



**HARVESTS**

22/23

23/24

# **SUSTAINABILITY** **REPORT**





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# Introduction

About the report ●

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## About the report

The Sustainability Report of Centro de Tecnologia Canavieira S.A. (CTC, Sugarcane Technology Center) for the 2022/2023 and 2023/2024 harvests reinforces the organization's commitment to transparency and accountability. It highlights key initiatives, results, and the impacts of our operations across Brazil from April 1, 2022, to March 31, 2024. Starting in 2025, we will adopt an annual reporting cycle. GRI 2-3

This document follows the guidelines of the Global Reporting Initiative (GRI) and incorporates the updated CTC materiality matrix, which was revised in October 2024. Our key material topics, identified by means of interviews with internal and external stakeholders are detailed on page 21 and served as a guide for the development of this report. By addressing the challenges, progress, and plans related to these topics, we aim to provide employees, customers, suppliers, shareholders, and community residents, as well as other stakeholders, with insight into how CTC manages its social, environmental, and economic impacts. Our approach emphasizes generating value through the integration of technological innovation, sustainability, and effective governance.

Starting in 2025, CTC plans to adopt the integrated reporting standards established by the IFRS (International Financial Reporting Standards). Therefore, we have decided to introduce the concepts of capital from now, in this publication.



For questions, suggestions, or feedback regarding the content, please reach out to us via e-mail at: [sustentabilidade@ctc.com.br](mailto:sustentabilidade@ctc.com.br).



# Highlights

22/23 and 23/24 Harvests



**30%**

market share of the sugarcane planting market.



**11 new products**

currently in the launch phase, enhancing the portfolio with advanced varieties designed for higher productivity.



**5,000 m²**

additional greenhouses for biotechnology and genetic enhancement, reinforcing CTC's infrastructure.



**BRL 406 million**

invested in research and development to accelerate innovations in biotechnology and genetic enhancement.



**38%**

increase in sales of genetically modified varieties, reflecting strong market acceptance.



**20%**

increase in the representation of women in leadership positions within the Company, highlighting the progress made in inclusion efforts.



**BRL 152.3 million**

**net profit for the 2023/2024 harvest**, driven by growing demand for high value-added varieties.

**BRL 900,000**

**allocated to social projects in the municipality of Camamu (BA)**, including the renovation of the school and health center in the Pinaré community.



# Message from the CEO

## GRI 2-22

It is with great pleasure that I address you to share the challenges and achievements that shaped the 2022/2023 and 2023/2024 harvests at the Sugarcane Technology Center. For over five decades, CTC has become a global leader in innovation within the sugar-energy industry, turning challenges into opportunities and elevating Brazil's competitiveness and sustainability to new heights. At every step, we stay dedicated to developing technological solutions that not only enhance productivity but also place sustainability at the core of our operations.

Aligned with our purpose, we invested approximately BRL 406 million in research and development over these harvests. This investment has driven significant progress in strategic areas, including advancements in biotechnology and the application of artificial intelligence in genetic enhancement. We currently have a strong portfolio of 11 new products in the launch phase, along with groundbreaking innovations like synthetic seeds, which are poised to revolutionize sugarcane planting. This technology, which eliminates the need for nurseries, is set to enhance process efficiency, lower production costs, and increase the productivity of sugarcane fields across Brazil.

Our growth extends beyond product development. To strengthen our operations, we expanded our team to 531 employees and increased our greenhouse facilities dedicated to genetic enhancement and biotechnology by an additional 5,000 square meters. These investments position us to meet the rising demand for advanced biotechnology and to sustain our leadership in an increasingly competitive market.

**We invested  
BRL 406 million  
in research and  
development  
in the past two harvests**







## Through innovations in genetic research, planting, and management techniques, we aim to double the productivity of Brazilian sugarcane fields by 2040

With its exceptional energy efficiency and carbon capture and storage capacity, sugarcane plays a pivotal role in the transition to a low-carbon economy. Our genetically modified varieties and advancements in synthetic seed technology contribute to more efficient production, reducing pesticide use and supporting management practices that minimize environmental impact.

Additionally, bioelectricity and biomethane, produced from sugarcane biomass, are becoming increasingly important. In 2023, bioelectricity generation from sugarcane reached 20,900 GWh, up 14 percent compared to the previous year. This progress not only strengthens the national energy matrix but also reinforces CTC's role as a catalyst for sustainability in the industry.

Our commitment to innovation and sustainability is driven by the ambitious goal of doubling sugarcane productivity by 2040. This vision, founded on strong partnerships with customers, employees, suppliers, and other innovation collaborators, reflects our confidence that, together, we can build a more resilient and competitive sugar-energy sector, ready to tackle the environmental challenges facing Brazil and the world.

I sincerely express my gratitude to each of you for your trust and for your support for CTC. We are prepared to move forward and, together, continue shaping a more prosperous, efficient, and sustainable future.

**César Barros**  
CEO of CTC



# CTC

- About us
- Corporate governance
- ESG agenda
- Vision for 2040



# About us

The Sugarcane Technology Center (CTC) is a global leader in innovation for the sugar-energy industry, committed to developing technologies that enhance competitiveness and sustainability in sugarcane production. Founded in 1969, CTC has grown from a research center focused on agricultural, logistics, and industrial solutions for Copersucar into a cutting-edge company driving the industry forward through advancements in biotechnology, genetic enhancement, and disruptive innovations. These solutions not only boost productivity but also enhance the protection of crops against diseases and pests, reduce the reliance on chemical pesticides, and improve sugarcane's adaptability to mechanization and diverse climatic and environmental conditions.

CTC's current portfolio includes technologies for high-yield sugarcane cultivation, aimed at reducing environmental impact, promoting more efficient agricultural practices, and addressing climate challenges. We collaborate closely with our customers, providing technology through products and services that positively impact the production chain, with a continuous focus on sustainability and innovation.



Our mission is clear: To drive innovation, increase our customers' productivity and offer technological solutions that expand the sector's potential, increasing protection against pests and enabling new levels of efficiency and sustainability, with the goal of doubling the productivity of Brazilian sugarcane fields in the next 20 years.

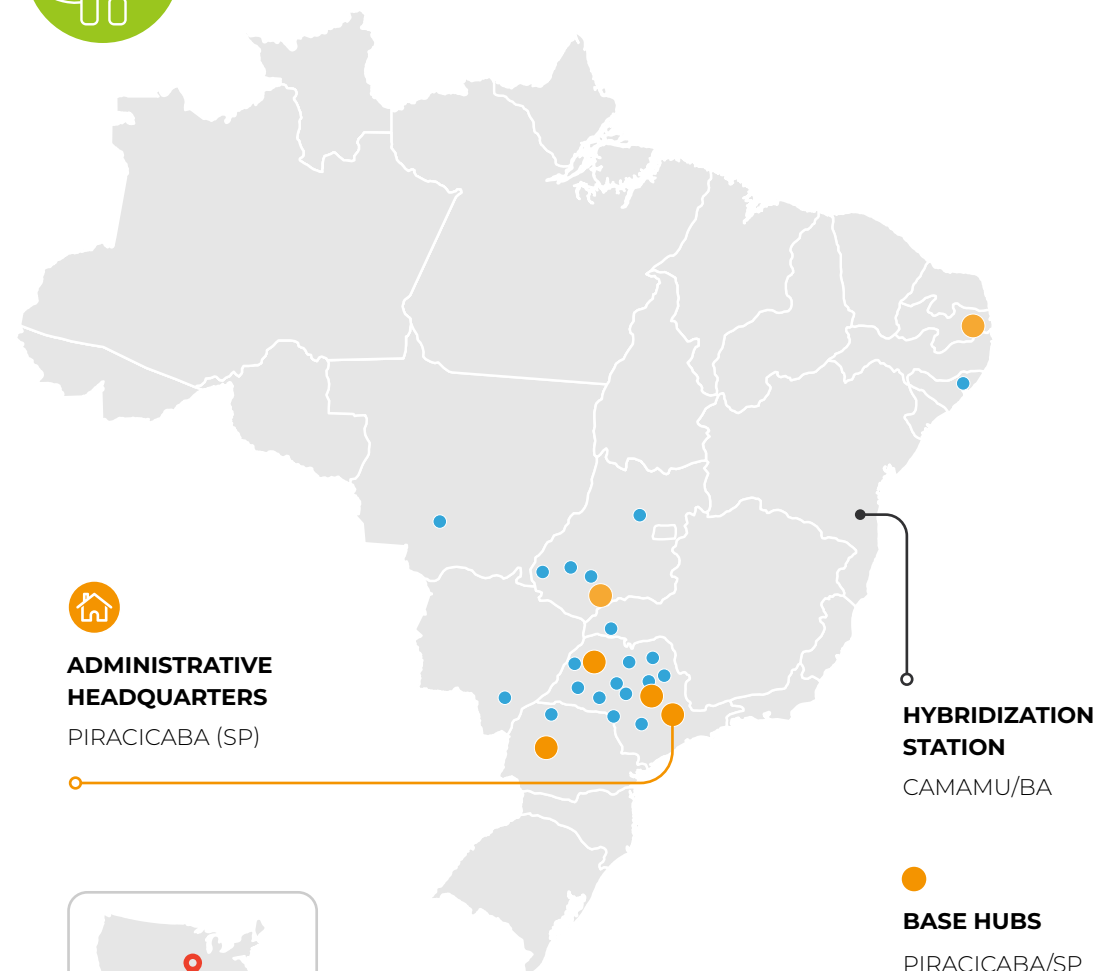
In the recent harvests (2022/2023 and 2023/2024), CTC experienced a phase of intensive expansion and modernization. We invested BRL 406 million in research and development, enhancing our expertise in artificial intelligence applied to genetic enhancement and second-generation biotechnology. Additionally, we are in the launch phase of 11 new products. We have also advanced in the development of synthetic seeds, which hold significant potential to revolutionize the sugarcane planting process.

To support this progress, CTC has expanded its workforce to around 531 employees and upgraded its research infrastructure, including a 5,000-square-meter expansion of greenhouses dedicated to biotechnology and genetic enhancement, a process completed in 2023.

