE CATEGORY IN BRAZIL

	CROP YEAR 2021/2022						CROP YEAR 2022/2023					
	Brazil						Brazil					
	Asian	White	Indigenous	Mixed race	Black	Not disclosed	Asian	White	Indigenous	Mixed race	Black	Not disclosed
CEO	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Vice presidents	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Executive Board	2%	92%	2%	5%	0%	0%	3%	88%	1%	4%	0%	4%
Middle managers	2%	87%	0%	11%	0%	0%	1%	85%	0%	10%	1%	2%
Heads/coordinators	1%	81%	0%	15%	1%	0%	1%	79%	0%	16%	2%	1%
Administrative	0%	57%	0%	36%	6%	0%	1%	62%	0%	25%	5%	6%
Technicians and supervisors	n/a	n/a	n/a	n/a	n/a	n/a	2%	67%	0%	26%	5%	0%
Operational	0%	42%	0%	50%	7%	1%	0%	43%	1%	45%	6%	5%
Trainees	0%	71%	0%	18%	12%	0%	0%	55%	0%	36%	9%	0%
Apprentices	0%	35%	0%	56%	9%	0%	n/a	n/a	n/a	n/a	n/a	n/a
Total	0%	51%	1%	42%	6%	0%	0%	49%	0%	39%	6%	5%

¹ For Brazil, employees figures were reported using the same criteria as for disclosure GRI 2-7. As from crop year 2022/2023, the apprentice category is no longer applicable (n/a). This disclosure does not include data for Argentina.

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN GRI 405-2, 13.15.3; WEF - People Metrics - Pay equality

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN¹

	CROP YEAR 2022/2023
Executive Board	95%
Middle managers	97%
Coordinators	99%
Administrative	89%
Operational	92%
Technicians/Supervisors	98%

¹ The salary and remuneration figures do not include Argentina. This disclosure was first reported in the 2022/2023 crop year and no historical data is available. The data are reported using the same criteria as for GRI 2-7, but exclude data on the CEO and vice-president categories for strategic reasons.

INCIDENTS OF DISCRIMINATION AND CORRECTIVE ACTIONS TAKEN GRI 406-1, 13.13.4; WEF - People Metrics - Discrimination and harassment

In crop year 2022/2023, we received 44 discrimination reports via our Ethics Hotline. Of these, 90% were investigated and resolved, with only 5 reports being deemed substantiated. These reports related to racial discrimination, gender-based discrimination, and discrimination against LGBTQIAP+ and PwD individuals. As an additional control measure, our Diversity & Inclusion function launched a new Diversity Track to foster awareness, provide training and increase engagement.

Our legal department received three labor claims, for which we have submitted our defense and are following developments. Our legal department reports only individual legal claims alleging discrimination.

DISCRIMINATION REPORTS RECEIVED BY THE ETHICS HOTLINE

	CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Reports/claims received	26	22	47
Cases deemed substantiated	n/a	3	5

¹ The figures in this disclosure are for Brazil only.



OPERATIONS AND SUPPLIERS IN WHICH THE RIGHT TO FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING MAY BE AT RISK GRI 407-1; WEF - People Metrics - Freedom of association and collective bargaining at risk

People are free to peacefully associate around common interests. We respect worker’s right to form, join or not to join unions or other organizations at their own discretion. We also recognize the right of any worker to participate in collective bargaining and other union activities.

We are committed to engaging in genuine dialogue and negotiating in good faith with legally recognized unions representing our employees, upholding collective agreements and conventions.

Our collective bargaining agreements also include provisions on exercising trade union rights. These provisions include commitments to facilitate union elections, granting unions access to notice boards in our facilities to enhance communication between employees and unions, and providing leaves of absence for union officials who are also employees.

There are no suppliers in which the right to freedom of association and collective bargaining may be at risk. We inform managers and business partners about the role of unions, collective bargaining processes and applicable labor regulations.

CHILD, FORCED OR COMPULSORY LABOR GRI 408-1, 409-1; WEF - People Metrics - Risk for incidents of child, forced or compulsory labor

This disclosure applies only to our operations in Brazil, to which it is material.

Complex supply chains, such as in the sugar and ethanol industry, are faced with challenges that include geographical dispersion and differences in scale among sugarcane growers. However, this also creates an opportunity to advocate for and support the implementation of best practices in sugarcane growing. As a result of these initiatives, the raw materials we source are compliant with agreed social and labor standards and are free from labor or any other human rights violations.

In 2014 we launched *Elos*, a comprehensive program for managing the sugarcane supply chain. *Elos* ensures that compliant social, labor, environmental, and governance practices are applied by all contract growers. *Elos* is an inclusive initiative that employs a dedicated team to verify and agree on action plans for continuous improvement in practices and procedures at every stage of sugarcane growing. The program is audited by external civil society organizations and firms, contributing to the development of an increasingly sustainable ecosystem.

During *Elos* visits in the 2022/2023 and previous crop years (2020/2021 and 2021/2022), no instances of child or compulsory labor practices were identified. If such cases are identified in the field, they are immediately reported and established governance workflows are activated.

SECURITY PERSONNEL WHO RECEIVED TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES GRI 410-1

This disclosure applies only to our operations in Brazil, to which it is material.

In crop year 2022/2023, 69% of security personnel received formal training in the organization’s human rights policies or specific procedures and their application to security. Training requirements for direct employees are the same as for contractors.

PERCENTAGE OF SECURITY PERSONNEL TRAINED IN HUMAN RIGHTS POLICIES OR PROCEDURES¹ GRI 410-1

	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Total number of security personnel	309	593
Total number of security personnel who received human rights training	15	408
Percentage of security personnel who received human rights training (%)	4.8%	68.8%

¹ Our security teams are composed of both employees and contractors. The figures in this disclosure are for Brazil only

INCIDENTS OF VIOLATIONS INVOLVING RIGHTS OF INDIGENOUS PEOPLES GRI 2-23, 411-1, 13.14.2

There were no reported incidents of violations involving rights of indigenous peoples in crop year 2022/2023 or in previous crop years (2020/2021 and 2021/2022). In 2022/2023, we expanded our efforts to disseminate our Indigenous Peoples Engagement Policy through communication, engagement, and awareness-raising initiatives targeting the stakeholders involved.

This policy, applicable to all units, departments, and functions, sets out the following overarching principles:

- recognize, respect, and value the rights of indigenous peoples;
- promote the capacity building and improved management of businesses that involve indigenous lands and peoples;
- work with social and environmental responsibility regarding indigenous lands and peoples;
- foster procedures to consult and provide prior free and informed consent from indigenous peoples where applicable; and
- help improve the quality of life and social and environmental aspects of indigenous peoples.

LOCATIONS OF OPERATIONS WHERE INDIGENOUS PEOPLES ARE PRESENT OR AFFECTED BY ACTIVITIES OF THE ORGANIZATION GRI 13.14.3

In the 2022/2023 crop year we carried out a mapping exercise to identify traditional peoples and Indian reservations in the areas where we operate. The mapping approach identified communities within a 10 kilometer radius from our operational sites, in accordance with Annex I of Joint Ministry Ordinance 060/2015, and assessed the municipalities where our operations are located. We identified interactions with two bioenergy operations and 10 distribution centers.

EMPLOYEE TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES FORMER GRI 412-2

EMPLOYEES TRAINED DURING THE REPORTING PERIOD IN HUMAN RIGHTS POLICIES OR PROCEDURES THAT ARE RELEVANT TO OPERATIONS

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023
	Brazil	Argentina	Brazil ¹	Argentina	Brazil ¹
Total hours of training on human rights	8,170	126	10,515	867	14,121
Total workforce trained on human rights	5,415	168	8,025	1,142	11,216
Percentage of workforce trained on human rights	19%	14%	27%	97%	25%

¹ In Brazil, data for assets acquired from Biosev have been included as from crop year 2022/2023. All employees and apprentices were included in this disclosure (43,621 employees). The training provided focused on our Code of Conduct and Human Rights in the Workplace. Employees in Argentina are trained on our Code of Conduct and receive refresher training every two years.



OPERATIONS WITH LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAM GRI 2-25, 413-1

In Brazil, social and environmental impact assessments are integrated into operational impact assessment tools within the SIGO - Element 2 - *Risk Identification*. These include a Risk Factors Matrix tool that assesses factors such as the likelihood and consequences of identified impacts in the local context and informs mitigation measures and action plans to reduce risks to the lowest reasonably practicable level.

