

elos  
raízen



2022/2023

Impact Report

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# Presentation

We are Raízen, an integrated energy company, with a strategy grounded in the biofuels, sugar, renewable energy and mobility sectors. As one of the biggest players in Brazil, with areas of activity on a global scale, we are proud to present the second ELOS Raízen report, an initiative which for 10 years has been transforming the way in which we cooperate with our partner sugarcane producers to promote respect for the environment and human rights throughout our entire value chain.

In this report, we are sharing the progress we have managed to achieve so far, whilst reaffirming the the fundamental objective of this initiative, which, for us, is more than just a commitment; it is a path towards a more sustainable, equal and collaborative future.

We invite all our stakeholders to join together and come with us on this journey. Questions and comments are very welcome and can be sent to us by e-mail ([fale@raizen.com](mailto:fale@raizen.com)) or you can call us on 0800 728 1616. Together, we can build an elos that is getting stronger for the good of all.

**We hope you enjoy the report!**



# Messages from the management

It is with enormous pride that Elos Raízen is celebrating a decade of achievements.

I would like to express my deep gratitude to all our employees and partners who have allowed us to reach this significant point in our journey.

This program, which stands out as a pioneer in the sugar and ethanol sector, has completely revolutionized the sugarcane production chain, through continuous improvement and practices that respect human and labor rights, as well as the environment.

What makes our program unique is the dedication we have invested in it over the years. We have made in-person visits to all the participating properties, submitting our procedures to rigorous evaluations conducted by independent third

parties. Furthermore, Elos Raízen is recognized by the SAI Platform and Bonsucro as a model that adopts international sustainability standards as a basic directive.

In the 2022/2023 harvest alone, we collaborated with more than 2,000 farmers in around 200 municipalities in four Brazilian states. More than 2,500 technical visits were made and 440 actions were implemented on 435,000 hectares of land.

The results and impacts of the program are notable, with significant improvements in the field both in terms of labor relations, involving occupational safety and compliance with laws, and in relation to the environment, with training for the operation of machinery and implementation of farming methods and training focused on regenerative agriculture. The most important aspect is the transformation of our suppliers into defenders of good practices in the areas of business, environmental sustainability and responsible management. Currently 33% of the volume of our purchased sugarcane is graded as excellent.

Whilst celebrating a decade of Elos success, we are able to look towards the future with confidence. This program will continue to be a driving force for positive change in agribusiness. We are committed to redefining the future of energy to lead people towards a more equal, inclusive and sustainable world, and it is an honor for us all to take part in this movement.



The sugarcane crop performs an essential role in the Brazilian economy and our dedication to Elos Raízen is not only a duty, but also a constant reminder that there is still a lot of work to be done to ensure that this industry becomes truly sustainable and socially responsible. We are committed to this mission, recognizing the advances that have been made so far, but aware of the challenges currently being faced. We are prepared for a future that is increasingly more inclusive and sustainable in the sugarcane production chain.

**Ricardo Berni**  
Director of Agribusiness at Raízen



“Connected to our 2030 Agenda, Elos Raízen is the driver that aims to disseminate best sustainability practices throughout the sugarcane chain. I am extremely proud of the entire team, all of whom are dedicated to pursuing responsible agricultural practices, thus providing us with a competitive advantage grounded in the quality and traceability of our raw-material. By means of this program, we generate value for our partner producers, clients and the entire market. Let's go!”

**Ricardo Dell Aquila Mussa,**  
CEO of Raízen



“Elos Raízen is simply amazing program. It was born with the purpose of sharing sustainability best practices with our supply chain, leveraging knowledge and scale, genuinely developing and caring for the value chain long before this topic became a central theme in any business discussion. This program has grown and matured to become the essence of our agenda today, where it's not enough for our products to be renewable; they must be provenly sustainable, generating value in every link of our chain.”

**Paula Kovarsky,**  
Vice-President of Strategy and Sustainability



“Over the last 10 years, Elos Raízen has established itself as a model to be followed not only in the sugarcane crop, but throughout the agribusiness sector. As part of the program, we are constantly working to build a bridge between the present and a more equal and sustainable future. This commitment has resulted in substantial improvements for our partner producers, covering issues related to human and labor rights as well as a genuine concern over the preservation of the environment. With these stakeholders, more than simply negotiating the production of sugarcane, we are sharing best practices and establishing an exemplary standard.”

**Francis Vernon Queen Neto,**  
Executive Vice-President of  
Ethanol, Sugar and Bioenergy

# The Program's Highlights

Recognized by the UN as a 'big push' for sustainability in Brazil, Elos Raízen is a program which, 10 years after its implementation, is still making significant advances:



More than **2,000** **producers** engaged in Elos Raízen, as well as their third parties and service providers, having a positive impact on **more than 20,000 workers**



**Partnership with the National Rural Apprenticeship Service (Senar)** to provide training for suppliers' employees: in 2022/2023, 2,580 workers received health and safety training.



**435,00** **hectares** of land are involved in Elos' activities, the equivalent of more than 609,000 football fields.

→ **35** **million tons of sugarcane** were farmed on these properties, a weight equal to approximately 29 million cars or 760 Titanic ocean liners.



Present in around **200** **municipalities in four Brazilian states:** São Paulo, Minas Gerais, Mato Grosso do Sul and Goiás.



In-person visits to **100%** the properties each harvest.



Together with the producers, around **30** **fully dedicated employees** implemented **more than 400 improvement actions** last year.



Around **500** **hectares of preservation areas** already promised for reforestation in partnership with the SOS Mata Atlântica organization.