**We expanded our presence in strategic areas with new hubs in the Northeast, totaling 6 base hubs, 20 advanced hubs, and a hybridization station**

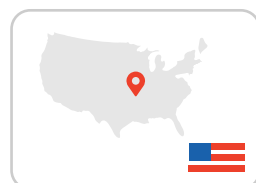


## Where is CTC?



### ADMINISTRATIVE HEADQUARTERS

PIRACICABA (SP)



**CTC GENOMICS: WHOLLY OWNED  
SUBSIDIARY IN THE UNITED  
STATES** ST. LOUIS/MISSOURI

### HYBRIDIZATION STATION

CAMAMU/BA

### BASE HUBS

PIRACICABA/SP  
BARRINHA/SP  
VALPARAISO/SP  
QUIRINÓPOLIS/GO  
MANDAGUAÇU/PR  
SANTA RITA/PB

In the synthetic seed project — a disruptive innovation for the industry — we are optimizing encapsulation prototypes to reach the desired levels of sprouting and productivity in the field. At the same time, we are planning large-scale industrial processes to ensure competitive production costs and advancing the design of a demonstration plant, scheduled to begin operations in the 2026/2027 harvest.

Our research stations have been modernized to align with our visual identity and technological standards. We expanded our presence in strategic regions, establishing new centers in the Northeast, bringing our total to 6 base hubs, 20 advanced experimentation hubs, and a hybridization station in Brazil. Additionally, we have a research center in Saint Louis, USA, dedicated to developing new genetic technologies, including genome editing. [GRI 2-2](#)

### ADVANCED EXPERIMENTATION HUBS

NOVO HORIZONTE/SP	RANCHARIA/SP
SERRA AZUL/SP	QUIRINÓPOLIS/GO
SÃO JOAQUIM	VILA PROPÍCIO/GO
DA BARRA/SP	JATAÍ/GO
CHAVANTES/SP	MINEIROS/GO
CESÁRIO LANGE/SP	CAARAPÓ/MS
SERTÃOZINHO/SP	COLORADO/PR
ITAPURA/SP	ITURAMA/MG
PENÁPOLIS/SP	BARRA DO BUGRES/MT
GUARAÇAI/SP	CORURIBE/AL
OLÍMPIA/SP	



## TIMELINE

Explore the key milestones  
in CTC's history

**Foundation of CTC as the Copersucar Technology Center**, dedicated to research and development of technologies for the sugar-energy industry.

**1969**

**Start of biotechnology programs** focused on pest and disease resistance.

**1999**

**CTC becomes a Public Limited Company (S.A.)**, with its shareholders comprising the leading business groups in the Brazilian sugar-energy industry.

**2011**

**The National Bank for Economic and Social Development (BNDES)** joins the CTC shareholder base.

**2014**

**CTC Genomics is launched** as a wholly owned subsidiary in Saint Louis, Missouri, United States, aiming to accelerate research and development in sugarcane biotechnology, with a focus on genome editing.

**2018**

**Modernization of the research facilities**, including the expansion of greenhouses and laboratories. Opening of new research centers in the Northeast.

**2022/2023**

**1980**

**Start of activities aimed at the genetic enhancement of sugarcane**, focusing on the development of high-yield varieties.

**2004**

**CTC turned** into a Public Interest Civil Society Organization (PICSO).

**2012**

**Launch of the marketing** of technologies.

**2017**

**Approval of the world's first genetically modified variety** of sugarcane resistant to the borer, the primary pest that affects crops in Brazil.

**2020**

**Advancement in the development of synthetic sugarcane seeds**, a groundbreaking innovation in the industry, set to revolutionize sugarcane planting methods.

**2023/2024**

**Significant progress made in the synthetic sugarcane seed project**, including the initiation of planting system development, testing in customer fields, and preparation of the executive plan for the Demonstration Plant.





## THE SUGAR-ENERGY INDUSTRY AND DECARBONIZATION

The Brazilian sugar-energy industry plays a pivotal role in driving the global transition to a low-carbon economy. With sugarcane as its primary raw material, the industry has pioneered biofuel production, particularly ethanol, recognized as one of the most viable solutions for reducing greenhouse gas emissions. In recent years, Brazil has strengthened its position as a global leader in sugarcane ethanol production, offering a significantly lower carbon footprint than gasoline and contributing directly to the decarbonization of transportation.

The 2023/2024 harvest marked a historic milestone for the sector, setting production records for both

sugar and ethanol. Sugarcane milling reached 713.2 million tons, up 16.8 percent compared to the previous cycle. This growth was fueled by record-breaking agricultural productivity, reaching 87.2 tons per hectare in the South-Central region of the country, a 19 percent increase over the previous harvest. The average TSH (tons of sugar per hectare) also saw a 17 percent increase, reaching 11.5.

**713.2 million**  
tons of sugarcane was the  
production in the 2023/2024  
harvest, a record







Besides biofuels, the industry also produces bioelectricity from sugarcane biomass, powering the mills' operations and supplying surplus energy to the national electricity grid. In 2023, bioelectricity generation from sugarcane reached 20,900 GWh, a 14 percent increase compared to 2022. This segment accounts for 75 percent of all biomass-based energy generation in Brazil, highlighting the industry's potential to provide renewable solutions for both mobility and energy production.

Another relevant advance is the development of biomethane, produced from sugarcane waste. During the 2023/2024 harvest, biomethane production reached approximately 78 million Nm<sup>3</sup>, with strong potential for substantial growth in the coming years. This renewable gas can replace diesel in agricultural operations, enhancing the sustainability of production plants. In the future, biomethane production could support the manufacture of green hydrogen, a clean fuel at the forefront of energy innovation. This process can also produce biofertilizers, lowering costs and reducing dependence on chemical inputs.

Also significant is the production of decarbonization credits (CBIOs), enabling fuel distributors to offset emissions from the sale of fossil fuels in compliance with the National Biofuels Policy (RenovaBio). In 2023, 33.1 million CBIOs were issued, underscoring the sector's strategic role in advancing Brazil's climate goals.

Thus, the sugar-energy industry positions itself as a crucial player in the future energy matrix, providing renewable energy solutions and driving the transition toward a decarbonized economy. Through continuous innovation and enhanced productivity, the industry is well-positioned to meet the rising demand for biofuels and clean energy, making a substantial contribution to global climate objectives.

**In addition to sugar and ethanol, the industry produces bioelectricity and biomethane**

Sources: EPE, Abiogás, Cepea, Unica, Conab, CTC, Consecana, ANP, CNA.



# Corporate governance

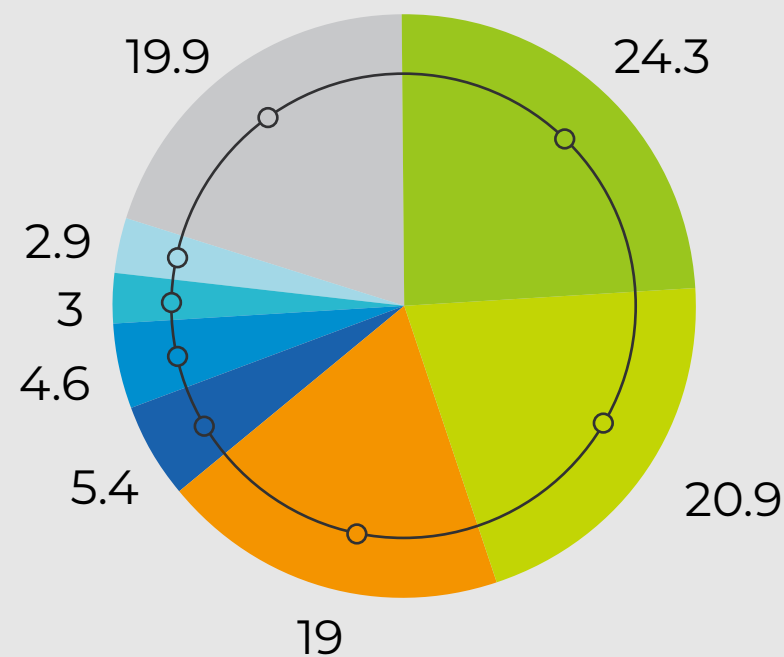
The Sugarcane Technology Center adheres to a corporate governance model grounded in best market practices and guided by the principles of transparency, accountability, and equal treatment for its nearly 90 shareholders and other stakeholders. Registered with the Brazilian Securities and Exchange Commission (CVM) as a publicly held closed capital company, the company has its shares listed on Bovespa Mais. Our governance framework is guided by the Bylaws, Shareholders' Agreement, and policies established over the past four years, aimed at ensuring compliance, transparency, and efficiency in decision-making processes.

## SHAREHOLDING

CTC is controlled by strategic shareholders, including major companies in the sugar and energy sector, as well as the National Bank for Economic and Social Development (BNDESPAR) (refer to the accompanying graph for details).

We are preparing for an initial public offering (IPO), subject to market conditions, which will enhance liquidity for shareholders and support the financing of strategic projects, such as the sugarcane seed platform — one of the company's most transformative innovations.

### CTC SHAREHOLDERS (%)



<span style="color: #76b82a;">●</span>	Copersucar	24.3%
<span style="color: #f1c40f;">●</span>	Raízen	20.9%
<span style="color: #3498db;">●</span>	BNDESPAR	19%
<span style="color: #2980b9;">●</span>	São Martinho	5.4%
<span style="color: #21a1d3;">●</span>	Tereos	4.6%
<span style="color: #1abc9c;">●</span>	Grupo Coruripe	3%
<span style="color: #aed681;">●</span>	BP Bioenergia	2.9%
<span style="color: #bdc3c7;">●</span>	Others	19.9%



## GOVERNANCE STRUCTURES GRI 2-9

CTC's senior management consists of the General Shareholders' Meeting, the company's highest governing body, and the Board of Directors, supported by statutory committees including the Related Companies, Scientific, Audit, IPO, and Human Resources committees. The CEO leads the executive structure, comprising nine departments: Research and Development (R&D) in Genetic Enhancement and Biotechnology, Research and Development (R&D) in Seeds, Regulatory and Government Affairs, Operations, Finance and Investor Relations, Human Resources (HR), Legal and Intellectual Property, Marketing and Sales.