In terms of local community development programs based on local communities' needs, we use a proprietary Social and Economic Assessment Tool (FAMS) to identify communities' needs and expectations through consultations with internal and external stakeholders and secondary social and economic indicators. Our social performance strategy applies to 100% of the areas where we operate, with a focus on Local Development and Energy Transition. Throughout 2022/2023 we delivered on our public commitment to advance educational initiatives in 100% of the communities where we operate through Raízen Foundation programs, achieving 34% coverage in the crop

year. We have set a target for 100% of our locations of operation to have active Community Relationship Plans (CEPs) in place by 2024/2025. Currently, we have implemented CEPs in 50% of locations.

We ensure that workers are represented in Internal Accident Prevention Committees (CIPA) and in labor unions in 100% of our operations. Regarding formal local community grievance processes, we have a Whistleblowing Hotline and Customer Service (SAC) available that are communicated in all our operations.

In Argentina, we do not conduct environmental and social impact assessments in communities; however, where relevant, we conduct monitoring assessments to inform decision-making and obtain relevant insights. As part of these assessments, we have evaluated the data for each operation and determined that the Refinery and Sola Plant have a high level of vulnerability and account for 60% and 20% of our area of influence, respectively. The Arroyo Seco Terminal and Santa Fé Terminal have a low level of vulnerability, with each representing 10% of our area of influence.

Regarding formal grievance processes, we have a 24/7 hotline number that is

communicated in all our operations and throughout our service station network. Each inquiry and/or complaint received is forwarded to specialized departments depending on the specific issue, and we follow up on responses.

PERCENTAGE OF OPERATIONS WITH COMMUNITY PROGRAMS

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Brazil	Argentina	Brazil ¹	Argentina ²	Brazil	Argentina
Community engagement programs	41%	60%	97%	72%	100%	60%
Environmental and social impact assessments	73%	0%	97%	0%	100%	0%
Local community development programs	62%	60%	77%	72%	100%	60%
Communication of results of environmental and social impact assessments	n/a	n/a	n/a	n/a	100%	0%
Stakeholder engagement plans based on stakeholder mapping	n/a	n/a	n/a	n/a	50%	0%
Worker representation in labor and health and safety committees	n/a	n/a	n/a	n/a	100%	100%
Formal local community grievance process	n/a	n/a	n/a	n/a	100%	100%

¹ Where no historical information is available (n/a), the relevant disclosure was first reported in the 2022/2023 crop year.

OPERATIONS WITH SIGNIFICANT ACTUAL OR POTENTIAL NEGATIVE IMPACTS ON LOCAL COMMUNITIES GRI 2-25, 413-2

All of our operations are at risk of generating potentially negative social impacts. We regularly conduct mapping exercises to identify social and environmental aspects and impacts related to our businesses, as well as analyses of direct and indirect risks to communities, which are monitored on an ongoing basis. Managing negative impacts and safety is embedded in our approach to managing our operations through Community Relationship Plans.

We also compile a Risk and Opportunity Matrix (R&OM) and Risk Factors Matrix (RFM). The R&OM is used to assess and prioritize risks and opportunities associated with issues that are common across our operations. The RFM assesses factors such as the likelihood and consequence of identified impacts within the local context, and establishes mitigation measures and action plans aimed at reducing risks to the lowest reasonably achievable level.

As part of our commitment to managing negative impacts, we advertise available direct communication channels, such as Customer Service; we run awareness and risk prevention campaigns; and we ensure incidents involving communities are properly documented and addressed.

Significant negative impacts in **Brazil** by operation are as follows:

- Bioenergy operations:
 - Actual impacts: road spraying, dust, noise and effluents.
 - Potential impacts: explosions and turnarounds.
- Distribution bases and airport bases:
 - Actual impacts: dust, noise and heavy vehicle traffic.
 - Potential impacts: explosions and spills.

In **Argentina**, actual and potential negative impacts are primarily related to the refinery. There are also impacts from fuel transfers

and distribution and, at a lesser scale, from land terminals and airport bases, our lubricants plant and service stations. The significant potential negative impacts we have identified include:

- Air quality and odors;
- Soil and/or water contamination;
- Hydrocarbons in effluents;
- Product spills into the soil and/or water;
- Explosions and fire;
- Heavy vehicle traffic;
- Sound pollution;
- Air emissions of particulate matter, dust and smoke from vehicles during construction and maintenance.

POLITICAL CONTRIBUTIONS GRI 415-1

Under our Code of Conduct we are not permitted to make contributions to or join political parties, make donations to election campaigns, or make other types of contributions.

NUMBER OF REFINERIES IN OR NEAR AREAS OF DENSE POPULATION

SASB EM-RM-120A.2

We have one refinery in an area of dense population in Buenos Aires, Argentina.



PROCESS SAFETY EVENT (PSE) RATES FOR LOSS OF PRIMARY CONTAINMENT (LOPC) OF GREATER CONSEQUENCE (TIER 1) AND LESSER CONSEQUENCE (TIER 2) SASB EM-RM-540A.1

This disclosure applies only to our operations in Argentina, for which it is material.

Process Safety Event (PSE) rates for Loss of Primary Containment of greater consequence and lesser consequence are process safety performance indicators for the refining and petrochemical industries. The calculation includes events resulting in injuries, days away from work, hospital admissions and/or fatalities involving employees.

PROCESS SAFETY EVENT (PSE) RATES

	CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
	Argentina	Argentina	Argentina
Tier 1 PSEs ¹ (of greater consequence)	0.00	0.02	0.04
Tier 2 PSEs ¹ (of lesser consequence)	0.03	0.02	0.00

¹ The rate is calculated as: Total Tier 1 PSE Count / Total Hours Worked) × 200,000.

² The rate is calculated as: Total Tier 2 PSE Count / Total Hours Worked) × 200,000.

CHALLENGES TO SAFETY SYSTEMS INDICATOR RATE (TIER 3) SASB EM-RM-540A.2

This disclosure applies only to our operations in Argentina, for which it is material.

This rate provides a measure of the challenges resulting from a flaw or weakness within internal technical safety systems that has led to consequences that fall below the Tier 1 and Tier 2 loss of primary containment (LOPC) impact threshold (previous disclosures), such as safe operating limit excursions or primary containment inspections or testing results outside acceptable limits.

CHALLENGES TO SAFETY SYSTEMS INDICATOR RATE (TIER 3)¹

CROP YEAR 2020/2021	CROP YEAR 2021/2022	CROP YEAR 2022/2023
Argentina	Argentina	Argentina
2.91	3.55	3.58

¹ The rate is calculated as: Total Tier 3 Indicator Count / Total Hours Worked) × 200,000. In the 22/23 crop year we recorded 10,563,636.00 hours worked and 189 events.

DISCUSSION OF MEASUREMENT OF OPERATING DISCIPLINE AND MANAGEMENT SYSTEM PERFORMANCE THROUGH TIER 5 INDICATORS SASB EM-RM-540A.3

This disclosure applies only to our operations in Argentina, for which it is material.

Operating Discipline and Management System Performance are measured using the following indicators:

- Management of Change (MOC) deviations;
- Expired temporary MOC deviations;
- Integrity and design deviations;
- Exceptions to Essential Process Safety Rules (RESP); and
- Active RESP derogations.

Each change is implemented in accordance with the Shell Group Design Engineering Standards (DEPs) and globally recognized engineering standards. In addition, any inspections and preventive maintenance on Process Equipment and Critical Process Safety Equipment are closely monitored. All identified losses of containment, including where less than 10 kg, are documented, reviewed and investigated according to their potential.

We also have a Process Safety Review Plan in place to manage identified risks according to accepted tolerance levels.

SECTOR DISCLOSURES

NATURAL ECOSYSTEM CONVERSION **GRI 13.4.1, 13.4.2, 13.4.3, 13.4.4, 13.4.5**

We have undertaken three significant public commitments to reduce our impact on biomes and ecosystems by 2030:

- 15% reduction in water consumption/withdrawals;
- 20% reduction of our ethanol carbon footprint; and
- 100% traceability of sourced sugarcane, with zero illegal deforestation from 2008.

These commitments have informed procedures and policies that—in conjunction with our Environmental Management Program (PGA) and Bonsucro Certification—ensure we implement best practices while minimizing or eliminating impacts on natural ecosystems.

All crops grown on leased land (100%) are guaranteed to be deforestation- and conversion-free. Data is collected via georeferenced assessments conducted by Agroicone. During the 2022/2023 crop year, no deforestation occurred in leased areas. Data for managed areas was not collected as we do not own any land. Historical data is unavailable as this disclosure was not compiled in previous crop years.

SOIL HEALTH **GRI 13.5.1**

Our crop management practices include soil analysis using grid sampling methods. This enables us to apply soil amendments and fertilizers at variable rates based on specific soil requirements.