**Partnership with the National Empty Packaging Processing Institute (InpEV)** for the collection of mobile packaging.



**44%** of the suppliers are small, rural producers (operating on up to 50 hectares), **thus reinforcing the program as an inclusive initiative.**



A photograph of two men shaking hands in a sugarcane field. The man on the left is wearing a white polo shirt, blue jeans, and a straw hat. The man on the right is wearing a dark blue button-down shirt with the 'raízen' logo on the chest and blue jeans. They are standing on a dirt path with tall sugarcane stalks in the background under a clear blue sky.

# elos raízen



# Elos Raízen

An innovative initiative that strengthens the links throughout the sugarcane production chain.

**Elos Raízen** is a groundbreaking and ambitious program focused on promoting the ongoing improvement of the entire sugarcane chain, contributing to the quality of life of rural workers, preservation of the environment, and the prosperity of the business on and off the farms.

The complexity of managing the sugarcane production chain is inherent to the broad geographical dispersion and the diversity of the sizes of the rural producers involved. For us, this scenario represents an opportunity to share our best practices with the farms and use our influence to strengthen the production chains that are increasingly free of improper working conditions and any violations of human rights and damage to the environment.

Around 50% of the sugarcane that we process is sourced from partner producers, for whom we develop an inclusive program of support for ongoing improvement: Elos Raízen. By means of this program, our suppliers form part of a free, ongoing and individualized consultation and verification process, receiving technical monitoring throughout the entire harvest year.

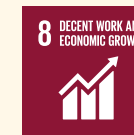
The program is led by a team of specialists and involves partnerships with the non-governmental organizations (NGOs) Solidaridad Foundation, which is specialized in the development of sustainable production chains, and the Institute of Forestry and Agricultural Management and Certification (Imaflora), the accreditation institution recognized for development of the program.

Elos Raízen is directly aligned with our ESG Agenda ([read more here](#)), mainly for addressing some of the targets we aim to achieve by 2030:

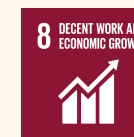
- Guarantee the traceability of 100% of the sugarcane milled and zero illegal deforestation post-2008.



- Ensure and continue to maintain that 100% of the sugarcane sources take as their benchmark an internationally recognized sustainability standard.



- Promote advances in the area of human rights in our operations and our supply chain.



It is also aligned with our objective of redefining the future of energy, which is not limited solely to the production of renewable energy, but also involves the development of responsible solutions for every stage of the chain, with a deep respect for the environment and people.



## WHAT MAKES THE PROGRAM DIFFERENT

- **An inclusive program:** Elos was planned to meet the needs of 100% of our sugarcane suppliers, from the smallest to the biggest producers.
- **Checking of the properties by an independent third party:** the Institute of Forestry and Agricultural Management and Certification (Imaflora).
- **Part of our 2030 strategy:** Elos helps us to address some of our public commitments to human rights, ethics and compliance, and sustainable procurement.
- **Recognized by the SAI Platform and Bonsucro<sup>1</sup>** for having criteria aligned with international sustainability standards.



<sup>1</sup> Organizations and certifications related to sustainability in the production of sugar and ethanol sourced from sugarcane.

## OUR PARTNERS

**Solidaridad Foundation** – An international organization dedicated to promoting sustainability in agriculture and supporting farmers. With operations in 54 countries, Solidaridad Foundation has stood out as a key player in the transformation of production chains, driving the efficiency and rational use of natural resources.

“When we look back on our 10-year partnership with Raízen, one cannot fail to see the positive progress we have achieved. Our journey has been notable for the exceptional evolution we have achieved, especially in the way we assess the process of continued improvement of our sugarcane suppliers, using exhaustive monitoring and checking procedures. The past decade has been a real journey of learning, innovation and constant improvement of the tools we employ. The value proposal for the involvement of the producers has also evolved, going far beyond simply complying with the law, by creating a positive environment that encourages the farmers to seek constant improvement in the field. Even though we do recognize that challenges still lie ahead, Elos has shown itself to be following a solid and consistent path. We want to continue moving forward together, facing these challenges and contributing to a more promising future.”

**Rodrigo Castro,**  
Country Director of the  
Solidaridad Foundation



**Imaflora** – A Brazilian organization that aims to promote positive changes in the forest and agriculture sectors. The institute stands out due to its activities in the creation and implementation of innovative solutions for production chains, encouraging the growth of sustainable businesses that promote environmental and economic wellbeing.

“For Imaflora, the partnership with Raízen is fundamental, since it strengthens our activity in the sugarcane chain and, most importantly, supports the development of the sugar and ethanol sector for more sustainable and equitable production. Elos addresses our mission to generate a positive impact on Brazilian agriculture, involving the conservation of forests. The program has been constantly evolving over the last ten years. Continual improvement targets have been established, allowing us to clearly observe the evolution of the suppliers. Without doubt it is the most significant initiative involving operations with sugarcane workers at a national level, and is of utmost importance when compared to similar programs, led by multinationals in other segments.”

**Eduardo Trevisan Gonçalves,**  
Manager of Agricultural  
Chains at Imaflora



# Methodology

Elos Raízen's methodology is aimed at continued improvement, combining planning, diagnosis, individual guidance and engagement. The approach aims to achieve specific targets as well as strengthen a culture of socio-environmental responsibility and respect for human rights in the regions neighboring our operations.