During the 2022/2023 and 2023/2024 harvests, we achieved significant advancements in our management. The internal audit was restructured to operate independently from the controller, reporting directly to the Audit Committee and the Board of Directors, strengthening the company's commitment to transparency and compliance with regulatory requirements for future capital listing. Additionally, the separation of the Marketing and Sales departments enhanced management efficiency, enabling a more targeted focus on the specific needs of each industry. We must emphasize the crucial role of the ESG Steering Committee, which advises the Board of Directors by discussing and monitoring indicators, risks, impacts, opportunities, advancements, and sustainability strategies. Additionally, the creation of the ESG Executive Committee has been key to ensuring the implementation of the strategy, conducting studies, and proposing new projects.

## Four key committees oversee the organization's impacts:



### AUDIT COMMITTEE

Responsible for monitoring compliance and managing economic risks.



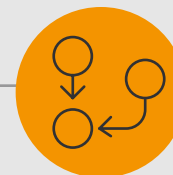
### HUMAN RESOURCE COMMITTEE

Charged with addressing social impacts, including ethics and employee well-being.



### SCIENTIFIC COMMITTEE

Evaluates potential environmental impacts, particularly concerning scientific and technological practices.



### RELATED COMPANIES COMMITTEE

This committee aims to ensure fair market conditions and business practices for all customers and related companies.

These committees ensure the organization effectively manages its economic, environmental, and social impacts.







## INVESTOR RELATIONS

CTC's governance practices emphasize a strong commitment to accountability, ensuring that relevant information is transparent, accessible, and clear to investors and other stakeholders.

Our Investor Relations (IR) department plays a vital role in fostering effective communication by providing information about the company and its performance through the [IR website](https://ri.ctc.com.br/), which adheres to the highest governance standards. Since its formal establishment in 2020 and subsequent strengthening in recent years, the IR department has played a strategic role in our preparation for the IPO. The company has been continuously structuring itself to meet capital market demands, prioritizing transparency and fostering a relationship of trust with its shareholders and potential investors.



**LEARN MORE**

IR website: <https://ri.ctc.com.br/>

With transparency and  
accessibility in communication,  
CTC is getting ready for its IPO



## ETHICS AND INTEGRITY

The CTC Integrity Program serves as a fundamental pillar, ensuring that the company operates in compliance with applicable laws and the ethical principles that guide our activities. Governed by a Code of Ethics and Conduct, revised in 2021 and approved by the Board of Directors, the Integrity Program sets clear guidelines covering key areas such as health, safety, human rights, data protection, fair competition, fraud prevention, and conflict of interest management. The Code applies to all employees, regardless of their hierarchical level, as well as to third parties, including suppliers and service providers.

We have a range of supporting policies, including the Anti-Corruption Policy, the Gifts, Presents, and Hospitality Policy, and the Related Company Transactions Policy. To ensure the effective implementation of these policies, the Compliance department, part of the Legal Department, is responsible for conducting investigations, monitoring complaints, and proposing updates to the program. The Ethics Committee, in collaboration with the Audit Committee, reviews cases reported through the Ethics Channel and ensures that appropriate decisions are made.

During the 2022/2023 harvest, CTC investigated 23 reports of misconduct, of which seven were found to be valid. In the 2023/2024 harvest, of the 14 complaints received, three were confirmed to be valid.

Over the past two harvests, the admissible cases involved issues related to harassment, information confidentiality, workplace safety, and non-compliance with legislation or company policies.

All complaints were reported to the Ethics Committee, thoroughly investigated, and duly closed. Corrective measures were implemented for valid cases, while preventive measures were applied for all employees. These included training and refresher courses on the Code of Ethics (CODEC), awareness of CTC reporting channels, and a lecture on ethics delivered by the Cescon Barrieu law firm.



Further details on how CTC manages the "Ethics, integrity, and compliance" material topic can be found in the GRI Indicator Book, page 64.

## REPORTING CHANNELS

Employees and third parties can use the Ethics Channel to report any irregularities or inappropriate conduct, with full assurance of anonymity and confidentiality for those involved. The Channel is managed by a third-party company, ensuring independence in handling complaints.

**Phone:** 0800 771 8199 (Monday to Friday, from 8 am to 8 pm)

**E-mail:** [canaldeetica.ctc@iaudit.com.br](mailto:canaldeetica.ctc@iaudit.com.br)

**Hot site:** [denuncia.iaudit.com.br/sistema/ctc](https://denuncia.iaudit.com.br/sistema/ctc)

**Voicemail:** 0800 771 8199 (outside opening hours, weekends and holidays)



## TRAINING AND AWARENESS

Over the past two harvests, we have intensified training and awareness initiatives on ethics and integrity, reinforcing our ongoing commitment to fostering a safe and respectful work environment. In November 2023, comprehensive training on moral and sexual harassment was conducted by external experts, aimed at clarifying what constitutes these behaviors and how employees can identify and report incidents. The training included both in-person sessions in Piracicaba and remote, synchronized sessions for employees at other locations.

In addition, there was a refresher course on the Code of Ethics and Conduct, which reached 97 percent of employees. The process included a quiz and corporate videos, along with in-person and remote presentations, to ensure all employees fully understood their responsibilities. For field employees based at the hubs, training was conducted in person and emphasized the importance of maintaining an ethical work environment in compliance with company policies.



Ethics, diversity and respect  
are values of our culture







## RISK MANAGEMENT

Risk management is a crucial element in ensuring the sustainability and continuity of our business operations. Designed to identify, assess, and mitigate key risks that could affect operations, this risk management framework is structured in alignment with best governance practices. The process involves active participation from leaders across all areas, including internal audit, internal controls, and compliance, ensuring a comprehensive and accurate assessment of risks.

We follow the three lines of defense model: The first line, consisting of operational managers, oversees the daily control of activities; the second line, comprising internal controls and compliance areas, focuses on risk monitoring and mitigation; and the third line, internal audit, operates independently, reporting to the Audit Committee and the Board of Directors to ensure effective risk management.

Risk management is also fully integrated into the strategic decision-making process. Audit results and control improvements are regularly presented to the Board of Directors, enabling them to allocate resources more effectively. This governance framework ensures that key risks are prioritized and corrective measures are promptly implemented. This continuous monitoring and evaluation cycle forms the foundation for strategic decisions in areas such as investment, innovation, and expansion.



Integrating the **process** with strategic decisions ensures the prioritization of risks.



THE SUGARCANE  
TECHNOLOGY CENTER



## PROGRESS

During the 2022/2023 and 2023/2024 harvests, risk management saw significant progress, marked by strengthened governance and increased senior management involvement. Today, risk management is part of our organizational culture. ESG risks are now addressed with the same seriousness as financial and operational risks, reflecting our commitment to broader and more sustainable management.

Another highlight was the automation of processes and the improvement of assessments. For example, internal audit conducted an in-depth analysis of field experiment backups, which proved crucial in mitigating the impacts of unexpected events, such as fires. This type of preventive assessment is part of our audit plan, which is directly guided by the results of the risk matrix.

## STRUCTURE AND PROCESSES



Since the publication of the Risk Management Policy in 2021, we have conducted annual reviews of our risk matrix, which encompasses operational, financial, strategic, and sustainability risks. Each department is responsible for identifying risks specific to their areas, with internal audit consolidating this information into a unified risk matrix. Thus, risk management is a shared effort across the organization, and internal audit calibrates risks based on impact and likelihood.

Additionally, we have implemented a maturity rating system that evaluates the controls within each audited process, classifying them into five maturity levels, ranging from 1 to 5. This system helps us identify areas requiring investment in improvements and processes that already have an adequate level of control and risk mitigation.

**Risks related to ESG aspects**  
are addressed with the  
same priority as financial  
and operational risks



# ESG agenda

GRI 3-1, 3-2

In 2024, CTC conducted a materiality review through a process that involved consultation with both internal and external stakeholders, including shareholders, investors, customers, consumers, employees, suppliers, public officials, service providers, associations, and surrounding communities.

With this, we began using the new material topics to guide the content of our Sustainability Report and shape the Company's business and relationship strategies. This approach aims to continuously improve the management of our key social and environmental impacts, while minimizing risks and maximizing opportunities presented by the external environment to our business activities (see *more details on the materiality process on page 71*).

## CTC's material topics

and their correlation with the UN  
Sustainable Development Goals

### ETHICAL GOVERNANCE

Ethics, integrity and compliance  
SDG 8, 16

Government relations and *tirar  
itálico* SDG 16, 17

### CARE WITH PEOPLE

Employee attraction,  
development and retention  
SDGs 3, 4, 5, 8, 10

Diversity, equity and inclusion  
SDGs 5, 8, 10

### COMMUNITY RELATIONS

Community relations  
and local development  
SDGs 1, 2, 4, 5, 8, 17

### INNOVATION AND DATA SECURITY

Innovation and technology  
SDG 2, 9

Data privacy and security ODS 9

### CLIMATE STRATEGY

Climate change  
SDGs 3, 7, 8, 12, 13, 14, 15

### GENETIC ENHANCEMENT AND NATURAL RESOURCES

Management of genetically  
modified organisms  
(GMOs) SDGs 2, 12, 15

Water and effluent management  
SDGs 2, 6, 12, 14

Biodiversity and Ecosystems  
SDGs 6, 304, 15

SDGs  
Sustainable  
Development Goals



Further details on how CTC manages the material topics are available in the GRI Indicator Book, on page 64.





# Vision for 2040

Our Vision for 2040 is an ambitious and strategic plan aimed at doubling sugarcane agricultural productivity by the end of the next decade, in alignment with global trends in decarbonization and energy transition.

The plan to achieve this goal was developed with input from various areas of the Sugarcane Technology Center, based on a series of internal workshops, meetings, interactions with the Board of Directors, and feasibility assessments. The aim was to identify key innovations and technologies that will position CTC as a leader in driving the industry toward a more sustainable future.

The Vision for 2040 is based on four strategic **pillars** aimed at increasing agricultural productivity and reducing the carbon footprint:



**GENETICS**



**BIOTECHNOLOGY**



**SEEDS**



**MANAGEMENT**

See the strategies and actions involved in this plan in the infographic below.



## Double productivity without increasing the planted area

CTC innovations that will transform sugarcane cultivation

### GENETICS

Through genetic improvement, we develop high-yield varieties adapted to diverse management conditions and environments.