Our focus is on optimizing fertilizer use by maximizing the utilization of waste materials from our agricultural and mill operations. This allows us to fully leverage organic fertilization, repurposing operational waste materials to create value-added co-products such as fertilizers. The co-products generated from our operations provide organic matter that improves soil health and fertility. Approximately 80% of our potassium requirement is met through organic fertilization using vinasse, and 30% of our phosphorus requirement is supplied through organic fertilization using filter cake. We also use crop rotation in 60% of areas being replanted, along with the application of biological inputs.

Below are the main threats to soil health and related preventive measures:

THREATS	PREVENTIVE MEASURES
Soil depletion.	Organic fertilization.
Soil compaction.	Subsoiling to alleviate soil compaction in 100% of replanted areas, as well as controlling heavy machinery traffic during harvesting and crop management operations.
Weeds and pests.	Adopting best practices for weed and pest control, reducing reliance on chemical pesticides, and implementing crop management techniques that promote soil health.
Chemical and/or biological imbalance in the soil.	Using soil amendments and applying biological inputs to restore and maintain soil health.
Erosion.	Implementing soil conservation practices to prevent erosion, enhance water infiltration, and optimize conditions for machinery traffic.

PESTICIDE USE GRI 13.6.1,

The majority of pesticides used in our Brazil operations have a low-risk profile, with 49.32% posing a low probability of acute toxicity and 41.92% classified as mildly toxic. We do not employ highly toxic pesticides.

VOLUME AND INTENSITY OF PESTICIDES USED BY THE FOLLOWING TOXICITY HAZARD LEVELS, IN KILOGRAMS OF ACTIVE INGREDIENTS PER HECTARE (KG AI/HA) GRI 13.6.2

	CROP YEAR 2020/2021		CROP YEAR 2021/2022		CROP YEAR 2022/2023	
	Volume	Intensity	Volume	Intensity	Volume	Intensity
Extremely hazardous	0	0%	0	0%	0	0.0%
Highly hazardous	157,179	6%	75,037	3%	n/a	n/a
Moderately hazardous	31,273	1%	6,893	0%	n/a	n/a
Slightly hazardous	967,796	36%	965,648	41%	n/a	n/a
Unlikely to present an acute hazard	1,190,188	45%	1,075,659	49%	n/a	n/a
Not classified (biological inputs or inputs that have no toxicological classification)	309,307	12%	272,143	11%	n/a	n/a

¹Data for crop year 2022/2023 has not yet been fully compiled, and some information is therefore unavailable. This information will be reported in the following crop year.

RATIONALE AND METHODOLOGY FOR TRACING THE SOURCE, ORIGIN, OR PRODUCTION CONDITIONS OF THE PRODUCTS SOURCED BY THE ORGANIZATION (SUCH AS RAW MATERIALS AND PRODUCTION INPUTS PURCHASED); IMPROVEMENT PROJECTS TO GET SUPPLIERS CERTIFIED; LEVEL OF TRACEABILITY IN PLACE FOR EACH PRODUCT SOURCED; AND PERCENTAGE OF SOURCED VOLUME CERTIFIED TO INTERNATIONALLY RECOGNIZED STANDARDS THAT TRACE THE PATH OF PRODUCTS THROUGH THE SUPPLY CHAIN GRI 13.23.1, 13.23.2, 13.23.4

Part of the sugarcane we process is sourced from farms that are Bonsucro-certified and fully traceable through a Chain of Custody System. This system enables us to trace our raw materials to their source farms and to trace our products using a mass balance approach, from production to sale. The inputs we purchase also undergo a thorough screening process, and we closely monitor incoming inputs using an internal system.

In addition, we have implemented an inclusive program called *Elos* to support continuous improvement and development of sugarcane growers. With a dedicated team, *Elos* positively impacts approximately 2,000 growers by providing them with free technical support in sustainable practices. Each producer is assigned a trusted technician who assists them in adopting best cultivation practices that ensure respect for both people and the environment, through regular field visits and comprehensive assessments. Learn more [here](#).

To reinforce our commitment to transparent business management, in 2022 we made a public pledge to ensure that 100% of the sugarcane we source is covered by internationally recognized sustainability standards.

GRI CONTENT INDEX

STATEMENT OF USE

Statement of use	Raízen S.A. has developed its report in accordance with the GRI Standards for the period from April 2022 to March 31, 2023.
GRI 1 Used	GRI 1 – Foundation 2021
Applicable sector standards	GRI Oil and Gas Sector: 11, GRI Agriculture, Aquaculture and Fishing Sectors: 13

GRI 2: GENERAL DISCLOSURES 2021

Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
2-1	Organizational details	Location of the organization's headquarters: Avenida Faria Lima, 4.100 – 11o andar – Itaim Bibi, São Paulo (SP. Pages 8, 24..				
2-2	Entities included in the organization's sustainability reporting	Page: 91				
2-3	Reporting period, frequency and contact point	The Report is published on an annual basis. The current edition, for the 2022/2023 crop year, was published in July 2023. Page: 3				
2-4	Restatements of information	Restated data is indicated in footnotes. Pages 101, 118, 119, 124, 127.				
2-5	External assurance	Page: 3				
2-6	Activities, value chain and other business relationships	Pages: 8, 11, 12, 13, 22, 76, 91x				
2-7	Employees	Pages: 93, 94, 95, 96			8.5, 10.3	
2-8	Workers who are not employees	Page: 97			8.5, 10.3	
2-9	Governance structure and composition	Page: 25			5.5, 16.7	
2-10	Nomination and selection of the highest governance body	Page: 27			5.5, 16.7	

Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
2-11	Chairman of the highest governance body	Page: 24			16.6	
2-12	Role of the highest governance body in overseeing the management of impacts	Pages: 28, 36, 44			16.7	
2-13	Delegation of responsibility for managing impacts	Page 44				
2-14	Highest governance body's role in sustainability reporting	Page: 3				
2-15	Conflicts of interest	Page: 34			16.6	
2-16	Communicating critical concerns	Pages: 36, 101				
2-17	Collective knowledge of the highest governance body	Page: 29	This information is not being reported for strategic or governance reasons.			
2-18	Evaluating the highest governance body's performance	Page: 27				
2-19	Remuneration policies	Page: 31				
2-20	Process for determining remuneration	Page: 31. We have a committee of shareholders and executives that meets on a quarterly basis to discuss and agree on key remuneration policies, and to ensure we maintain a constructive relationship with over 90 local unions. The terms of collective bargaining agreements affecting employee salaries and benefits are discussed, presented, and voted upon through these unions.	For confidentiality reasons, collective bargaining outcomes are not disclosed.		16.7	
2-21	Annual total compensation ratio		This information is not being reported for strategic or governance reasons.			
2-22	Statement on sustainable development strategy	Page: 4				
2-23	Policy commitments	Pages: 24, 33, 41, 61, 71, 150			16.3	
2-24	Embedding policy commitments	Pages: 24, 41			16.3	
2-25	Processes to remediate negative impacts	Pages: 33, 61, 151, 152				
2-26	Mechanisms for seeking advice and raising concerns	Page: 33			16.3	

Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
2-27	Compliance with laws and regulations	Page: 101.			16.3	
2-28	Membership of associations	Pages: 41, 42				
2-29	Approach to stakeholder engagement	Page: 76				
2-30	Collective bargaining agreements	Page: 101			8.8	

MATERIAL TOPICS

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GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Pages: 45, 46, 47				
	3-2	List of material topics	Pages: 46, 47				
SUSTAINABLE SOURCING							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 16, 50, 76, 77, 79, 81			2, 8, 12	
GRI 204: Procurement practices 2016	204-1	Proportion of spending on locally-based suppliers	Page: 107			8.3	
GRI 308: Supplier environmental assessment 2016	308-1	New suppliers that were screened using environmental criteria	Page: 129				7, 8, 9
	308-2	Negative environmental impacts in the supply chain and actions taken	Page: 130			5.2, 8.8, 16.1	7, 8, 9

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 414: Supplier social assessment 2016	414-1	New suppliers that were screened using social criteria	Page: 129			5.2, 8.8, 16.1	
	414-2	Negative social impacts in the supply chain and actions taken	Page: 130			8.1, 8.2, 9.1, 9.4, 9.5	
HUMAN RIGHTS AND WELL-BEING							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 51, 71, 75			5, 8, 16	1, 2
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Pages: 133, 134, 135, 136			5.1, 8.5, 8.6, 10.3	6
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		This information is not being reported for strategic or governance reasons.		3.2, 5.4, 8.5,	6
GRI 403: Occupational health and safety 2018	403-1	Occupational health and safety management system	Page: 71			13.19.2	
	403-2	Hazard identification, risk assessment, and incident investigation	Page: 71			8.8	
	403-3	Occupational health services	Page: 71			13.19.4	
	403-4	Worker participation, consultation, and communication on occupational health and safety	Page: 71			8.8, 16.7	
	403-5	Worker training on occupational health and safety	Page: 138			8.8	
	403-6	Promotion of worker health	Page: 75			13.19.7	