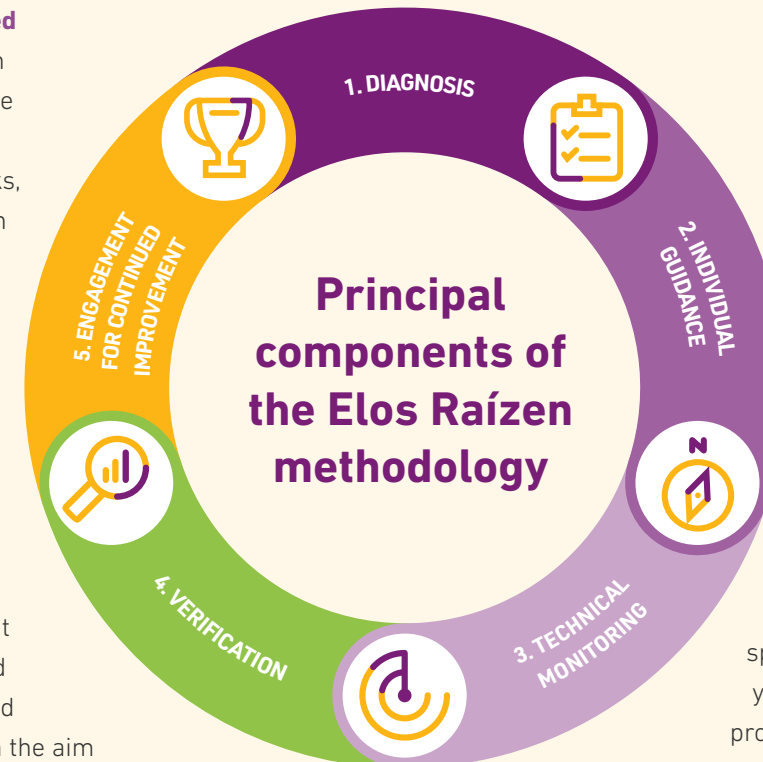
**1) Diagnosis:** this is the stage that aims to understand the individual realities and challenges faced by the producers participating in the Program. Elos currently engages more than 2,000 suppliers (93% of the volume of sugarcane acquired by Raízen from third parties), of which 11 million tons of sugarcane is classified at the level of excellent.

**5) Engagement for continued improvement:** undertaken in the form of meetings with the suppliers, partnerships with associations, events and talks, training sessions, publication of informative materials, encouragement in the use of technologies, promotion of knowledge, and long-lasting relationships.

**4) Verification:** this stage is conducted by an independent third party - the Forestry and Agricultural Management and Certification (Imaflora) - with the aim of ensuring that the results of the program are transparent and credible.

**2) Individual guidance:** our team of specialists provides individual guidance, suggesting specific strategies and activities that can be implemented for the improvement of production and the adoption of best socio-environmental practices.

**3) Technical monitoring:** technical monitoring of our specialists throughout the harvest year. The number of visits to each property varies depending upon the complexity of the activities set forth in the action plans.



# The thematic pillars of the Elos Program

The topics addressed during the technical monitoring visits are divided into four thematic pillars: Human Rights, Environment, Agronomic Practices, and Business.

“ My land, located in Rio Verde (GO), measures around 1.5 hectares, and two thirds of it is planted with sugarcane, whilst I also breed cattle and pigs. I have been in partnership with Raízen since 2013, and the company presented the Elos Program at exactly the moment that I was looking to make sure that my property complied with all the relevant laws. The specialists at Raízen became my consultants, responding to all my questions. As well as ensuring legal compliance, Elos Raízen has contributed significantly to raising the awareness of my employees in relation to socio-environmental issues, with all that is learned being applied to all our crops, thereby firmly establishing certain fundamental concepts. This partnership has been crucial to our sustainable growth.”

**Junior Nogueira,**  
Raízen sugarcane  
supplier | West Pole



## HUMAN RIGHTS



1. Hiring and remuneration
2. Infrastructure
3. Occupational health and safety
4. Freedom of union association
5. Hiring of third party labor
6. Respect, equality and diversity
7. The working day
8. Minimum age
9. Hiring of labor (in-house employees, third-parties and migrant workers)

## ENVIRONMENT



10. Protection of preservation areas
11. Responsible use of agrochemicals
12. Disposal of waste and treatment of effluents
13. Fire prevention and fighting
14. Preservation of hydro-resources

## AGRONOMIC PRACTICES



15. Soil management and conservation
16. Planting techniques
17. Rational use of correctives and fertilizers
18. Integrated pest management

## BUSINESS



19. The right to land use
20. Financial management
21. Succession
22. Ethics and compliance



# Our history

**2011**

Pilot-project designed to provide training for 15 partner sugarcane producers.

**2013**

Development of the Elos Program.

**Between 2014 and 2016 Phase 1**, during which the initiative created a data base from information provided by the producers.

**2016**

The start of **Phase 2**, during which we invested in a team exclusively dedicated to the program, thus allowing us to get closer to the producers and provide them with individually-focused support.

**Between 2016 and 2019**

We were dedicated to providing the program participants with support in the improvement of production and adoption of good practices.

**2020**

The Economic Commission for Latin America and the Caribbean, connected to the Economic and Social Counsel of the United Nations, recognized Elos Raízen as an important social and economic sustainability tool for the chain within which it is inserted

**2012**

Extension of the initiative, also in pilot form, to 256 suppliers.

**2014**

Formal launch of Elos Raízen as a groundbreaking initiative in the sugar and ethanol sector, with the aim of promoting the sustainable development of sugarcane producers.

**2019**

The start of **Phase 3**, in which Elos began working with the service providers' producers, thereby expanding the reach of the program to one more link in the chain. That same year, the program was recognized for adopting criteria aligned with Bonsucro regulations.

**2022**

Elos Raízen was recognized for involving criteria aligned with the Farm Sustainability Assessment (FSA), a tool developed by the Sustainable Agriculture Initiative (SAI). The recognition confers international validity on our commitment to a socially fair and environmentally correct production model.

# Recognition



**BONSUCRO INSPIRE AWARD 2016** | An award for the pioneering and innovative initiative promoting the sustainable advancement of the sugar and ethanol industry.