### SUGARCANE SEEDS

With this disruptive innovation, we will drive cost reduction, enhance productivity, and improve operational efficiency in planting.

### MANAGEMENT

By integrating technologies, technical assistance, and the best agricultural practices, we will maximize the potential of our customers' cultivation areas.

### BIOTECHNOLOGY

Using genetic modification and genome editing technologies, we provide the market with disease-free, insect-resistant, and herbicide-tolerant varieties.

### Impacts in the field



More

- Protection against diseases and pests
- Adaptation to different environments
- Tolerance to herbicides
- Tolerance to stress
- Flexibility and streamlining of planting



Less

- Pesticides and fertilizers
- Operational costs
- Agricultural inputs
- Carbon emissions

\*Source: Conab



# Human capital

- Our people
- Management of excellence





# Our people

The Sugarcane Technology Center ended the 2023/2024 harvest with 531 employees. In recent years, we have experienced significant growth in our workforce, driven by the expansion of strategic projects, particularly in Research & Development and Sales. For us, people are at the core of all our achievements, and this growth is a direct reflection of our efforts to strengthen a culture of innovation and excellence.

We recently reviewed and consolidated our organizational culture around the “CAIS” pillars: Agile Collaboration, High performance, Innovation and Customer Success. This culture shapes our actions, fostering an environment where each employee has the autonomy to innovate and make meaningful contributions.

The review of our organizational culture followed a diagnosis completed in November 2023, which included a survey with employee participation and focus groups. This process helped us identify the strengths of the existing culture and the areas that required adjustments. The pre-launch of the new culture, aligned with the strategic vision and employee aspirations, took place in 2024 during the first meeting of the company's entire leadership, an event named LIDERA CTC. The DAY 1 event for the new Culture, held immediately after, officially launched CAIS for all CTC employees.

## EMPLOYEES BY REGION AND GENDER GRI 2-7

	2022/2023			2023/2024		
	Males	Females	Total	Males	Females	Total
Northeast	25	4	29	24	4	28
Midwest	22	1	23	24	1	25
Southeast	235	177	412	276	195	471
South	6	0	6	7	0	7
<b>Total</b>	<b>288</b>	<b>182</b>	<b>470</b>	<b>331</b>	<b>200</b>	<b>531</b>



# Management of excellence

People management at CTC is grounded in the principle that human capital is the organization's most valuable asset. We believe that valuing, developing, and retaining talent is crucial to our ongoing success and to the achievement of our strategic objectives. Our focus is to foster a work environment that supports both the professional and personal growth of our employees, while maintaining a balance with quality of life and promoting a healthy, inclusive workplace.

Over the last two harvests, we have made significant progress in our people management practices. We have implemented robust skills development programs, enhanced our talent attraction and retention efforts, and expanded our diversity and inclusion initiatives. Additionally, leadership development has been a central focus, with the creation of programs designed to cultivate leadership aligned with the renewed organizational culture and CTC's long-term goals.



## CTC AT THE GPTW AWARDS

### Recognition of excellence in the workplace

CTC has distinguished itself as one of the best companies to work for in Brazil, earning the Great Place to Work (GPTW) seal for four consecutive years, with the most recent recognition being in 2024. This award acknowledges the company's efforts to create a work environment that prioritizes employee well-being and engagement. For us, it is an honor to see our commitment to people recognized through an award that values satisfaction and a positive work environment.

The GPTW recognition also reinforces the effectiveness of our inclusion, diversity, and occupational health practices. We strive to ensure that all employees feel like integral members of a culture that fosters innovation, growth, and collaboration. The new CAIS culture, for instance, has been crucial in strengthening engagement and fostering an environment where high performance and quality of life coexist harmoniously.





## DEVELOPING SKILLS

### GRI 404-1, 404-2

The development of skills at the Sugarcane Technology Center (CTC) is central to its strategy of strengthening the organization and maintaining its position as a leader in innovation within the sugar-energy industry. The Company invests in a broad range of initiatives to train its employees, emphasizing technical, functional, and behavioral skills. During the 2022/2023 and 2023/2024 harvests, personalized programs, internal and external courses, as well as mentoring and coaching initiatives, were made available to enhance skills aligned with organizational and market demands.

Actions included internal training focused on leadership, technical and functional skills, as well as behavioral competencies, with emphasis on investment in external training, such as language courses, undergraduate and graduate courses. This strategy not only fosters professional growth but also strengthens talent retention, underscoring CTC's commitment to the continuous development of its team.

In the last two cycles, the company has significantly increased the number of hours dedicated to training its employees. In 2023/2024, the annual average number of training hours per employee was 47 hours, up compared to the previous harvest. This progress reflects the positive impact of structured initiatives, including the creation of specific tracks for

different employee categories and strategic areas, such as leadership and R&D, ensuring that each employee receives training relevant to their role and future within the organization.

Additionally, CTC has implemented regular performance evaluation and career development systems, with 100 percent of employees in administrative and technical roles undergoing periodic reviews. These assessments not only identify areas for improvement but also help align individual goals with corporate strategies. The company also offers career transition support through outplacement programs, helping employees re-enter the job market, demonstrating its commitment to the well-being and professional continuity of its team.

With a focus on the future, CTC remains dedicated to strengthening its human capital by integrating technology and innovative methodologies into its development programs. The goal is to establish a culture of continuous learning and high performance, aligned with the industry's needs and global challenges. This commitment reflects the central role employees play in the company's long-term strategy, helping to build a sustainable and competitive future.

### AVERAGE HOURS OF TRAINING PER YEAR BY GENDER GRI 404-1

	2021/2022	2022/2023	2023/2024
Males	54	22	46
Females	62	24	48
<b>Total</b>	<b>57</b>	<b>23</b>	<b>47</b>

### AVERAGE HOURS OF TRAINING BY EMPLOYEE CATEGORY GRI 404-1

	2021/2022	2022/2023	2023/2024
Office of the President	0	12	104
Board of Directors	122	26	116
Managers	62	31	53
Coordination	59	30	69
Supervision	95	34	54
Technicians	61	26	55
Administrative	78	28	49
Operational	33	13	31
<b>Total</b>	<b>57</b>	<b>22</b>	<b>47</b>



Further details on how CTC manages the "Employee attraction, development, and retention" material topic can be found in the GRI Indicator Book, page 72.



## DIVERSITY AND INCLUSION

Diversity and inclusion at CTC are essential pillars in fostering an innovative, collaborative, and ethical work environment. Our approach to the topic goes beyond legal compliance, translating into concrete actions that promote equity and respect. We believe that diversity strengthens our organizational culture, enriches the exchange of experiences, and drives innovation across all areas of the company.

Over the past two harvests, CTC has introduced new initiatives focused on inclusion and promoting diversity within the workplace. In 2024, two pillars of diversity governance were consolidated: Inclusion of People with Disabilities (PwD) and Gender.

The PwD Inclusion pillar is well-established and features a Supported Employment program, a methodology designed to integrate people with disabilities into the formal job market with a higher degree of commitment. This program includes a range of support measures that not only facilitate entry into the workforce but also ensure long-term retention, offering conditions and salaries equivalent to those of other employees. Eight vacancies were filled under this modality, in addition to the 14 positions already held by people with disabilities within the organization. All are supported by external consultancy, which provides relational, productive, and environmental assistance. Currently, the CTC fully complies with the legal requirements regarding the PwD quota.



The Gender pillar began its initiatives at the end of the 2023/2024 harvest and is currently in the literacy and prioritization phase, setting the foundation for actions in the upcoming cycles.

Since Diversity became a material and priority issue for CTC following the review of the materiality matrix in 2024, the governance of this topic will be structured during the 2024/2025 harvest.

**In 2024, diversity, equity and inclusion** were included in the CTC materiality matrix



It is worth noting that the percentage of women in leadership positions at CTC increased by 20 percent during the 2022/2023 and 2023/2024 harvests, reinforcing our commitment to gender equity.

Another significant achievement was the implementation of continuous training on diversity and inclusion, with 97 percent of employees participating. This training was offered both in person and remotely, ensuring comprehensive coverage across all our units. The sessions included topics such as moral harassment, diversity in teams and recycling of the Code of Ethics, with a practical approach focused on the employees' daily lives.

# +20%

of women in  
leadership positions  
at CTC in the last  
two harvests



Further details on how CTC manages the "Diversity and inclusion" material topic can be found in the GRI Indicator Book, page 74.



## ATTRACTION AND RETENTION

At CTC, attracting and retaining talent are strategic priorities essential to ensuring the company's sustainable growth and excellence. Our approach is built on three main pillars: Fostering a work environment that promotes innovation, the continuous development of people, and valuing employees across their diverse professional trajectories. To attract qualified talent aligned with our organizational culture, we implemented innovative selection processes and expanded our presence on digital recruitment platforms, enhancing the visibility of our career opportunities and solidifying CTC as an employer of choice.

We recorded important advances in this area in the 2022/2023 and 2023/2024 harvests. We implemented a robust onboarding model, which facilitated the integration of new employees and enhanced their experience from the very first contact. To achieve effective onboarding we created the Friendly Hug project, assigning an integration ambassador to each new employee. This initiative accelerates their learning curve not only in processes, structure, and internal policies but, most importantly, in understanding our culture and how it is reflected in our practices and behaviors. This approach accelerates the sense of belonging among new employees, making the experience of starting a new career cycle even more positive.



During this period, over 200 new professionals joined the company, with a focus on the areas of Research & Development and Operations, which were propelled by our strategic projects. Furthermore, the turnover rate was reduced to 13.37 percent, with only 5.5 percent of those being involuntary terminations, marking a significant improvement compared to the previous cycle.

Talent retention was also strengthened through development programs and initiatives that promote quality of life at work. We also reviewed our remuneration and benefits policy to ensure competitiveness in the market. As a result, we maintained high levels of engagement and satisfaction among employees, with 97 percent of employees participating in development programs and continuous feedback.

Key highlights in the area are the hiring of 200 professionals, the new onboarding model, the promotion of quality of life at work, and the new remuneration policy



Further details on how CTC manages the "Employee attraction, development and retention" material topic can be found in the GRI Indicator Book, page 72.