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 403: Occupational health and safety 2018	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Pages: 71, 73			8.8	
	403-8	Workers covered by an occupational health and safety management system	Page: 138			8.8	
	403-9	Work-related injuries	Pages: 74, 139, 140			3.6, 3.9, 8.8, 16.1	
	403-10	Work-related ill health	Page: 141			3.3, 3.4, 3.9, 8.8, 16.1	
GRI 404: Training and education 2016	404-1	Average hours of training per year per employee	Pages: 141, 142			4.3, 4.4, 4.5, 5.1, 8.2, 8.5, 10.3	1, 6
	404-2	Programs for upgrading employee skills and transition assistance programs	Page: 67			8.2, 8.5	8
	404-3	Percentage of employees receiving regular performance and career development reviews	Page: 143			5.1, 8.5, 10.3	1, 6
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	Page: 148		13.15.4	5.1, 8.8	1, 2, 3, 4, 5, 6
GRI 407: Freedom of association and collective bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Page: 149			8.8	1, 2, 3, 4, 5, 6
GRI 408: Child labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	Page: 149			5.2, 8.7, 16.2	1, 2, 6

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 409: Forced or compulsory labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Page: 49			5.2, 8.7	1, 2, 3
Former GRI 412: Human rights assessment 2016	412-2	Employee training on human rights policies or procedures	Page: 150				1, 2, 3, 4, 5, 6
DIVERSITY & INCLUSION							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 49, 66, 67, 70			5, 10, 16	6
GRI 401: Employment 2016	401-3	Parental leave	Page: 137			5.1, 5.4, 8.5	6
GRI 405: Diversity and equal opportunity 2016	405-1	Diversity of governance bodies and employees	Pages: 144, 145, 146, 147			5.1, 5.5, 8.5	
	405-2	Ratio of basic salary and remuneration of women to men	Page: 148	For strategic or governance reasons, this information is not being reported for our Argentina operations.	13.15.2	5.1, 8.5, 10.3	
ETHICS & GOVERNANCE							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 24, 33, 48			5, 8, 16	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Pages: 108, 112			16.5	10
	205-2	Communication and training on anti-corruption policies and procedures	Pages: 108, 109, 110, 111, 112			16.5	10
	205-3	Confirmed incidents of corruption and actions taken	Page: 112			16.5	10
GRI 206: Anti-competitive behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Page: 112			16.3	1, 5
CROP MANAGEMENT & BIODIVERSITY							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 16, 48, 59		11.4.1	6, 9, 11, 12, 15	7, 8

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased or managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	Page: 120	In 2023 we will conduct an assessment of biodiversity and actual and potential impacts from our agricultural operations, in accordance with a new Bonsucro Certification requirement to map out all protected areas and habitat conservation areas, areas of high biodiversity value and areas restored, and the status of each area.		6.6, 14.2, 15.1, 15.5	8, 9
	304-2	Significant impacts of activities, products, and services on biodiversity	Pages: 59, 120		11.4.3	6.6, 14.2, 15.1, 15.5	8, 9
	304-3	Habitats protected or restored	Page: 120		11.4.4	6.6, 14.2, 15.1, 15.5	8, 9
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Page: 120			6.6, 14.2, 15.1, 15.5	8, 9
WATER STEWARDSHIP							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 51, 64			6, 9, 12	7, 8
GRI 303: Water and effluents 2018	303-1	Interactions with water as a shared resource	Pages: 64, 117, 118			6.3, 6.4, 6.A, 6.B, 12.4	8, 9
	303-2	Management of water discharge related impacts	Pages: 64, 118			6.3	8, 9
	303-3	Water withdrawal	Page: 117			6.4	8, 9
	303-4	Water discharge	Page: 118		11.6.5	6.3	8, 9
	303-5	Water withdrawal	Page: 119		11.6.5	6.4	8, 9
CLIMATE CHANGE & GREENHOUSE GAS EMISSIONS							
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 47, 54		11.3.1	11, 12, 13	7, 8, 9

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 201: Economic performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	Page: 38			13.1	
	302-1	Energy consumption within the organization	Pages: 114, 115			7.2, 7.3, 8.4, 12.2, 13.1	
GRI 302: Energy 2016	302-2	Energy consumption outside of the organization	Page: 116	Our operations in Argentina have not compiled information on energy consumption outside of the organization.		7.2, 7.3, 8.4, 12.2, 13.1	
	302-3	Energy intensity	Page: 116			7.3, 8.4, 12.2, 13.1,	
	302-4	Reduction of energy consumption	There were no initiatives to reduce consumption in the 2022/2023 crop year.			7.3, 8.4, 12.2, 13.1,	
GRI 305: Emissions 2016	305-1	Direct greenhouse gas emissions (Scope 1)	Pages: 57, 121		11.1.5, 11.2.3	3.9, 12.4, 13.1, 14.3, 15.2	7, 8, 9
	305-2	Indirect GHG emissions (Scope 2)	Pages: 57, 58, 121		11.2.3	3.9, 12.4, 13.1, 14.3, 15.2	7, 8, 9
	305-3	Other indirect (Scope 3) GHG emissions	Pages: 57, 58, 121		11.2.3	3.9, 12.4, 13.1, 14.3, 15.2	7, 8, 9
	305-4	Greenhouse gas emissions intensity	Page: 121			13.1, 14.3, 15.2	7, 8, 9
	305-5	Reduction of GHG emissions	Page: 123			13.1, 14.3, 15.2	7, 8, 9
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Page: 124			3.9, 12.4, 14.3, 15.2	7, 8, 9

COMMUNITY ENGAGEMENT

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 3: Material Topics 2021	3-3	Management of material topics	Pages: 49, 83, 86			11, 16, 17	6
GRI 202: Market presence 2016	202-1	Ratio of standard entry level wage by gender compared to local minimum wage	Page: 104			1.2, 5.1, 8.5	
	202-2	Proportion of senior management hired from the local community		This information is not being reported for strategic or governance reasons.		8.5	
GRI 203: Indirect economic impacts 2016	203-1	Infrastructure investments and services supported	Page: 104			5.4, 9.1, 9.4, 11.2	
	203-2	Significant indirect economic impacts	Page: 107			1.2, 1.4, 3.8, 8.2, 8.3, 8.5	
GRI 411: Rights of indigenous peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	Page: 150			2.3	1, 2, 4
GRI 413: Local communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Page: 151				
GRI 413: Local communities 2016	413-2	Operations with significant actual or potential negative impacts on local communities	Page: 152			1.4, 2.3	

DISCLOSURES WITHOUT ASSOCIATED MATERIAL TOPICS

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	Page: 102		13.22.2	8.1, 8.2, 9.1, 9.4, 9.5	

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	Page: 128			3.9, 6.3, 6.6, 11.6, 12.4, 12.5	
	306-3	Waste generated	Page: 125	This information is not being reported for strategic or governance reasons.	11.5.4	3.9, 6.6, 11.6, 12.4, 12.5, 15.1	7, 8, 9
	306-4	Waste diverted from disposal	Pages: 125, 126		11.5.5	3.9, 11.6, 12.4, 12.5	7, 8, 9
	306-5	Waste directed to disposal	Pages: 125, 127		11.5.6	3.9, 6.6, 11.6, 12.4, 12.5, 15.1	7, 8, 9
GRI 410: Security Practices	410-1	Security personnel trained in human rights policies or procedures	Page: 149			16.1	1, 2, 5
GRI 415: Public policy 2016	415-1	Political contributions	Page: 152				

SECTOR DISCLOSURES

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 11.1 GHG emissions	11.1.1	Describe actions taken to manage flaring and venting and the effectiveness of actions taken.	Page: 54				