**BIG PUSH FOR SUSTAINABILITY** | Elos Raízen is amongst the repository of cases being handled by the Economic Commission for Latin America and the Caribbean (ECLAC) as part of the “Big Push for Sustainability in the sugarcane production chain”.



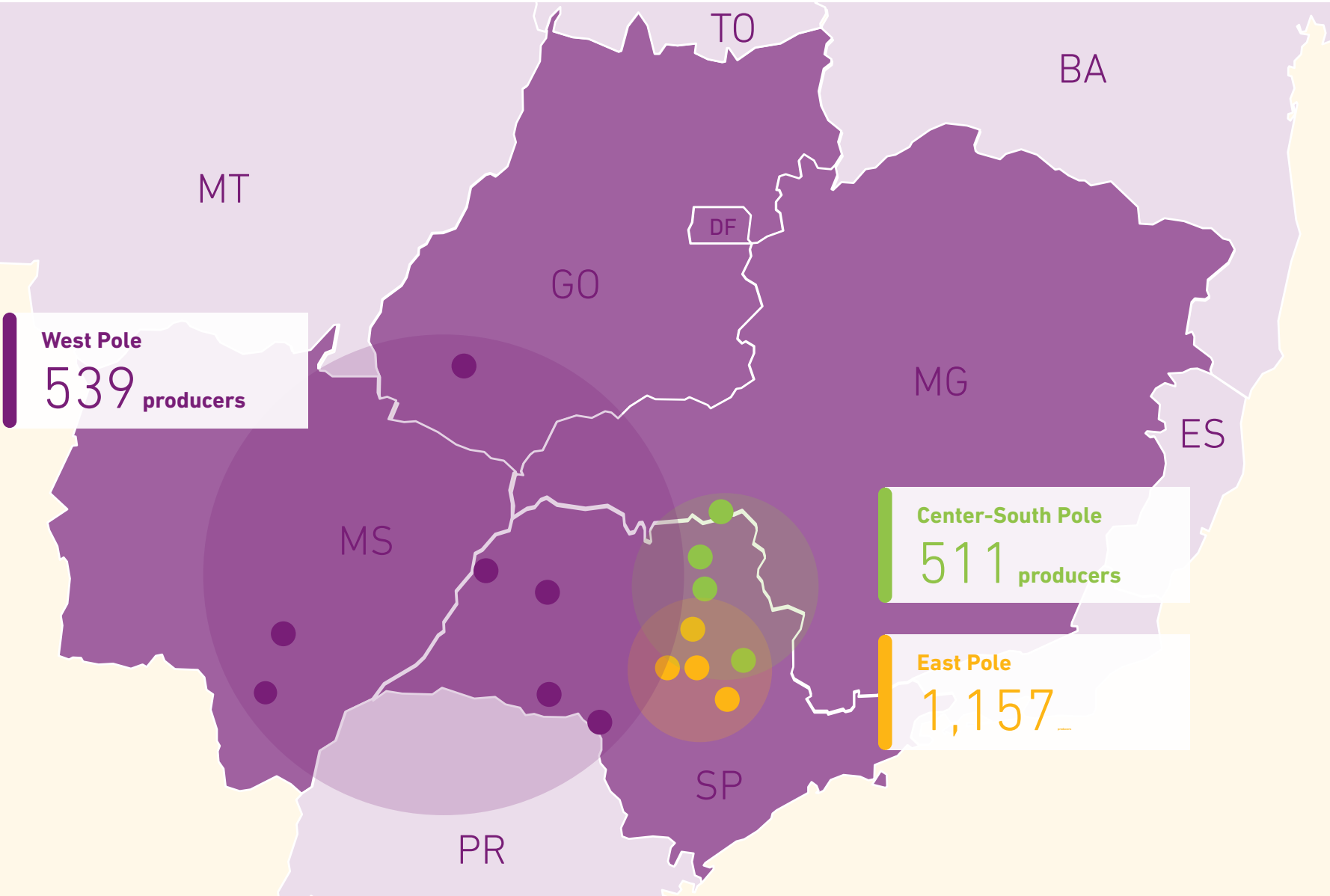
**SAI PLATFORM AND BONSUCRO** | The initiative is recognized by the SAI Platform and Bonsucro as a program that complies with global sustainability standards, driving responsible production.

**External recognition demonstrates belief in the Elos Raízen methodology**



# Areas of activity

More than 2,000  
producers engaged  
with Elos Raízen





# Governance

From senior management to operations, every level of our team is engaged in Elos Raízen

Firm governance of the Elos Program is one of the keys to its successors, since it ensures that the whole team is continually committed to the principles of sustainability, socio-environmental responsibility and respect for human rights, whilst also reinforcing our role as a leader in the sector.

The Non-Governmental Organizations (NGOs) that have been partnering Elos Raízen since it began have solid governance structures. **Solidaridad Foundation, for example, has five Continental Supervisory Boards (CSBs), each one of which is responsible for supervising the regional strategies of the continent and its financial control (read more here).** The actions

of **Imaflora**, meanwhile, are guided by a Board of Directors and performed by an in-house team, in conjunction with other partners, including specialist consultants and partner companies **(read more here)**.

Internally, all the levels of our team, from operations through to senior management, are committed to the program. Three poles providing regional services, supervised by the Agriculture Business Board, are responsible for maintaining regular contact with the partner producers, taking into consideration the specific features of each location.

**During the 2022/2023 harvest year, around 11 technical monitoring visits were made to the producers every day**

“ I have worked for Elos Raízen for six years, and during this time I have learned how winning the confidence of the producers requires a great deal of patience. When we can show the positive results of the guidance we provide, the relationship becomes stronger, and this evolution is extremely gratifying. Elos Raízen is not only about sustainability, it is also about involving emotions and building ties based upon trust. I believe that this program is a forward-facing journey towards facilitating sustainability throughout the chain, and it is an honor to be part of it.”