## HEALTH AND SAFETY AT WORK

Our commitment to the health and safety of our employees goes beyond legal compliance, integrating risk prevention with the promotion of well-being, always focusing on creating a safe and healthy work environment. We believe that awareness, prevention, and the involvement of all employees are essential to fostering a culture of excellence.

Over the past two cycles, we have made significant progress in our health and safety practices. The OPA (“Observar, Pensar e Agir,” or Observe, Think and Act) Program was created to reduce operational risks, with an emphasis on field activities and vehicle transport safety, one of the main risk factors in CTC operations. Through defensive driving training and constant monitoring of indicators such as speed and the number of fines, the program managed to significantly reduce transport-related incidents.

At the same time, daily safety dialogues have been crucial in promoting awareness about the use of PPE (personal protective equipment) and the best operational practices across all company areas.

In this context, leadership plays a key role in promoting a safety culture, supporting communication campaigns, organizing strategic stops for discussions, and encouraging the reporting of accidents and incidents through an application developed by the company.



The OPA Program (“Observar, Pensar e Agir,” or Observe, Think and Act) was created to strengthen the management of operational risks



Another significant innovation in 2024 was the transformation of operational procedures into educational videos, making safety standards more accessible and clear for all employees. This initiative is part of an ongoing effort to strengthen the safety culture, focusing on preventive actions that engage leadership at all levels of the organization. Reviewing near misses and implementing corrective measures before they escalate into incidents are also key elements of this proactive approach, aimed at completely eliminating workplace accidents.

In terms of health promotion, CTC launched several campaigns focused on occupational health, including periodic examinations, vaccination initiatives, and specific programs designed to support the mental and emotional well-being of employees. These actions resulted in greater employee adherence to self-care and prevention practices.

In the 22/23 and 23/24 harvests, CTC recorded five accidents, with an average absence of five days. This result reflects the positive impact of the health and safety programs that have been implemented, showing that we are on the right path to ensuring a safer and healthier work environment for everyone.

**Reduction in accidents with lost time** indicates the success of new initiatives implemented in the last two harvests



Further details on how CTC manages workplace health and safety can be found in the GRI Indicator Book, page 84.



# Intellectual and manufactured capital

- Business model
- Research & development
- Solutions



# Business model

The Sugarcane Technology Center's business model is unique within the sugar-energy industry and is designed to meet the increasing demand for innovation and productivity. Our operations are supported by four strategic pillars: Genetics, biotechnology, seeds and management. These initiatives enable the development of technological solutions that enhance agricultural productivity, reduce the carbon footprint, and increase the competitiveness of our customers in the field.

CTC's solution development areas are focused on continuous innovation and adaptability to the challenging conditions of the industry. In the area of genetic enhancement, we invest in technologies like genomic selection and precision breeding, enhancing the likelihood of identifying the best varieties among the generated individuals. In the field of biotechnology, our platform in Brazil focuses on genetic modifications to introduce desired traits into superior varieties, while in the United States, we utilize genome editing to enhance protection against pests and diseases, developing new genetically modified varieties that increase crop resilience. Furthermore, the synthetic sugarcane seed project emerges as a disruptive factor, offering increased operational efficiency, speed, and sustainability in planting operations.

In terms of revenue streams, CTC's business model is currently primarily based on royalties generated from the licensing of its conventional and genetically modified varieties. With the upcoming launch of synthetic seeds, CTC will introduce a new revenue stream, transforming the company's profile.

The CTC strategy also includes the continuous development of management solutions that optimize the use of natural resources, such as water and soil, while promoting the efficient use of agricultural inputs. This focus on sustainability not only improves crop productivity, but also significantly reduces the carbon footprint, in alignment with the Sustainable Development Goals (SDGs) that guide our actions.

**Synthetic seeds, under development, will create a new line of revenue for CTC**

**With the combination of these strategic pillars, CTC seeks not only to lead innovation in the industry, but also ensure sustainable growth, balancing financial gains with positive impacts on the environment and society.**







## Research and development

The research and development (R&D) area is the essence of CTC's business model, being the main driver of innovation and competitiveness for the sugar-energy sector. CTC has a solid history of innovation, from the launch of its first SP variety, the result of the Genetic Enhancement Program, in 1983, to the recent advance in synthetic seed technology, which promises to transform the sugarcane planting process in Brazil and globally.

Currently, CTC has a robust and modern infrastructure, which includes seven biotechnology laboratories, six of them in Brazil and one in the United States, in addition to 38 experimental stations distributed throughout Brazil. The CTC Genomics research center, located in St. Louis, USA, is one of the leading centers dedicated to genome editing and the discovery of new traits, with a focus on genetic transformation. In addition, CTC maintains the world's largest sugarcane germplasm bank, housing more than 5,515 varieties, providing extensive genetic variability for crossbreeding and the development of new varieties.

Our R&D team has approximately 240 highly qualified professionals, 72 percent of whom have higher education, including master's and doctoral degrees. This multidisciplinary team is capable of working with cutting-edge technologies such as genomic selection, genetic editing and digital phenotyping, which increase accuracy in clone selection and allow the development of new products in increasingly shorter timeframes.

Over the past 13 years, CTC has accumulated around BRL 2 billion in investments in R&D, highlighting its ongoing commitment to innovation and technological development. These investments have enabled significant advances in areas such as biotechnology, management and synthetic seeds, with technologies such as artificial intelligence being integrated into the research process to predict the behavior of varieties in different climate conditions and increase accuracy in the selection of new varieties.



**72%**  
of the R&D professionals have  
higher education, including  
master's and doctoral degrees



In the last two harvests, during which we invested approximately BRL 406 million in R&D, several innovations emerged from our laboratories. One of the key advancements was the creation of new genetically modified varieties with enhanced resistance to pests and adverse environmental conditions, as well as the launch of new varieties in the 9000 series, which offer productivity gains across a wide range of production environments. Another notable achievement was the development of the synthetic seed project, which will eliminate the need for nurseries and revolutionize the planting process, improving seedling health and enhancing operational efficiency in the field.

Looking ahead, CTC plans to maintain its leadership in R&D, with the goal of doubling sugarcane productivity by 2040. The strategy includes the ongoing launch of new varieties and the accelerated adoption of synthetic seeds. With the support of advanced technologies and a skilled team, CTC is well-equipped to tackle the challenges of the sector and contribute to a more sustainable and productive future.

**BRL 2 billion**  
have been invested in R&D  
over the past 13 years by CTC,  
driving innovation in the sector







## Intellectual property

Intellectual property is a strategic pillar of CTC's business model, essential for protecting innovation and ensuring a return on investments in research and development. In the sugar and energy sector, where competitiveness hinges on new technologies, protecting intellectual assets such as sugarcane varieties and biotechnologies ensures exclusive rights to these innovations, reinforcing the company's market position. Proper protection also enables the licensing of varieties with royalty payments, which constitute one of our main sources of income, ensuring financial predictability and recurrence.

At CTC, the intellectual property protection process spans multiple stages, from the development of new technologies to their commercialization. Our intellectual property team works closely with the R&D and Legal teams to identify protectable technologies, ensuring their security through patents, cultivar protection and industrial secrets. Patents are registered both in Brazil and abroad, and the company's current portfolio includes more than one hundred patents and 28 protected cultivars, in commercial use or in the approval process. Additionally, we implement a robust strategy to monitor and maintain these rights, ensuring their validity and integrity.

We act in accordance with the Brazilian legislation on the subject. The Brazilian Plant Variety Protection

Act (9,456/1997) permits the collection of royalties for up to 15 years following the registration of a plant variety with the Ministry of Agriculture, Livestock, and Supply (MAPA), administered by the National Cultivar Protection Service (SNPC). Additionally, we safeguard our technologies under the Industrial Property Act (9,279/1996).

In recent years, we have made significant progress in this area. During the 2022/2023 and 2023/2024 harvests, we integrated new intellectual property assets, protecting the technologies associated with synthetic seeds. Our projection is that the portfolio of assets will continue to grow, with the incorporation of new genetically modified varieties resistant to herbicides and pest control technologies, such as sugarcane resistant to *Sphenophorus*, known as the sugarcane weevil, consolidating CTC as a leader in innovation and intellectual property.

**Over 100 patents  
and 28 cultivars make up  
our current portfolio**



## THE CTC INNOVATION ECOSYSTEM

CTC employs an open innovation strategy to accelerate the development of new technologies and enhance its innovation pipeline. Our collaboration model involves strategic partnerships with universities, research centers, and startups, fostering a dynamic ecosystem around the company that is crucial for the advancement of our technological solutions.

One of the notable partnerships, signed in 2022, is with Unesp, which collaborates with CTC in the development of new proteins to control pests, such as the sugarcane weevil. This collaboration enables us to access new protein sources for research, accelerating the development of biotechnological solutions and enhancing agricultural practices. This partnership highlights the crucial role of academia in the innovation process and the discovery of new technological leads.

Another notable example of collaboration is the agreement with Embrapa Agroenergia, established in 2021, focusing on genome editing and biotechnology for sugarcane. The collaboration aims to develop more productive transgenic varieties adapted to adverse conditions. This initiative demonstrates our commitment to sustainable innovation and the expansion of sugarcane cultivation in regions with lower agricultural potential.

In addition to academic partnerships, we have formed a strategic alliance with PWC AgTech Innovation, one of the largest technological innovation hubs in Latin America. This environment provides us with access to a vast ecosystem of startups, emerging technologies, and disruptive solutions, thus enhancing our capacity for innovation. This partnership enables direct collaboration with startups that introduce new ideas to address challenges in the sugar-energy sector, amplifying the impact of our innovations.



Further details on how CTC manages the "Innovation and technology" material topic can be found in the GRI Indicator Book, page 72.



# Solutions

CTC offers a complete portfolio of technological solutions for the sugar-energy sector, focused on increasing productivity and sustainability. With 55 years of experience, we have established ourselves as leaders in innovations for sugarcane.

Below, we detail our main solutions, organized by the company's innovation pillars: **Genetics, Biotechnology, Seeds and Management.**



## GENETICS

In the Genetics pillar, CTC develops highly productive sugarcane varieties adapted to different regions and climate conditions. We have already launched more than 90 varieties, which have always stood out for their high productivity and resistance to pests. The varieties created offer clear benefits in terms of yield and quality, helping farmers to keep their operations more competitive.