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 11.2 Climate adaptation, resilience, and transition	11.2.1	Describe policies, commitments, and actions of the organization to prevent or mitigate the impacts of the transition to a low-carbon economy on workers and local communities.		This information is not being reported for strategic or governance reasons.			
	11.2.2	1) Report the emissions potential for proven and probable reserves. 2) Report the internal carbon-pricing and oil and gas pricing assumptions that have informed the identification of risks and opportunities due to climate change. 3) Describe how climate change-related risks and opportunities affect or could affect the organization's operations or revenue. 4) Describe how climate change-related risks and opportunities affect or could affect the organization's operations or revenue. 5) Report the percentage of capital expenditure (CapEx) that is allocated to investments. 6) Report net mass of CO in metric tons captured and removed from the atmosphere (CO stored less the GHG emitted in the process).	Page: 38	This disclosure has been only partially reported for strategic or governance reasons.			
GRI 11.2 Climate adaptation, resilience, and transition	11.2.3	1) Report how the goals and targets for GHG emissions are set, specify whether they are informed by scientific consensus, and list any authoritative intergovernmental instruments or mandatory legislation the goals and targets are aligned with. 3) Report the baseline for the goals and targets and the timeline for achieving them.	Pages: 54, 57	This disclosure has been only partially reported for strategic or governance reasons.			
			Pages: 54, 57				

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 11.2 Climate adaptation, resilience, and transition	11.2.4	Describe the organization’s approach to public policy development and lobbying on climate change.		This information is not being reported for strategic or governance reasons.			
GRI 11.3 Air emissions	11.3.3	Describe actions taken to improve product quality to reduce air emissions		This information is not being reported for strategic or governance reasons.			
GRI 11.5 Waste	11.5.1	Management of material topics		This information is not being reported for strategic or governance reasons.	11.2.2		

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 13.4 Natural ecosystem conversion	13.4.1	Describe policies or commitments to reduce or eliminate natural ecosystem conversion	Pages: 59, 154				
	13.4.2	Report the percentage of production volume from land owned, leased or managed by the organization determined to be deforestation- or conversion-free, by product	Page: 154				
	13.4.3	For products sourced by the organization, report the following by product: the percentage of sourced volume determined to be deforestation- or conversion-free	Page: 154				
	13.4.4	Report the size in hectares, the location, and the type of natural ecosystems converted since the cutoff date on land owned, leased, or managed by the organization	Page: 154				
	13.4.5	Report the size in hectares, the location, and the type of natural ecosystems converted since the cut-off date by suppliers or in sourcing locations	Page: 154				
GRI 13.5 Soil health	13.5.1	Describe the soil management plan	Page: 154				
GRI 13.6 Pesticides use	13.6.1	Describe the pest management plan of the organization and actions taken to prevent, mitigate and/or remediate negative impacts associated with the use of pesticides.	Page: 155				
	13.6.2	Report the volume and intensity of pesticides used by toxicity hazard levels	Page: 155				

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 13.9 Food security	13.9.1	Describe the effectiveness of actions and programs on food security at local, regional, national, or global levels		This information is not being reported for strategic or governance reasons.			
GRI 13.13 Land and resource rights	13.13.1	Describe commitments to respect land and natural resource rights	Pages: 59, 77				
	13.13.2	List the locations of operations, where land and natural resource rights may be affected by the organization's operations.		This information is not being reported for strategic or governance reasons.			
	13.13.3	Report the number, size in hectares, and location of operations where violations of land and natural resource rights occurred		This information is not being reported for strategic or governance reasons.			
GRI 13.14 Rights of indigenous peoples	13.14.1	Describe the approach to engaging with indigenous peoples	Page: 59				
	13.14.2	Describe the identified incidents of violations involving the rights of indigenous peoples.	Page: 150				
	13.14.3	List the locations of operations where indigenous peoples are present or affected by activities of the organization.	Page: 150				
	13.14.4	Report if the organization has been involved in a process of seeking free, prior, and informed consent (FPIC) from indigenous peoples for any of the organization's activities	We have not been involved in a process of seeking free, prior, and informed consent from indigenous peoples.				

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 13.15 Non-discrimination and equal opportunity	13.15.1	Management of material topics		This information is not being reported for strategic or governance reasons.			
	13.15.3	Report the ratio of the basic salary and remuneration of women to men for workers who are not employees and whose work is controlled by the organization.	Page: 148	This disclosure has been only partially reported for strategic or governance reasons.			
	13.15.5	Describe any differences in employment terms and approach to compensation based on workers' nationality or migrant status, by location of operations.		This information is not being reported for strategic or governance reasons.			
GRI 13.20 Employment practices	13.20.1	Describe policies or commitments regarding recruitment of workers, the approach to worker compensation, and the approach to actions taken to determine and address situations where work undertaken within the supply chain does not take place within appropriate institutional and legal frameworks	Page: 81				
GRI 13.21 Living income and living wage	13.21.1	Describe commitments related to providing a living income or paying a living wage		We are in an ongoing process to establish a methodology for evaluating wages that are commensurate with the cost of living for workers in various business sectors, and are developing strategic action plans and fostering widespread awareness on this topic.			

GRI Standard / Other source	Code	Disclosure	Response/Page	Omission	GRI Sector Standard Ref. No.	SDG	Global Compact
GRI 13.21 Living income and living wage	13.21.2	Percentage of employees and workers who are not employees and whose work is controlled covered by collective bargaining agreements that have terms related to wage levels		This information is not being reported for strategic or governance reasons.			
	13.21.3	Report the percentage of employees and workers who are not employees and whose work is controlled paid above living wage, with a breakdown by gender		This information is not being reported for strategic or governance reasons.			
GRI 13.22 Economic inclusion	13.22.1	Describe actions taken to support the economic inclusion of farmers and their communities	Pages: 77, 81				
GRI 13.23 Supply chain traceability	13.23.1	Describe the rationale and methodology for tracing the source, origin, or production conditions of the products sourced by the organization (such as raw materials and production inputs purchased)	Page: 155				
	13.23.2	Describe the level of traceability in place for each product sourced	Page: 155				
	13.23.3	Report the percentage of sourced volume certified to internationally recognized standards that trace the path of products through the supply chain	Page: 131				
	13.23.4	Describe improvement projects to get suppliers certified	Page: 155				

SASB CONTENT INDEX

FOOD & BEVERAGE

Topic	Code	Accounting metric	Response/Page
AGRICULTURAL PRODUCTS			
GHG Emissions	FB-AG-110a.1	Gross global Scope 1 emissions	Pages: 57, 121
	FB-AG-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Page: 54
	FB-AG-110a.3	Fleet fuel consumed, percentage renewable	This information is not being reported for strategic or governance reasons.
Energy Management	FB-AG-130a.1	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	Pages: 114, 115
Water Management	FB-AG-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Page: 117
	FB-AG-140a.2	Discussion of water management risks and description of strategies and practices to mitigate those risks	Page: 64
	FB-AG-140a.3	Number of incidents of non-compliance associated with water quantity, quality permits, standards, and regulations	Page: 119
Food Safety	FB-AG-250a.1	Global Food Safety Initiative (GFSI) audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	This information is not being reported for strategic or governance reasons.
	FB-AG-250a.2	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GFSI) recognized food safety certification program	This information is not being reported for strategic or governance reasons.
	FB-AG-250a.3	(1) Number of recalls issued and (2) total amount of food product recalled	This information is not being reported for strategic or governance reasons.
Workforce Health & Safety	FB-AG-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees	This information is not being reported for strategic or governance reasons.

Topic	Code	Accounting metric	Response/Page
Environmental & Social Impacts of Ingredient Supply Chain	FB-AG-430a.1	Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard	Page: 132
	FB-AG-430a.2	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	This information is not being reported for strategic or governance reasons.
	FB-AG-430a.3	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing.	Page: 77
GMO Management	FB-AG-430b.1	Discussion of strategies to manage the use of genetically modified organisms (GMOs)	This information is not being reported for strategic or governance reasons.
Ingredient Sourcing	FB-AG-440a.1	Identification of principal crops and description of risks and opportunities presented by climate change	Page: 54
	FB-AG-440a.2	Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	This information is not being reported for strategic or governance reasons.
Activity Metrics	FB-AG-000.A	Production by principal crop	Page: 99
	FB-AG-000.B	Number of processing facilities	Page: 99
	FB-AG-000.C	Total land area under active production	Page: 99
	FB-AG-000.D	Cost of agricultural products sourced externally	Page: 99

RENEWABLE RESOURCES & ALTERNATIVE ENERGY

Topic	Code	Accounting metric	Response/Page
BIOFUELS			
Air quality	RR-BI-120a.1	Air emissions for the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), (4) particulate matter (PM10), and (5) hazardous air pollutants (HAPs)	Page: 124
	RR-BI-120a.2	Number of incidents of non-compliance associated with air quality permits, standards, and regulations	Page: 131