**Gisele Mandoni Marconato,**  
Sustainability Manager at Raízen



“ I have worked for Raízen for 11 years and have witnessed the development of Elos Raízen up close, from its beginnings until today. It is a journey that has involved a lot of work, because major transformations don't happen overnight, but are the result of little changes taking place over time. Every year we look to make improvements to our partners' properties, and they realize that these improvements are generating benefits not only for Raízen, but also for them and the regions where they operate. For me, Elos can be summed up in one word: relationship. It involves empathy, a love for the countryside and the ability to put yourself in someone else's shoes, knowing the right time to have a discussion and point out opportunities for improvement. It is extremely gratifying to see the transformations to the properties and the desire the producers have to make their practices better.”

**Michele Cristina da Silva,**  
Sustainability Manager at Raízen





# impacts of the program



# Impacts of the program

The steady advances that have been made on our suppliers' properties have positioned the Elos Program as a benchmark in the sector, reflecting the ongoing improvements that can be seen in the production chain. Data provided by Imaflora show that the diagnoses made on the sugarcane producers' farms are 100% correct, meaning that the actions proposed are consistent with the challenges faced in the field.

The main impact of the program, which has been increasing with each passing year, is the number of suppliers which transform their properties and achieve the level of excellence, better representing the achievement of good practices in relation to business, personnel, the environment and farming. 81 suppliers achieved excellence grade in the 2022/2023 harvest. Together, these producers occupy 140,000 hectares of farmland and are responsible for 11 million tons of sugarcane (around 30% of the volume traded with suppliers).

THOSE PRODUCERS ACHIEVING 'EXCELLENCE' GRADE IN THE ELOS PROGRAM ARE A BENCHMARK IN THE ADOPTION OF GOOD SOCIO-ENVIRONMENTAL AND AGRONOMIC PRACTICES, WHICH GO BEYOND SIMPLY MEETING LEGAL REQUIREMENTS



Integrated pest management



Crop rotation



Actions for the prevention and fighting of accidental fires

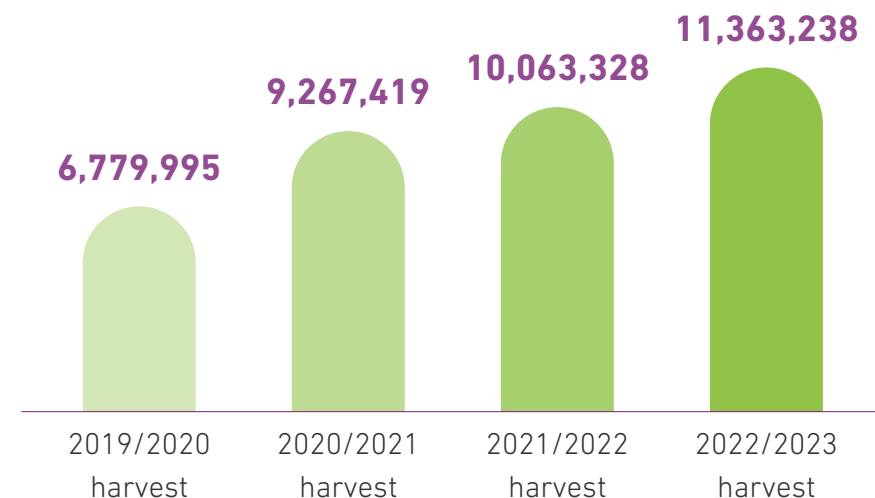


Health and safety training for employees



Financial planning

VOLUME OF SUGARCANE CATEGORIZED AT THE LEVEL OF EXCELLENCE (TONS)







One of the challenges for our team in the field during the 2022/2023 harvest was the integration of the producers supplying raw-material for Biosev, prior to its merger with our operations. During this period, our leaders presented business trends and opportunities, encouraging discussions on the economic scenario, perspectives for the inputs market, and sustainable practices in sugarcane farming. As a result, 100% of these suppliers joined the Elos Program. As of the 2023/2024 harvest year, our team will be supporting and monitoring the progress of these producers.

As well as general aspects, below we are highlighting the improvements that have been implemented in each one of the program's pillars: Human Rights, Environment, Agronomic Practices, and Business.

In 2022/2023, 81 partner producers achieved excellence grade (around 30% of the volume traded with suppliers).

“I have been aware of Elos Raízen since it began, and I have had a relationship with the Raízen team since I started farming sugarcane on my property, a group of farms covering more than 4,000 hectares. This program provides me with specialist support for the improvement of the quality of life and working conditions for my 120 employees. I have also received guidance on mapping the socio-environmental risks, with a structured schedule of tasks that have led to my company achieving the program's excellence level.”

**Mirto Sgavioli Neto**  
Raízen sugarcane  
supplier | East Pole



“My property, located in the municipality of Sales Oliveira (SP), near to Ribeirão Preto (SP), covers an area of 1,150 hectares and I employ around 30 people to farm the crop and deliver the sugarcane to the Raízen mill. My partnership with the company began two harvests ago, following its acquisition of Biosev, with which I had traded previously. Over these past two years, I have been very impressed with Raízen's approach, which is based upon education, respect and partnership. The integration and willingness to evolve together has been essential, and I have learned most of all in the area of improving the management of socio-environmental issues, taking advantage of the tools and technologies offered.”