## BIOTECHNOLOGY

Biotechnology is one of our core focuses, dedicated to developing genetically modified varieties with enhanced pest resistance and herbicide tolerance. Among the standout solutions are the CTC20 BT, CTC9001 BT and CTC9003 BT varieties, which guarantee protection against the sugarcane borer and other pests. These technologies streamline operations by reducing the need for insecticide application, while also boosting productivity in a sustainable manner.



## SEEDS

The synthetic seed project is a groundbreaking innovation poised to revolutionize the sugarcane seed industry. Synthetic seeds, under development by CTC, eliminate the need for nurseries, facilitating the planting process, creating a revolution in the way of planting sugarcane and increasing the efficiency and health of the plantation.



## MANAGEMENT

Within the Management pillar, we aim to optimize the use of natural resources, such as water and agricultural inputs, through advanced techniques. CTC offers systems that help farmers maximize the productive potential of their crops, with a focus on practices that reduce their carbon footprint. Digital monitoring and remote sensing enable more sustainable resource management, leading to increased efficiency and a positive environmental impact.





# Social capital

Customers ●

Suppliers ●

Communities ●



# Customers

The success of our customers is central to CTC's strategies, underscoring our commitment to innovation and sustainable development in the sugar-energy sector. We currently serve a substantial number of customers including plant suppliers and sugarcane farmer groups. Our customers are spread across all sugarcane-producing regions of Brazil, with a strong presence in the South-Central region, where CTC has experienced growth in market share.

Our business model is built on licensing proprietary technologies, primarily by charging royalties for the use of protected varieties. This model ensures a recurring and predictable revenue stream, supporting the economic sustainability of our customers while providing a continuous pipeline of technological innovations. With CTC's growth and the expansion of its portfolio, protected varieties now account for approximately 24 percent of the sugarcane planting area in Brazil.

Our relationship with customers is guided by principles of transparency, technical support, and the delivery of solutions that enhance the productivity and competitiveness of the agricultural

operations. We have implemented a value-sharing policy, where the benefits generated by our innovations are equitably distributed between CTC and its customers, fostering alignment and mutual incentives for the success of both parties.

Recent advances in our customer relationship practices are a reflection of the separation of the Marketing and Sales areas, which has provided greater specialization and focus on strategic actions. With the establishment of a dedicated marketing department, we have adopted a more dynamic and customer-focused approach. We introduced new incentive and market segmentation plans, along with direct relationship tools, such as continuous performance monitoring.

Additionally, we enhanced our marketing initiatives with the launch of new sugarcane varieties and the expansion of the synthetic seed project, which is set to revolutionize the industry. These innovations, including genetically modified varieties with enhanced pest resistance and higher yields, are developed in alignment with customer needs, ensuring our products meet current demands while offering long-term resilience and sustainability.

Our customer relationships have evolved significantly in recent harvests, highlighted by the doubling of GM variety adoption in 2023/2024 and the increase in CTC's market share. These accomplishments reinforce our role as a strategic partner in the technological transformation of the industry, ensuring that our innovations effectively reach the field, boost productivity, and support the sustainability of the entire production chain.



**CTC protected varieties** occupy about 24 percent of the sugarcane planting area in Brazil



## POLICIES GOVERNING CUSTOMER RELATIONSHIPS

**Commercial Policy:** Our cultivar marketing policy sets clear guidelines for pricing and licensing, following a value-sharing model that distributes the generated benefits with clients, ensuring transparency and mutual gains.

**Intellectual Property Policy:** CTC protects its innovations through patents and the Plant Variety Protection Act. This guarantees our customers access to cutting-edge, high-performance technologies, offering them a competitive edge in their agricultural operations.

**Gifts, Presents and Hospitality Policy:** Our relationship with customers is guided by ethical and transparent practices. The offering or acceptance of gifts and hospitality is governed by strict guidelines, preventing undue influence and ensuring that these actions do not compromise impartiality in business decisions.

**Code of Ethics and Conduct:** All business relationships must follow the highest ethical standards. CTC is committed to conducting transparent, fair, and lawful negotiations, reinforcing trust and integrity in its relationships with clients.

**Anti-Corruption Policy:** CTC upholds a zero-tolerance policy towards corruption, bribery, and any form of unethical conduct. This policy applies to all transactions with customers and partners, ensuring that every business interaction is conducted legally and ethically.

**Related Company Transactions Policy:** All transactions between CTC and related companies, including customers, are governed by this policy, ensuring they occur under fair market conditions, free from conflicts of interest or undue advantages for either party.



# Suppliers

CTC maintains a structured and strategic relationship with its supplier network, consisting of over a thousand partners across various industries, including biotechnology, specialized services, and information technology. These suppliers are vital to ensuring the continuity and growth of our operations, playing a key role in our innovation and technological development strategy.

Our relationship with suppliers is governed by strict policies that ensure adherence to quality, sustainability, and ethical standards. The Supplier Registration and Approval Policy, updated in 2024, sets clear criteria for selecting and approving partners through the G-Certifica platform. This process ensures that all suppliers meet stringent criteria regarding legal compliance, social and environmental responsibility, and financial and technical capacity to deliver the contracted services or products.

We have recently advanced the implementation of compliance audits for critical suppliers, particularly those involved in our research and development activities, to ensure their operations align with our environmental and social standards.

Another aspect that highlights our relationship with suppliers is the focus on security and risk management. We have implemented new procedures for continuous monitoring and

**Our processes  
aim to ensure  
legal compliance  
and social and  
environmental  
responsibility in  
the value chain**

periodic re-approval of critical suppliers, such as those operating in the areas of health, safety and environment (HSE). This approach ensures that these partners are in compliance with all regulatory and operational standards, while also promoting a safer and more efficient work environment.

Recent advancements in supplier relationship practices over the past two harvests include the expansion of monitoring for environmentally high-impact suppliers, the development of specialized training for partners in high-risk areas, and the formalization of new compliance and integrity policies. Anti-corruption and gifts and hospitality

policies have also been extended to include suppliers, reinforcing our commitment to ethics and transparency in all business relationships.

These initiatives not only raise the bar on quality and efficiency in our supply chain, but also generate value for our suppliers, who benefit from a more predictable, transparent and sustainable business environment. By strengthening our relationship with them, we ensure that together we can deliver innovative, high-quality products and services aligned with the challenges of the future.





# Communities

CTC has a strong commitment to the communities in which it has operations, especially in the regions where we operate our research and development units. The main communities are located around the units in Piracicaba/SP, Barrinha/SP, Valparaíso/SP, Quirinópolis/GO, Mandaguaçu/PR, Santa Rita/PB and Camamu/BA, with the latter being considered the most socially vulnerable region in which we operate.

We cultivate relationships with these communities based on respect, transparency, and the creation of mutual value, always striving to foster social and economic development in the regions where we are present. Our actions are guided by policies that provide clear directives on social responsibility and the strategic use of tax incentives to support initiatives aimed at enhancing local quality of life, with a focus on education, health, and infrastructure development.

Over the past two years, we have made significant progress in our community-facing practices and strategies. During the 23/24 harvest, we invested approximately BRL 900,000 of our own resources in Camamu, focusing on improving infrastructure in the Pinaré Community. This included the renovation of the Pedro Coutinho de Almeida Municipal School, where we increased the number of classrooms, built a new kitchen and cafeteria, and developed leisure areas for students. Additionally, we renovated the local health center, enhancing access to better medical care for the community.

With incentivized resources, we allocated more than BRL 360,000 to the same school in Camamu and to Valparaíso, at the Professor Pérsio Scatena Garcia Municipal School, where we inaugurated the Library of the Future, a playful space with a collection of 850 books, educational toys and research objects. The project encourages students and educators to explore the world of sustainability through books that cover crucial topics for the present and future of the planet, including recycling, renewable energy, and the water cycle.

**Our goal is to improve local quality of life,** with a focus on education, health and infrastructure



## BRL 900,000

in own resources were  
invested in community  
projects in Camamu/BA



The Educa CTC Program, in turn, has become a powerful catalyst for social transformation, providing knowledge and training to schools across the Piracicaba region. In 2023, we will serve 615 students from public and private schools, focusing on biotechnology and sustainability. The actions include lectures and visits to our facilities, creating a stronger bond between the CTC and future generations of these communities.

Another highlight is the increase in our volunteer actions, which directly involve CTC employees. Projects like CTC Solidário (Solidary CTC) raised funds and distributed food and gifts to families in vulnerable situations. In Piracicaba, initiatives such as the Children's Day, end-of-year, and start-of-harvest campaigns supported the Portelinha community and Apae, raising approximately BRL 22,000 in donations.