Topic	Code	Accounting metric	Response/Page
Water Management in Manufacturing	RR-BI-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Page: 119
	RR-BI-140a.2	Discussion of water management risks and description of strategies and practices to mitigate those risks	Page: 64
	RR-BI-140a.3	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Page: 119
Lifecycle Emissions Balance	RR-BI-410a.1	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	This information is not being reported for strategic or governance reasons.
Sourcing & Environmental Impacts of Feedstock Production	RR-BI-430a.1	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	Page: 77
	RR-BI-430a.2	Percentage of biofuel production third-party certified to an environmental sustainability standard	Page: 131
Management of the Legal & Regulatory Environment	RR-BI-530a.1	Amount of subsidies received through government programs	Page: 112
	RR-BI-530a.2	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Page: 41
Operational Safety, Emergency Preparedness & Response	RR-BI-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	This information is not being reported for strategic or governance reasons.
Activity Metrics	RR-BI-000.A	Biofuel production capacity	Page: 98
	RR-BI-000.B	Production of: (1) renewable fuel, (2) advanced biofuel, (3) biomass-based diesel, and (4) cellulosic biofuel	Page: 98
	RR-BI-000.C	Amount of feedstock consumed in production	Page: 98

OIL & GAS

Topic	Code	Accounting metric	Response/Page
MIDSTREAM			

Topic	Code	Accounting metric	Response/Page
GHG Emissions	EM-MD-110a.1	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Page: 123
	EM-MD-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Page: 54
Air quality	EM-MD-120a.1	Air emissions for the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), and (4) particulate matter (PM10)	Page: 124
Ecological Impacts	EM-MD-160a.1	Description of environmental management policies and practices for active operations	Pages: 59, 132
	EM-MD-160a.2	Percentage of land owned, leased, and/or operated within areas of protected conservation status or endangered species habitat	Page: 120
	EM-MD-160a.3	Terrestrial acreage disturbed, percentage of impacted area restored	This information is not being reported for strategic or governance reasons.
	EM-MD-160a.4	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume in Unusually Sensitive Areas (USAs), and volume recovered	This information is not being reported for strategic or governance reasons.
Competitive Behavior	EM-MD-520a.1	Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations	This information is not being reported for strategic or governance reasons.
Operational Safety, Emergency Preparedness & Response	EM-MD-540a.1	Number of reportable pipeline incidents, percentage significant	This information is not being reported for strategic or governance reasons.
	EM-MD-540a.2	Percentage of (1) natural gas and (2) hazardous liquid pipelines inspected	This information is not being reported for strategic or governance reasons.
	EM-MD-540a.3	Number of (1) accident releases and (2) nonaccident releases (NARs) from rail transportation	This information is not being reported for strategic or governance reasons.
	EM-MD-540a.4	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles	Page: 71
Activity Metrics	EM-MD-000.A	Total metric ton-kilometers of: (1) natural gas, (2) crude oil, and (3) refined petroleum products transported, by mode of transport	Page: 100
REFINING & MARKETING			
GHG Emissions	EM-RM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Pages: 57, 121
	EM-RM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Page: 54

Topic	Code	Accounting metric	Response/Page
Air Quality	EM-RM-120a.1	Air emissions for the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) H2S, and (5) volatile organic compounds (VOCs)	Page: 124
	EM-RM-120a.2	Number of refineries in or near areas of dense population	Page: 152
Water & Wastewater Management	EM-RM-140a.1	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	Pages: 117, 119
	EM-RM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Page: 119
Waste & Hazardous Materials Management	EM-RM-150a.1	Amount of hazardous waste generated, percentage recycled	Pages: 125, 126, 127
	EM-RM-150a.2	(1) Number of underground storage tanks (USTs), (2) number of UST releases requiring cleanup, and (3) percentage in states with UST financial assurance funds	This information is not being reported for strategic or governance reasons.
Workforce Health & Safety	EM-RM-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	Pages: 74, 139, 140
	EM-RM-320a.2	Discussion of management systems used to integrate a culture of safety	Page: 140
Product Specifications & Clean Fuel Blends	EM-RM-410a.1	Percentage of Renewable Volume Obligation (RVO) met through: (1) production of renewable fuels, (2) purchase of "separated" renewable identification numbers (RIN)	This information is not being reported for strategic or governance reasons.
	EM-RM-410a.2	Total addressable market and share of market for advanced biofuels and associated infrastructure	This information is not being reported for strategic or governance reasons.
Competitive Behavior	EM-RM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with price fixing or price manipulation	This information is not being reported for strategic or governance reasons.
Management of the Legal & Regulatory Environment	EM-RM-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	This information is not being reported for strategic or governance reasons.
Operational Safety, Emergency Preparedness & Response	EM-RM-540a.1	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1) and lesser consequence (Tier 2)	Page: 153
	EM-RM-540a.2	Challenges to Safety Systems indicator rate (Tier 3)	Page: 153
	EM-RM-540a.3	Discussion of measurement of Operating Discipline and Management System Performance through Tier 5 Indicators	Page: 153
Activity Metrics	EM-RM-000.A	Refining throughput of crude oil and other feedstocks	Page: 99
	EM-RM-000.B	Refining operating capacity	Page: 99

STAKEHOLDER CAPITALISM METRICS (WEF) INDEX

PRINCIPLES OF GOVERNANCE

Metric (Comprehensive)	Details	Response/Page
GOVERNING PURPOSE		
Setting purpose	How the company's stated purpose is embedded in company strategies, policies, and goals.	Pages: 8, 16, 24
	The company's stated purpose, as the expression of the means by which a business proposes solutions to economic, environmental and social issues. Corporate purpose should create value for all stakeholders, including shareholders.	Pages: 8, 16, 24
QUALITY OF GOVERNING BODY		
Governance body composition	Composition of the highest governance body and its committees by: competencies relating to economic, environmental and social topics; executive or non-executive; independence; tenure on the governance body; number of each individual's other significant positions and commitments, and the nature of the commitments; gender; membership of under-represented social groups; stakeholder representation.	Page: 25
Remuneration	1. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental and social topics, as connected to the company's stated purpose, strategy, and long-term value.	Page: 31
	2. Remuneration policies for the highest governance body and senior executives by type of remuneration	Page: 31
Progress Against Strategic Milestones	Disclosure of the material strategic economic, environmental, and social milestones expected to be achieved in the following year, such milestones achieved from the previous year, and how those milestones are expected to or have contributed to long-term value.	This information is not being reported for strategic or governance reasons.
STAKEHOLDER ENGAGEMENT		
Material issues impacting stakeholders	A list of the topics that are material to key stakeholders and the company, how the topics were identified and how the stakeholders were engaged.	Pages: 45, 47
ETHICAL CONDUCT		

Metric (Comprehensive)	Details	Response/Page
Anti-corruption	1. Total percentage of governance body members, employees and business partners who have received training on the organization's anti-corruption policies and procedures, broken down by region.	Pages: 108, 109, 110, 111
	a) Total number and nature of incidents of corruption confirmed during the current year, but related to previous years; and b) Total number and nature of incidents of corruption confirmed during the current year, related to this year.	Page: 112
	3) Discussion of initiatives and stakeholder engagement to improve the broader operating environment and culture, in order to combat corruption.	Page: 33
Protected ethics advice and reporting mechanisms	A description of internal and external mechanisms for: 1. Seeking advice about ethical and lawful behavior and organizational integrity.	Pages: 33, 140
	A description of internal and external mechanisms for: 2. Reporting concerns about unethical or unlawful behavior and lack of organizational integrity.	Pages: 33, 140
Alignment of Strategy and Policies to Lobbying	The significant issues that are the focus of the company's participation in public policy development and lobbying; the company's strategy relevant to these areas of focus; and any differences between its lobbying positions, purpose, and any stated policies, goals, or other public positions.	This information is not being reported for strategic or governance reasons.
Monetary Losses from Unethical Behavior	Total amount of monetary losses as a result of legal proceedings associated with: fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or violations of other related industry laws or regulations.	This information is not being reported for strategic or governance reasons.
RISK AND OPPORTUNITY OVERSIGHT		
Integrating risk and opportunity into business process	How the highest governance body considers economic, environmental, and social issues when overseeing major capital allocation decisions, such as expenditures, acquisitions and divestitures.	Page: 36
Economic, environmental and social topics in capital allocation framework	Company risk factor and opportunity disclosures that clearly identify the principal material risks and opportunities facing the company specifically (as opposed to generic sector risks), the company appetite in respect of these risks, how these risks and opportunities have moved over time and the response to those changes. These opportunities and risks should integrate material economic, environmental and social issues, including climate change and data stewardship.	This information is not being reported for strategic or governance reasons.