**Sérgio Gustavo Quassi de Castro,**  
Sugarcane supplier |  
Center South Pole



# Human Rights

One of the pillars adopted by Elos Raízen is human rights, involving recognition of the importance of guaranteeing decent working conditions for all those involved in the sugarcane production chain. One of the most important initiative is the promotion of fair and safe labor relations. Along these lines, training sessions are offered with support from local partners, such as the National Rural Apprenticeship Service (Senar), aimed at training the suppliers and their employees in relation to compliance with the Regulatory Norms (RN) concerning health and safety at work, with 2,580 workers being impacted in the 2022/2023 harvest year. In addition to this, the producers receive guidance from our employees on matters such as registering working days, the infrastructure for meeting workers' needs, and the legal requirements concerning hirings, remuneration, accommodation and transportation.

We consider occupational safety to be an essential basis for decent work, which is why we also involve

the producers in addressing matters such as fire prevention and fighting, the safe use of agrochemicals and agricultural machinery, the proper use of Personal Protective Equipment (PPE), and first aid, amongst others. In the 2022/2023 harvest, 156 training sessions were offered, engaging 3,147 workers and 190 suppliers.

We also hosted events as part of our corporate calendar, including "Safety Day", which takes place twice each year, and is designed to raise awareness not only amongst our employees, but also amongst our suppliers, sugarcane transporters and communities, for the adoption of safe behavior. We also held discussions on safety and offered a **"Safety Tour"**, along with other actions aimed at reinforcing safe attitudes on the farms and elsewhere.

As well as promoting safety as an integral part of our corporate culture, we also invest in improving people's living conditions and wellbeing. One example of this is the **Aloja** project, that was implemented in the 2023/2024 harvest year in the Piracicaba (SP) region.<sup>2</sup> This initiative aims to promote healthy competition between the migrant employees who are provided with living quarters, in order to ensure better conditions of hygiene and cleanliness in their living spaces. At the end of the project, those participants from the living quarters with the best scores receive recognition and awards.

**2** This project was developed following the reported period.

## ACCOMMODATION IN FIGURES

- **11 participating** plantation consortiums
- More than **960 migrant workers** accommodated
- **44 competing** accommodations
- **220 inspections** performed



# Environment

The environment is another fundamental pillar of the Elos Program, demonstrating our commitment to preserving natural resources and conserving biodiversity. As part of the company's approach, we focus on guiding the producers in responsible management of water resources, with projects that aim to optimize the use of water in agriculture, thereby reducing the impacts on the local ecosystems. In addition to this, we consider the conservation of biodiversity to be a crucial aspect, especially due to the fact that sugarcane is very often produced in rural areas that are home to a rich variety of fauna and flora.

In order to protect the preservation areas and environmental reserves, 95% of our suppliers harvest the raw material using machinery, with manual harvesting only being employed on lands where the use of machinery is not possible. We are signatories to the 'Agri-Environmental Green Ethanol Seal' and members of the 'External Mutual Aid Plan' (Pame), meaning we do not encourage controlled burning. Furthermore, as part of the "Who loves the land, doesn't light a fire", we hosted 22 rallies with our sugarcane suppliers and producers' associations.



**We provide our suppliers with guidance on the responsible management of natural resources and the environment.**

In relation to fighting accidental fires on the plantations, meanwhile, we have implemented a protocol that is groundbreaking in the sector, involving the dissemination of dozens of safety procedures aimed at preventing fires and, whenever necessary, instructions on how to tackle fires safely.

We also strive to raise the awareness of our suppliers in regard to the importance of crop rotation and the implementation of crops both with added commercial value (such as soybean), or others offering agronomic benefit (such as crotalarias and millet). Furthermore, we provide guidance on other issues focused on regenerative agriculture and the protection of biodiversity, such as the use of organic fertilizers and the use of biological inputs, as well as the importance of reducing the use and environmental impact of agricultural pesticides, increasing the microbiological rate of the soil, and recovering damaged soils.



# Agronomic practices

The best agronomic practices - including proper management of the soil, plant nutrition, and pest and disease control, amongst others - play a fundamental role in the promotion of sustainability and optimization of sugarcane production. This pillar is essential to guaranteeing that the agricultural activities are conducted efficiently and responsibly.

We keep Elos Raízen fully updated on all the most recent innovations in order to continually improve farm management. This not only increases production efficiency, but also reduces the need for inputs, such as water and fertilizer, thereby minimizing the environmental impact. Mechanized harvesting, for example, as well as increasing efficiency in the field, reduces the workers' exposure to challenging physical conditions. Precision farming, meanwhile, that involves the adaptation of agronomic practices based upon specific data from each area, results

in more efficient management of the resources and, consequently, in more sustainable production.

Other practices disseminated as part of this pillar include the correct management of agrochemicals, as a means of contributing to avoiding contamination of the soil and improving the quality of the water.



In the 2022/2023 harvest,  
**607** workers were  
trained in the correct use of  
agrochemicals.



# Business

In this pillar, that brings together economic and commercial aspects, the most significant impact for the suppliers relates to the increased opportunities in accessing rural credit. This is because part of the risk assessment performed by the financial institutions takes into consideration compliance with the regulations relating to agricultural activities, an aspect that is addressed in great detail by the Elos Raízen program. As such, those suppliers which fulfill certain criteria relating to ongoing improvement and sustainability, are more likely to be able to increase their investments in the acquisition of inputs, equipment, and machine maintenance, as well as other expenses associated with the management of their properties, which can lead to an increase in their productivity and competitiveness.

**Around R\$ 1 billion in funding has been contracted by our suppliers through the Jornada Cultivar Program**

Since the beginning of the program, we have contributed to ensuring that around R\$ 1 billion in funding has been contracted by our suppliers, with the Banco Santander being the main partner. We have managed to agree upon conditions with the bank that the producers would not be able to find in conventional loan agreements.