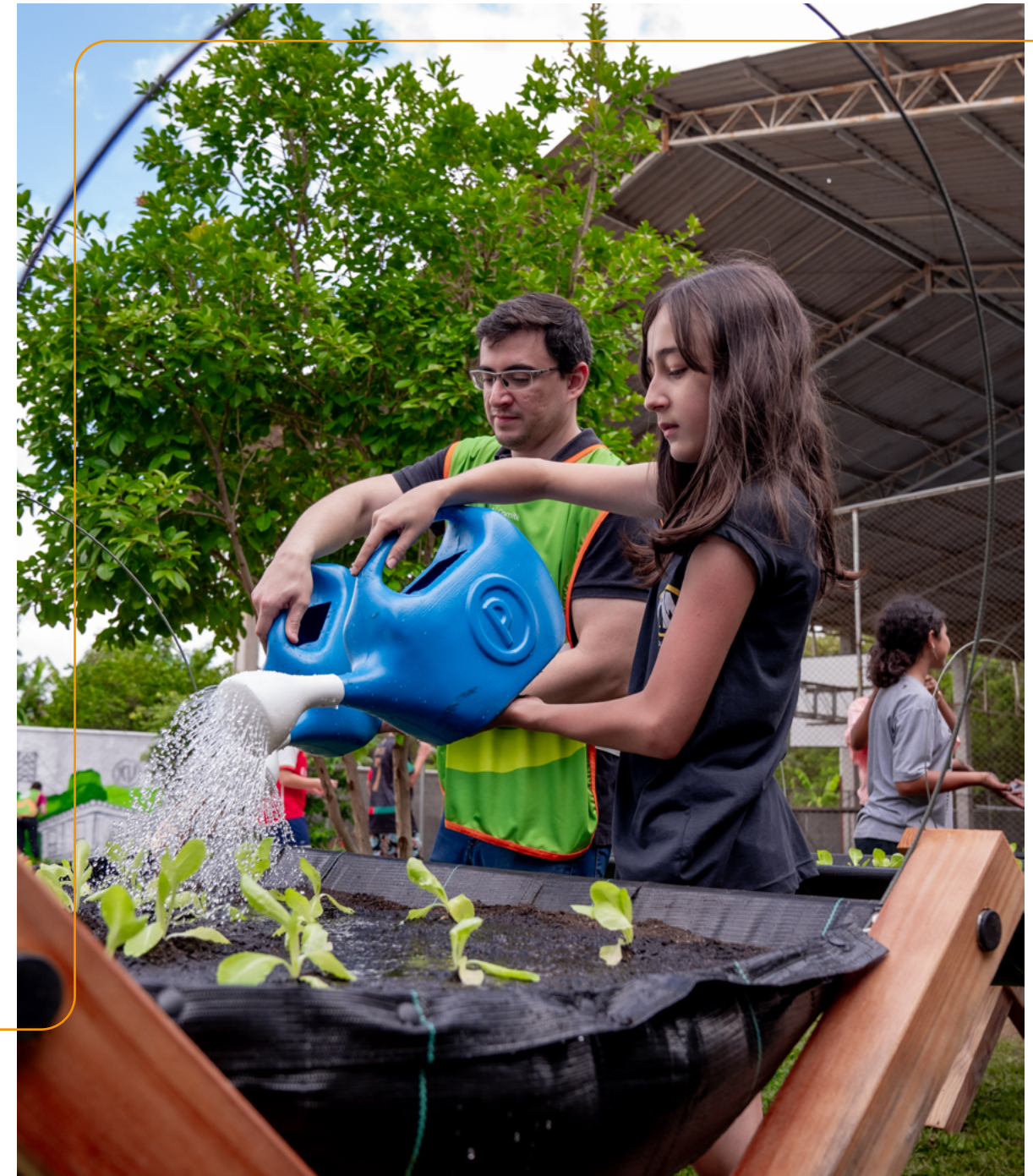
In the area of health, CTC has implemented initiatives like the flu vaccination campaign, which in 2023 provided over 1,200 doses to employees, contractors, and their families. Additionally, our Piracicaba outpatient clinic offers specialized professionals, including a gynecologist and an occupational physician, who are available three times a week to provide care for both employees and contractors.

These initiatives demonstrate our commitment to fostering strong, long-term relationships with communities, promoting local development, and enhancing the social well-being of everyone who lives and works in the regions where CTC operates.



Further details on how CTC manages the "Community relations and local development" material topic can be found in the GRI Indicator Book, page 74.

615 students from  
public and private schools  
from the Piracicaba/SP region  
were benefited in 2023





# Natural capital

- Indirect impacts
- Environmental management



# Indirect impacts

CTC's commitment to environmental sustainability extends beyond its direct operations, encompassing significant indirect environmental impacts by enhancing the productivity and efficiency of its customer's agricultural activities. Through technological advances in genetic enhancement, biotechnology, and agricultural practices, CTC provides solutions that promote more sustainable sugarcane production, with no need to expand cultivated areas. This approach supports the preservation of natural resources and reduces deforestation pressure, reinforcing the company's core contribution to environmental sustainability.

The replacement of fossil fuels with sugarcane-based ethanol is one of the most significant contributors to reducing greenhouse gas emissions in Brazil. According to data from the Brazilian Sugarcane Industry and Bioenergy Association (UNICA), the use of ethanol as a substitute for gasoline has reduced emissions by approximately 600 million tons of CO<sub>2</sub> equivalent over the past 20 years. In the 2022/2023 and 2023/2024 harvests alone, the use of ethanol is estimated to have prevented the emission of approximately 30 million tons of CO<sub>2</sub> equivalent.

Furthermore, the genetic enhancement and biotechnology technologies developed by CTC have continuously enhanced sugarcane productivity, offering varieties that are more resistant to pests and adverse weather conditions. These advancements enable higher production per hectare, eliminating the need to expand agricultural areas and thereby reducing pressure on forests and natural ecosystems.

In the area of agricultural practices, CTC has promoted techniques such as crop rotation and the use of biological inputs, which support soil regeneration and reduce the reliance on chemical

fertilizers. These practices have contributed to soil conservation and to the reduction of the carbon footprint associated with agricultural production.

These advancements demonstrate how CTC's ongoing innovation has been a crucial factor in reducing the environmental impacts of the agricultural sector and fostering a low-carbon economy, in alignment with global sustainability goals.

**CTC's main environmental impact is indirect, with the use of our solutions in the field**





# Environmental management

CTC's environmental management focuses on minimizing the impacts of its activities, both in agricultural operations and administrative facilities. We recognize that our operations rely on natural resources and can generate environmental impacts, which is why we adopt a preventive approach focused on continuous improvement. CTC strives to integrate sustainable practices across all aspects of its operations, ensuring the efficient use of resources like water and energy, while prioritizing emission reductions and the preservation of biodiversity in the regions where it operates.

In field operations, we adopt techniques that increase agricultural productivity without compromising local ecosystems. Meanwhile, in administrative units, CTC seeks to reduce resource consumption and promote the well-being of employees, maintaining a harmonious coexistence with the environment. These efforts demonstrate how CTC conducts its operations responsibly, balancing economic efficiency and environmental sustainability in its daily activities.

## EMISSIONS GRI 305-1, 305-2, 305-3

The management of emissions by the Sugarcane Technology Center (CTC) underscores our commitment to environmental responsibility. Administrative operations have made progress in energy efficiency, with emphasis on the acquisition of international clean energy certificates (I-RECs), ensuring that 100 percent of the energy consumed in all our units comes from renewable sources. In the field, the optimized use of fossil fuels in machinery and equipment has contributed to emission reductions, while the adoption of more sustainable agricultural practices demonstrates a strategic approach aligned with the industry's best practices.

Emissions are calculated in accordance with the Brazilian GHG Protocol Program, ensuring transparency and accuracy, which enables us to rigorously monitor and evaluate our environmental performance. Additionally, our initiatives, including process modernization and the prioritization of renewable energy sources, have helped us maintain the Program's gold seal, recognizing our commitment to responsible and sustainable practices.

Our efforts and practices we undertake led to a reduction in the intensity of scopes 1 and 2 greenhouse gas emissions, reaching 1.7 tCO<sub>2</sub>eq per employee in the 2023/2024 cycle, highlighting the positive impact of the improvements implemented.

Looking ahead, we are committed to expanding our emissions monitoring and management capabilities throughout the entire value chain. Our goal is to broaden the scope of data under scope 3, incorporating a more detailed analysis of both upstream and downstream activities. Additionally, we plan to invest in even more efficient technologies, ensuring that we continue to reduce our environmental footprint while promoting innovation in the sugar-energy industry.

**GHG emissions  
intensity at CTC  
decreased in the  
2023/2024 harvest**



## SCOPE 1 EMISSIONS

	2021/2022		2022/2023		2023/2024	
	Total emissions (tCO <sub>2</sub> e)	Biogenic emissions (T)	Total emissions (tCO <sub>2</sub> e)	Biogenic emissions	Total emissions (tCO <sub>2</sub> e)	Biogenic emissions (T)
Stationary combustion	78	5	97.1	9.828	78.359	9.183
Mobile combustion	463	750	541.92	1,004.677	529.571	1,031.729
Fugitive emissions	2	896	29.323	0	13.652	0
Agricultural activities	0	-	0	776.720	0	1,496.210
Waste/wastewater	8	-	118.690	0	115.806	0
<b>Total</b>	<b>551</b>	<b>1,651</b>	<b>787.03</b>	<b>1,791.225</b>	<b>737.388</b>	<b>2,537.122</b>

Note: The organization calculates greenhouse gas emissions considering CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>.

## INDIRECT GHG EMISSIONS (SCOPE 2) FROM ENERGY PURCHASE [GRI 305-2](#)

	2021/2022	2022/2023	2023/2024
Purchase of electric energy	448.952	150.28	163.15
		<b>2022/2023</b>	<b>2023/2024</b>
Energy (tCO <sub>2</sub> e)		150.28	163.15

## OTHER INDIRECT GHG EMISSIONS (SCOPE 3) [GRI 305-3](#)

	2021/2022		2022/2023		2023/2024	
	Total emissions (tCO <sub>2</sub> e)	Biogenic emissions (t)	Total emissions (tCO <sub>2</sub> e)	Biogenic emissions (t)	Total emissions (tCO <sub>2</sub> e)	Biogenic emissions (t)
Transportation and distribution (upstream)	935	108	1,692.236	172.802	-	-
Business travel	25	-	128.826	-	272.754	-
Employee commuting	244	29	249.105	26.631	-	-
<b>Total</b>	<b>1,204</b>	<b>137</b>	<b>2,070.167</b>	<b>199.433</b>	<b>272.754</b>	<b>-</b>

Note: Carbon dioxide (CO<sub>2</sub>) was included in the calculation. The methodology applied was based on the Brazilian GHG Protocol Program, ensuring standardization and accuracy in the monitoring of greenhouse gas emissions. The transportation and distribution, as well as employee travel categories, were not accounted for in the 2023/2024 harvest.



Further details on how CTC manages the “Climate change” material topic and on the Company's emissions indicators can be found in the GRI Indicator Book, page 72.



WASTE GRI 306-1, 306-2, 306-3, 306-4, 306-5

CTC manages environmental impacts related to both the input and output of materials used in its operations. Among the main input materials are raw materials and chemicals, which require strict controls to minimize risks to both the environment and the health of our employees. On the output side, the greatest impacts are linked to packaging, production waste, and chemicals, as well as hazardous waste, which must be properly disposed of to prevent environmental contamination.

CTC's waste management follows Brazil's National Solid Waste Policy, prioritizing waste prevention, followed by reduction, reuse, recycling, treatment, and proper disposal. The company's Solid Waste Management Plan (PGRS) identifies organic, laboratory, and recyclable waste as the primary types, all of which are managed by specialized and certified companies to ensure environmentally appropriate disposal.