PLANET

Metric (Comprehensive)	Details	Response/Page
CLIMATE CHANGE		
Greenhouse gas (GHG) emissions	For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F-gases etc.), report in metric tons of carbon dioxide equivalent (tCO ₂ e) GHG Protocol Scope 1 and Scope 2 emissions. Estimate and report material upstream and downstream (GHG Protocol Scope 3) emissions where appropriate.	Page: 121
Impact from GHG emissions	Report wherever material along the value chain (GHG Protocol Scope 1, 2 and 3) the valued societal impact of greenhouse gas emissions.	This information is not being reported for strategic or governance reasons.
Paris-aligned GHG emissions targets	Define and report progress against time-bound science-based GHG emissions targets that are in line with the goals of the Paris Agreement	This information is not being reported for strategic or governance reasons.
TCFD implementation	Fully implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). If necessary, disclose a timeline of at most three years for full implementation. Disclose whether you have set, or have committed to set, GHG emissions targets that are in line with the goals of the Paris Agreement – to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C – and to achieve net-zero emissions before 2050.	TCFD 2022
NATURE LOSS		
Land use and ecological sensitivity	Report the number and area (in hectares) of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas (KBA).	Page: 120
	For operations (if applicable) and full supply chain (if material): 1. Area of land used for the production of basic plant, animal or mineral commodities	Page: 120
	For operations (if applicable) and full supply chain (if material): 2. Year-on-year change in the area of land used for the production of basic plant, animal or mineral commodities.	Page: 120
	For operations (if applicable) and full supply chain (if material): 3. Percentage of land area in (1) or of total plant, animal and mineral commodity inputs by mass or cost, covered by a sustainability certification standard or formalized sustainable management program.	Page: 120
Impact of land use and conversion	Report wherever material along the value chain, the valued societal impact of use of land and conversion of ecosystems.	This information is not being reported for strategic or governance reasons.

Metric (Comprehensive)	Details	Response/Page
FRESHWATER AVAILABILITY		
Water consumption and withdrawal in water-stressed areas	Report for operations where material: megaliters of water withdrawn, megaliters of water consumed and the percentage of each in regions with high or extremely high baseline water stress, according to WRI Aqueduct water risk atlas tool. Estimate and report the same information for the full value chain (upstream and downstream) where appropriate.	Pages: 117, 118, 119
	Report wherever material along the value chain, the valued societal impact of freshwater consumption and withdrawal.	Pages: 117, 118, 119
WATER POLLUTION		
Impact of water pollution	Report wherever material along the value chain, the valued societal impact of water pollution, including excess nutrients, heavy metals and other toxins.	This information is not being reported for strategic or governance reasons.
Nutrients	Estimate and report wherever material along the value chain, metric tonnes of nitrogen, phosphate and potassium in fertilizer consumed.	This information is not being reported for strategic or governance reasons.
RESOURCE AVAILABILITY		
Resource circularity	Report the most appropriate resource circularity metric(s) for the whole company and/or at a product, material or site level as applicable.	This information is not being reported for strategic or governance reasons.
AIR POLLUTION		
Air pollution	Report wherever material along the value chain: Nitrogen oxides (NOx), sulfur oxides (SOx), particulate matter and other significant air emissions. Wherever possible, estimate the proportion of specified emissions that occur in or adjacent to urban/densely populated areas.	Page: 124
	Report wherever material along the value chain, the valued impact of air pollution, including nitrogen oxides (NOx), sulfur oxides (SOx), particulate matter and other significant air emissions.	Page: 124
SOLID WASTE		
Impact of solid waste disposal	Report wherever material along the value chain, the valued societal impact of solid waste disposal, including plastics and other waste streams.	This information is not being reported for strategic or governance reasons.
Single use plastics	Report for the full value chain, estimated metric tonnes of single-use plastic consumed.	This information is not being reported for strategic or governance reasons.

PEOPLE

Metric (Comprehensive)	Details	Response/Page
DIGNITY AND EQUALITY		
Incidents and the total amount of monetary losses from incidents of discrimination and harassment	1. Number of discrimination and harassment incidents, status of the incidents and actions taken.	Page: 148
	2. Total amount of monetary losses as a result of legal proceedings associated with law violations and employment discrimination.	This information is not being reported for strategic or governance reasons.
Diversity and inclusion (%)	Percentage of employees per employee category, by age group, gender and other indicators of diversity (e.g. ethnicity).	Pages: 144, 145, 146, 147
Pay gap (%)	1. Mean pay gap of basic salary and remuneration of full-time relevant employees based on gender (women to men) and indicators of diversity at a company level or by significant location of operation.	This information is not being reported for strategic or governance reasons.
	2. Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees in the same country.	This information is not being reported for strategic or governance reasons.
Pay equality (%)	Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality: women to men, minor to major ethnic groups and other relevant equality areas.	Page: 148
Human rights review, grievance impact and modern slavery (%)	1. Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country.	This information is not being reported for strategic or governance reasons.
	2. Number and type of grievances reported with associated impacts related to a salient human right issues in the reporting period and an explanation of impacts.	This information is not being reported for strategic or governance reasons.
	3. Number and percentage of operations and suppliers considered to have significant risk for incidents of child labor, forced or compulsory labor. Such risks could emerge in relation to a) type of operation (such as manufacturing plant) and type of supplier; or b) countries or geographic areas with operations and suppliers considered at risk.	This information is not being reported for strategic or governance reasons.
Wage level (%)	1. Ratios of standard entry-level wage by gender compared to local minimum wage.	This information is not being reported for strategic or governance reasons.
	2. Ratio of the annual total compensation of the CEO to the median of the annual total compensation of all its employees, except the CEO.	This information is not being reported for strategic or governance reasons.

Metric (Comprehensive)	Details	Response/Page
Risk for incidents of child, forced or compulsory labor	An explanation of the operations and suppliers considered to have significant risk for incidents of child labor, forced or compulsory labor. Such risks could emerge in relation to: a) type of operation (such as manufacturing plant) and type of supplier; and b) countries or geographic areas with operations and suppliers considered at risk	Page: 149
Living wage (%)	Current wages against the living wage for employees and contractors in states and localities where the company is operating.	This information is not being reported for strategic or governance reasons.
Freedom of Association and Collective Bargaining at Risk (%)	1. Percentage of active workforce covered under collective bargaining agreements.	Page: 101
	2. An explanation of the assessment performed on suppliers for which the right to freedom of association and collective bargaining is at risk including measures taken by the organization to address these risks.	This information is not being reported for strategic or governance reasons.
HEALTH & WELLBEING		
Health and safety (%)	The number and rate of fatalities as a result of work-related injury; high-consequence work-related injuries (excluding fatalities); recordable work-related injuries; main types of work-related injury; and the number of hours worked. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided for employees and workers.	Pages: 139, 140
Monetized Impacts of Work-related Incidents on Organization (\$)	By multiplying the number and type of occupational incidents by the direct costs for employees, employers per incident	This information is not being reported for strategic or governance reasons.
Well-Being (%)	1. The number and rate of fatalities as a result of work-related ill-health; recordable work-related ill-health injuries, main types of work-related injury; and the main types of work-related ill-health for all employees and workers.	This information is not being reported for strategic or governance reasons.
	2. Percentage of employees participating in 'best practice' health and well-being programs that help to reduce absenteeism and improve productivity and employee absentee rate (AR) for all employees.	Page: 141
SKILLS FOR THE FUTURE		
Monetized Impacts of Training - Increased earning capacity as a result of training intervention (% , \$)	1. Investment in training a percentage (%) of payroll.	This information is not being reported for strategic or governance reasons.
	2. Effectiveness of the training and development through increased revenue, productivity gains, employee engagement and/or internal hire rates.	This information is not being reported for strategic or governance reasons.
Number of Unfilled 'Skilled' Positions (#, %)	1. Number of Unfilled "Skilled" positions.	This information is not being reported for strategic or governance reasons.
	2. Percentage of Unfilled "Skilled" positions for which the company will hire unskilled candidates and train them. (%)	This information is not being reported for strategic or governance reasons.

Metric (Comprehensive)	Details	Response/Page
Training provided (#, \$)	1. Average hours of training per person that the organization's employees have undertaken during the reporting period, by gender and employee category (total number of hours of training provided to employees divided by the number of employees).	Pages: 141, 142
	2. Average training and development expenditure per full time employee (total cost of training provided to employees divided by the number of employees).	This information is not being reported for strategic or governance reasons.