We have also provided guidance on the succession of the properties, a crucial process in guaranteeing the long-term continuity and success of the agricultural operations. Together with the Jornada Cultivar program ([read more on page 25](#)), Elos Raízen is investing in the training of heirs and future leaders, providing them with the skills and knowledge necessary to efficiently manage the agricultural operations. Part of this initiative involves the successors being guided on the adoption of responsible agricultural practices and considering environmental impacts in their decisions. Elos Raízen also values the integration of generations, thus encouraging a collaborative working environment in which the ideas and perspectives of the young are respected and incorporated into the operations, thus creating a culture of innovation and continual learning.

“My family has properties in the municipalities of Colômbia and Jaborandi, in the state of São Paulo, where we grow sugarcane and implement crop rotation techniques with soybean, with a view not only to the sustainable development of our business, but also preservation of the soil and the environment. Over the years, we have established a solid partnership with Biosev, providing the company with raw-materials. When Biosev was acquired by Raízen, we had the opportunity of familiarizing ourselves with the company's programs, and one of them, Elos, caught our attention, since it guides producers like us on the adoption of best practices in the field. The support provided by the program has been essential, especially because we were working towards certification by the SAI (Sustainable Agriculture Initiative). The team from Raízen visited our properties on numerous occasions, sharing information and making valuable recommendations. Thanks to the commitment of these specialists, we were able to raise our standards and achieve a level of excellence in our agricultural operations. This journey has been especially important for me, since I am my father's successor, he being a farmer with more than 40 years of experience in the field, who, in turn, was heir to the legacy left by my grandfather. Agriculture is in our blood, and working side-by-side with the team from Raízen and as part of the Elos program has made us feel part of a much wider community, committed to doing the right thing.”

**Laisa Pinto Neto,**  
Raízen sugarcane supplier  
| Center-South Pole





A photograph of a sugarcane harvest at sunset. A harvester on the left is cutting the cane, with its arm extended over a yellow tractor pulling a large trailer. Another tractor with a trailer is visible in the background. The scene is filled with dust and the warm glow of the setting sun.

# integrated value proposal



# Integrated value proposal



The Elos Program brings together a broad ecosystem of solutions that we have developed to generate value for both the sugarcane producers and other stakeholders, including clients and other institutional partners.



## RESOURCES



## THE RAÍZEN INTEGRATED VALUE PROPOSAL



## VALUE GENERATED

- **Relationship with more than 2,000 sugarcane suppliers**, responsible for more than 430,000 hectares of land
- Around **30 employees fully dedicated** to the program
- **Investment in the Program**
  - **more than 6 million reais** invested in the Elos Program every year

- **Elos Program**, with engagement of 93% of the volume of sugarcane sourced from third parties
  - on site visits to all the properties
  - external assessment by an independent third party (Imaflora)
- **Jornada Cultivar**, involving around 80% of the volume of raw-material traded with suppliers
  - integrated solutions for productivity in the field
- **Pulse Hub**, with 58 partner startups and more than 1,200 in the database

- **Free consultation:**
  - more than 48,500 hours of consultation provided for the sugarcane producers
- **2,580 workers received health and safety training** in 2022/2023
- **607 workers were trained** in the proper use of agrochemicals in 2022/2023
- **Practices recognized by**