PROSPERITY

Metric (Comprehensive)	Details	Response/Page
EMPLOYMENT AND WEALTH GENERATION		
Absolute number and rate of employment	1. Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region.	Pages: 133, 134, 135
	2. Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.	Pages: 133, 134, 135
Economic contribution	1. Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations, ideally split out by: - Revenues - Operating costs - Employee wages and benefits - Payments to providers of capital - Payments to government - Community investment	Page: 102
	2. Financial assistance received from the government: total monetary value of financial assistance received by the organization from any government during the reporting period.	This information is not being reported for strategic or governance reasons.
Financial investment contribution	1. Total capital expenditures (CapEx) minus depreciation, supported by narrative to describe the company's investment strategy.	Page: 113
	2. Share buybacks plus dividend payments, supported by narrative to describe the company's strategy for returns of capital to shareholders.	Page: 113
Infrastructure investments and services supported	1. Extent of development of significant infrastructure investments and services supported.	Page: 104
	2. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant.	Page: 104
	3. Whether these investments and services are commercial, in-kind, or pro bono engagements.	Page: 104

Metric (Comprehensive)	Details	Response/Page
Significant indirect economic impacts	1. Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts.	Page: 107
	2. Significance of the indirect economic impacts in the context of external benchmarks and stakeholder priorities.	Page: 107
INNOVATION OF BETTER PRODUCTS AND SERVICES		
Total R&D expenses (\$)	Total costs related to research and development.	This information is not being reported for strategic or governance reasons.
Social value generated (%)	Percentage of revenue from products and services designed to deliver specific social benefits or to address specific sustainability concerns.	This information is not being reported for strategic or governance reasons.
Vitality Index	Percentage of gross revenue from product lines added in last three (or five) years calculated as the sales from products that have been launched in the past three (or five) years divided by total sales, supported by narrative that describes how the company innovates to address specific sustainability challenges.	This information is not being reported for strategic or governance reasons.
COMMUNITY AND SOCIAL VITALITY		
Total tax paid	The total global tax borne by the company, including corporate income taxes, property taxes, non-creditable VAT and other sales taxes, employer-paid payroll taxes, and other taxes that constitute costs to the company, by category of taxes.	This information is not being reported for strategic or governance reasons.
Additional tax remitted	The total additional global tax collected by the company on behalf of other taxpayers, including VAT and employee-related taxes that are remitted by the company on behalf of customers or employees, by category of taxes.	This information is not being reported for strategic or governance reasons.
Total social investment (\$)	Total Social Investment (TSI) sums up a company's resources used for "S" in ESG efforts defined by CECV Valuation Guidance.	This information is not being reported for strategic or governance reasons.
Total and additional tax breakdown by country for significant locations	Total tax paid and, if reported, additional tax remitted, by country for significant locations.	This information is not being reported for strategic or governance reasons.



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Independent auditors' limited assurance report on non-financial information included in the Integrated Report crop year 2022/2023

To the Board of Directors and Shareholders
Raízen S.A.
São Paulo - SP

Introduction

We have been engaged by Raízen S.A ("Company") to present our limited assurance report on the non-financial information included in the "Integrated Report crop year 2022/2023" of Raízen S.A, for the period between April 1, 2022 and March 31, 2023 (crop year 2022/2023).

Our limited assurance does not extend to prior period information or to any other information disclosed in conjunction with the Integrated Report crop year 2022/2023, including any embedded images, audio files or videos.

Responsibilities of Raízen S.A.'s management

The management of Raízen S.A. is responsible for:

- select and establish appropriate criteria for the elaboration of the information contained in the Integrated Report crop year 2022/2023;
- prepare the information in accordance with the criteria and guidelines of the Global Reporting Initiative (GRI - Standards), with the Sustainability Accounting Standard - Engineering & Construction Services, Professional & Commercial Services and Road Transportation, of the Sustainability Accounting Standards Board (SASB) and the CPC 09 Guidance - Integrated Reporting, correlated with the Basic Conceptual Framework of Integrated Reporting, prepared by the International Integrated Reporting Council (IIRC);
- design, implement, and maintain internal control over information relevant to the preparation of Integrated Report crop year 2022/2023 that is free from material misstatement, whether due to fraud or error.

Responsibility of the independent auditors

Our responsibility is to express a conclusion on the non-financial information included in the Integrated Report 2022 crop year 2022/2023, based on the limited assurance engagement conducted in accordance with Technical Communication CTO 07/2022 issued by the CFC, and based on NBC TO 3000 - Assurance Engagements other than Audits and Reviews, also issued by the CFC, which is equivalent to international standard ISAE 3000 - Assurance engagements other than audits or reviews of historical financial information, issued by the International Auditing and Assurance Standards Board (IAASB). These standards require compliance by the auditor with ethical requirements, independence, and other responsibilities relating to it, including the application of the Brazilian Quality Control Standard (NBC PA 01) and, therefore, the maintenance of a comprehensive quality control system, including documented policies and procedures on compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Additionally, the standards require that the work be planned and performed with the objective of obtaining limited assurance that the non-financial information in the Integrated Report 2022 crop year 2022/2023, taken as a whole, is free from material misstatement.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) mainly consists of inquiries to Raízen S.A 's management and other Raízen S.A 's professionals who are involved in the preparation of information, as well as the application of analytical procedures to obtain evidence that enables us to conclude, in a limited assurance manner, on the information taken as a whole. A limited assurance engagement also requires the performance of additional procedures when the independent auditor becomes aware of matters that lead him to believe that the information disclosed in the Integrated Report crop year 2022/2023, taken as a whole, may present material misstatements.

The procedures selected were based on our understanding of the aspects relating to the compilation, materiality and presentation of the information contained in the Integrated Report crop year 2022/2023, other circumstances of the engagement and our consideration of areas and the processes associated with the material information disclosed in the Integrated Report crop year 2022/2023 where material misstatements could exist. The procedures comprised, among others:

- a. planning the work, considering the materiality of the aspects for Raízen S.A 's activities, the relevance of the information disclosed, the volume of quantitative and qualitative information and the operating and internal control systems that served as a basis for the preparation of the information contained in the Integrated Report crop year 2022/2023.
- b. the understanding of the calculation methodology and the procedures for the compilation of the indicators through inquiries with the managers responsible for the preparation of the information;
- c. the application of analytical procedures on the quantitative information and inquiries on the qualitative information and its correlation with the indicators disclosed in the information contained in the Integrated Report crop year 2022/2023; and

- d. for the cases in which the non-financial data correlate with indicators of a financial nature, the confrontation of these indicators with the accounting statements and/or accounting records.
- e. analysis of the processes for preparing the Report and its structure and content, based on the Content and Quality Principles of the Sustainability Reporting Standards of the Global Reporting Initiative - GRI, with the Sustainability Accounting Standard - Engineering & Construction Services, Professional & Commercial Services and Road Transportation, of the Sustainability Accounting Standards Board (SASB), with the CPC 09 Guidance - Integrated Reporting (which correlates to the Basic Conceptual Framework of Integrated Reporting, prepared by the International Integrated Reporting Council - IIRC);
- f. evaluation of the sampled non-financial indicators;
- g. understanding the calculation methodology and the procedures for the compilation of the indicators through interviews with the managers responsible for the preparation of the information;
- h. analysis of the reasonableness of the justifications for the omission of performance indicators associated with aspects and topics indicated as material in the Company's materiality analysis.

The limited assurance work also comprised adherence to the guidelines and criteria of the GRI - Standards elaboration framework applicable in the preparation of the information included in the Integrated Report crop year 2022/2023.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Scope and limitations

The procedures performed in limited assurance work vary in nature and timing, and are smaller in extent than in reasonable assurance work. Consequently, the level of assurance obtained in limited assurance work is substantially lower than that which would be obtained if reasonable assurance work had been performed. If we had performed reasonable assurance work, we could have identified other issues and possible distortions that may exist in the information contained in the Report. Therefore, 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 the methods used to determine, calculate or estimate these data. Qualitative interpretations of materiality, relevance, and accuracy of the data are subject to individual assumptions and judgments. Additionally, we did not perform any work on data reported for prior periods, nor in relation to future projections and targets.

The preparation and presentation of sustainability indicators followed the GRI - Standards criteria and, therefore, are not intended to ensure compliance with social, economic, environmental or engineering laws and regulations. These standards do, however, provide for the presentation and disclosure of any non-compliance with such regulations when significant sanctions or fines are incurred. Our assurance report must be read and understood in this context, inherent to the selected criteria (GRI - Standards).

Conclusion

Based on the procedures performed, described in this report and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial information included in the Integrated Report crop year 2022/2023 of Raízen S.A, have not been prepared, in all material respects, in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative - GRI, the Sustainability Accounting Standard - Engineering & Construction Services, Professional & Commercial Services and Road Transportation, of the Sustainability Accounting Standards Board (SASB) and with the Guidance CPC 09 - Integrated Reporting (which correlates to the Integrated Reporting Framework prepared by the International Integrated Reporting Council - IIRC).

São Paulo, August 1st, 2023

KPMG Auditores Independentes Ltda.
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Original report in portuguese signed by

Sebastian Yoshizato Soares
Accountant CRC 1SP257710/O-4



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