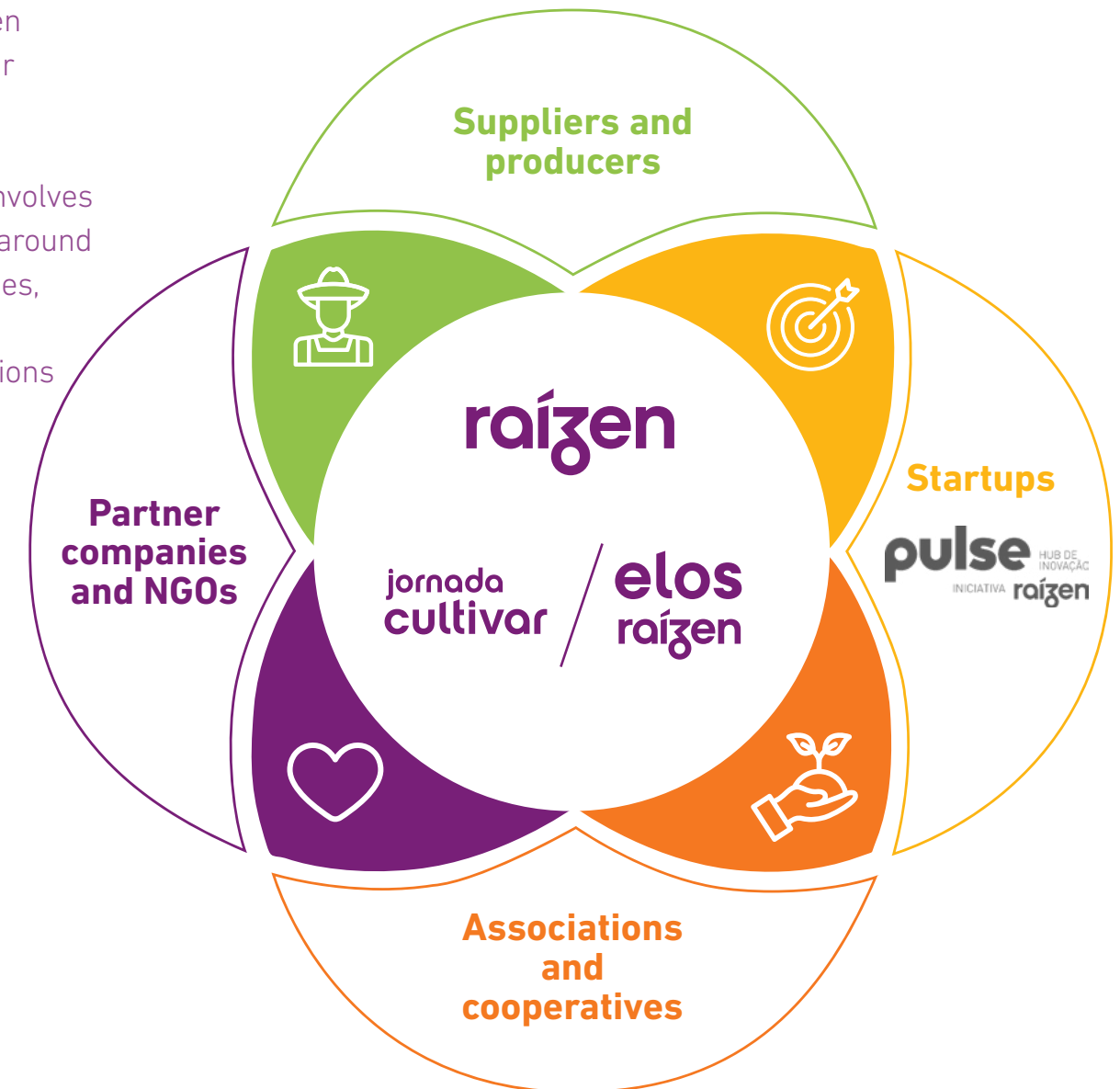
### international standards



- **More than 100 pilot projects performed** with Pulse Hub startups
- **Strengthening and influence** for an increasingly more sustainable production chain.

In addition to the Elos Program, the suppliers have the opportunity to get involved with other initiatives that we develop, such as **Jornada Cultivar**. Launched a decade ago, 'Cultivar' performs a vital role in offering assistance to our suppliers, facilitating access to management support initiatives, financial solutions and means of optimizing resources, as well as developing efficiency and productivity, thus allowing everyone to grow together. In the 2022/2023 harvest, approximately 80% of the sugarcane sourced from our producers was involved in this program - meaning a direct relationship with 6% of the domestic market.

Together, Elos Raízen and Jornada Cultivar form an ecosystem of innovation and sustainability that involves the participation of around 50 partner companies, NGOs, and rural producers' associations cooperatives.



“ I own a 2,400 hectare farm located between the São Paulo municipalities of Matão and Dobrada, where I employ more than 80 people. As I am committed to the adoption of best socio-environmental practices in the field, I have been seeking Bonsucro certification for my property, and Elos Raízen has been guiding my operations to this end. The staff on the program wear my farm's shirt and are extremely helpful, for which I can offer nothing but praise and thanks.”

**Eduardo Guedes Pereira,**  
Raízen sugarcane supplier | East Pole







**the future is now**





# The future is now

Elos Raízen is commemorating its 10<sup>th</sup> anniversary, renewing its commitment to driving the sugar and ethanol sector, with the aim of improving socio-environmental practices throughout the sugarcane chain.

As we celebrate 10 years of Elos Raízen success, we look to the future with renewed commitment. The program will continue to be a driver of innovation and positive change, pushing the sugar and ethanol sector towards new successes in the move towards a more just, inclusive and sustainable world.

The production of sugarcane performs a vital role in the Brazilian economy and the global energy transition. Brazil is one of the world's biggest sugarcane producers, and this crop sets up a production chain that can generate jobs, promote the development of rural communities, and

substantially contribute to the commercial balance of the country. However, it still faces challenges related to the implementation of good socio-environmental practices.

Recognizing these challenges provides the encouragement to mobilize the coordinated efforts of the producers, government, industry and society. Through the Elos Program, and by leading by example, we have been aiming to improve practices in the sector, fighting for environmental conservation and respect for human rights in a crop that performs a fundamental role in the economy.

The program is now considered to be a model for other countries. The Elos Raízen Program's decade of experience with digital solutions has allowed Solidaridad Foundation to establish a partnership with Alcoholes del Uruguay (ALUR), a sugarcane processing company that forms part of the National Fuel, Alcohol, and Portland Administration (ANCAP), connected to the Uruguayan government. The aim is to replicate the successful model that is the basis of our program with 300 Uruguayan producers looking to be awarded the Bonsucro certification.

A partnership that we established with Solidaridad Foundation, and the respected international leader in the biological protection of crops, Koppert, was considered in 2022/2023, by the Bonsucro Impact Fund (BIF). The aim of the initiative in question is to create a comprehensive program that combines incentives and rewards, together with practical guidance, with the intention of speeding up the adoption of more sustainable agricultural practices amongst sugarcane producers. This mechanism will initially be tested with 50 sugarcane farmers in four South American countries: Brazil, Colombia, Paraguay and Uruguay. In Brazil, Solidaridad Foundation can count upon our assistance for the implementation of a replicable model that is to be based upon engagement, learning and support strategies, all driven by cutting edge digital tools.

In addition to this, our partner producers ultimately apply the knowledge acquired through the Elos program to other areas, such as orange and pig farming, thus demonstrating the positive impact of our actions, not only in a specific sector, but also on the strengthening of agribusiness as a whole.

■ Taking part in Elos Raízen has been an incredible experience. As part of Associcana, together with more than 700 producers covering an area of 45,000 hectares, we trade millions of tons of sugarcane with Raízen. Since the beginning of the program, we have all started along this path of continual learning, not only driving sustainability in our region, but also contributing to the energy transition. The values and knowledge shared in the Elos Raízen program have had a positive impact not only on the production of sugarcane, but also in other areas, such as coffee, soybean and broiler chicken farming, that many of our members are involved in. This is an experience that combines economic performance with social responsibility and environmental conservation, and we are very proud to be a part of this."

**Eduardo Romão,**  
President of the  
Sugarcane Farmers  
of the Jaú Region  
(Associcana)



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- Daniel Lorenzo (Piracicaba – SP)
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**elos**  
**raízen**