We adopt several practices to avoid the generation of waste, promoting a culture of reduction from the source. In December 2022, for example, we started a campaign for the use of reusable cups in all administrative areas. We also maintain partnerships with recycling companies for the regular collection of recyclable materials and apply circular economy principles to the management of specific waste, such as cooking oil, light bulbs, and batteries, which are shipped for specialized treatment.

The selection and monitoring of waste management service providers is rigorous. All suppliers are approved by the Health, Safety and Environment (HSE) department to ensure proper practices, and waste quantities are periodically assessed, ensuring compliance and the continuous improvement of waste management processes.

To manage waste data, we rely on documents such as the Waste Transport Manifest (MTR), operating permits (LO), and the Certificate of Final Disposal (CDF). This documentation enables detailed and efficient monitoring, including periodic weighing, ensuring precision and effectiveness in management.

We made significant advances in waste management in the last two harvests. In 2023, we reviewed the PGRS and implemented improvements at our headquarters in Piracicaba, where recyclable materials are separated and collected by a partner social institution. Starting in 2024, non-recyclable waste will be sent for co-processing, a technique that eliminates environmental liabilities by utilizing the energy and mineral content of materials, further reinforcing the company's commitment to increasingly sustainable practices.

WASTE GENERATED (T)

	2021/2022*	2022/2023	2023/2024
Hazardous waste	33.8	62.14	47.42
Non-hazardous waste	66.1	106.04	90.15
Total	99.9	168.19	137.57

\*From the 2021/2022 cycle onwards accounting has been enhanced to include additional types of waste and agricultural hubs.

NON-HAZARDOUS WASTE DIVERTED FROM DISPOSAL (T)

	2022/2023			2023/2024		
	Within the organization	Outside the organization	Total	Within the organization	Outside the organization	Total
Recycling	0	41.58	41.58	0	76.63	76.63
Composting	1	0	1	1.5	0	1.5
Co-processing and energy recovery	0	0	0	0	15.26	15.26
Total	1	41.58	42.58	1.5	91.89	93.39



## WASTE INTENDED FOR END DISPOSAL (T)

Hazardous waste	2021/2022			2022/2023			2023/2024		
Types of disposal	Within the organization	Outside the organization	Total	Within the organization	Outside the organization	Total	Within the organization	Outside the organization	Total
Incineration (without energy recovery)	0	35.7	35.7	0	0	0	0	0	0

Non-hazardous waste	2021/2022*			2022/2023			2023/2024		
Types of disposal	Within the organization	Outside the organization	Total	Within the organization	Outside the organization	Total	Within the organization	Outside the organization	Total
Landfill	0	47.7	47.7	0	106.04	106.04	0	74.89	74.89

\*From the 2021/2022 cycle onwards accounting has been enhanced to include additional types of waste and agricultural hubs.



Further details on the Company's waste management indicators can be found in the GRI Indicator Book, page 82.



## ENERGY GRI 302-1, 302-3

CTC's energy management is driven by a continuous pursuit of efficiency and sustainability in its internal operations. We strive to reduce the consumption of non-renewable resources and prioritize the use of renewable sources, aligning our practices with the organization's environmental commitments. Across all units, we ensure the supply of clean energy certified by I-RECs, encompassing regional hubs as well as the headquarters in Piracicaba/SP.

We follow policies and practices that integrate sustainability into our daily lives. We use rigorous methods to measure and monitor energy consumption, based on recognized standards such as the National Energy Balance. Additionally, we prioritize technologies and processes that enhance energy efficiency in both laboratories and administrative facilities. Our approach involves not only controlling consumption, but also awareness-raising initiatives for employees, highlighting the importance of rational energy use.

We made significant progress in the last two harvests. One of the most significant achievements was the reduction in fossil fuel use in machinery and vehicles, with renewable fuel consumption reaching 16,175 GJ in 2023/2024, an 8 percent increase compared to the previous cycle. This growth reflects not only increased demand but also our capability to structure more sustainable operations.



We also undertake system and equipment upgrades to increase energy efficiency. Examples include replacing outdated equipment with more efficient alternatives in laboratories and administrative areas, as well as automating critical energy processes.

**All CTC units are supplied with clean energy certified by I-RECs**



Internal awareness-raising was another pillar of these advances. Training initiatives and educational campaigns helped to engage employees in rational energy use practices, reinforcing an organizational culture focused on sustainability. With this, we were able to reduce energy intensity, which fell from 74.56 GJ per employee, in 2022/2023, to 73.69 GJ per employee, in 2023/2024.

Looking ahead, we remain committed to innovation and expanding sustainable practices. We plan to integrate new energy management systems that further optimize consumption across all units. Furthermore, we will reinforce employee training on topics related to energy efficiency, promoting an organizational culture aligned with global best practices.

FUEL CONSUMPTION (GJ)

Type of energy	2021/2022	2022/2023	2023/2024
Fuels from non-renewable sources	8,951	8,351	8,059
Renewable fuels	10,672	14,996	16,175
Total	19,623	22,254	24,234

ENERGY CONSUMPTION PER SOURCE (GJ)

	2021/2022	2022/2023	2023/2024
Electricity	1,264	12,790	14,898

	2021/2022	2022/2023	2023/2024
Non-renewable			
Gasoline (fleet vehicles)	1,057	652	596
Diesel (machinery, trucks and generators)	7,360	7,634	7,423
LPG (heating greenhouse + restaurant)	533	65	40
Total	8,951	8,351	8,059
Renewable			
Ethanol and Biodiesel (fleet vehicles)	10,672	14,996	16,175
Total	10,672	35,045	39,132

Note: In the calculations, the amount of fuel was multiplied by its respective Lower Calorific Value (LCV). The National Energy Balance report, published by the Ministry of Mines and Energy in 2023, was utilized for this reference. This method ensures accuracy in calculation and alignment with official standards and data established in the energy sector.

ENERGY INTENSITY

Within the organization	2021/2022*	2022/2023	2023/2024
Rate	2.9	74.56	73.69

Note: This indicator is calculated by dividing the total energy consumption by the total number of employees. The formula is as follows: Energy intensity = total energy consumption / total number of employees.  
\*Only electricity consumption was considered to calculate the energy intensity for the 21/22 harvest, while in subsequent years, data on gasoline, diesel, LPG, ethanol, and other fuels were included.



## WATER AND EFFLUENTS

GRI 303-1, 303-2, 303-3, 303-5

Water and effluent management at CTC reflects our commitment to sustainability and efficient use of natural resources. Our internal operations rely on diverse sources of collection, including artesian wells and natural water bodies, which are used responsibly to meet industrial, laboratory and administrative needs.

We follow strict water use and disposal policies to minimize environmental impacts and ensure compliance with legislation. We conduct regular potability analyses across all units, ensuring the quality of water for both human consumption and industrial processes. Furthermore, effluent disposal is done safely through systems such as septic tanks and infiltration ditches, in line with the standards required by competent bodies.

In the last two cycles, we have made significant advances in water and effluent management, consolidating practices that combine operational efficiency and environmental sustainability. During the period, total water consumption increased from 275.96 megaliters in 2022/2023 to 312.38 megaliters in 2023/2024, reflecting the expansion of our internal operations. This growth, however, was accompanied by strategic measures to optimize use and reduce environmental impacts.

One of the main initiatives was the implementation of advanced systems for capturing and reusing rainwater. These systems have contributed to reducing dependence on external sources and minimizing the impacts of dry periods. In addition, we have enhanced the use of water meters and loss detection systems, which provide greater accuracy in measuring consumption and identifying areas of waste, enabling quick and effective adjustments.

Another important achievement was the strengthening of water reuse processes in laboratory and irrigation activities. Through updated technologies and practices, we are able to reuse significant volumes of water in

agricultural processes, particularly in experimental areas. In addition to reducing the need for new funding, these initiatives reflect our commitment to the principles of the circular economy.

All effluents generated by CTC are domestic in nature and are treated as determined by the competent bodies.

**Strict water use  
and disposal  
policies minimize  
environmental impacts**





CTC also invested in raising awareness among employees through internal campaigns on the conscientious use of water. These actions helped to spread a culture of sustainability among the teams, promoting rational use and raising awareness of the importance of preserving water resources. As a result, operations have grown without a disproportionate increase in water impact.

Looking ahead, we plan to invest in advanced monitoring technologies, such as water management software, to identify further opportunities for reducing consumption and increasing water reuse. We also intend to expand awareness initiatives among employees about the rational use of water, reinforcing our culture of sustainability. At the same time, we will continue to review and improve our intake and disposal systems to meet operational demands without compromising natural resources and the established collection limits in each location.

#### WATER INTAKE BY SOURCE (MEGALITERS)

Fresh water	2021/2022	2022/2023	2023/2024
Surface water	323.82	243.9	266.74
Groundwater	23.14	32.06	45.64
<b>Total</b>	<b>346.96</b>	<b>275.96</b>	<b>312.38</b>

Note: The organization does not collect water in areas classified as experiencing water stress. To calculate this indicator, all current water collection permits at the operational hubs were considered, with measurements taken using water meters to ensure accuracy and compliance with legal requirements.

#### WATER CONSUMPTION (MEGALITERS)

	2022/2023	2023/2024
Total water intake	275.96	312.38
Total water discharge	0	0
Water consumption	275.96	312.38

Note: Measurement using water meters.

We will invest in monitoring technologies, such as water management software, to identify further opportunities for reducing consumption and increasing water reuse



Further details on how CTC manages the "Water and effluents" material topic can be found in the GRI Indicator Book, page 73.



**BIODIVERSITY** GRI 304-1, 304-4, 13.4.2

Biodiversity management at CTC is an integral part of our operations and reflects our commitment to environmental sustainability. We operate on approximately 1,700 hectares of leased areas — located in the municipalities of Piracicaba/SP, Barrinha/SP, Valparaíso/SP, Mandaguaçu/PR, Quirinópolis/GO, Santa Rita/PB and Camamu/BA, in addition to smaller locations called advanced hubs —, all of which mapped and monitored to ensure compliance with environmental standards. This enables us to ensure that our activities are conducted without converting natural ecosystems, aligning our processes with current environmental standards.

Some of these areas, including base hubs, experimental stations and advanced hubs, are located near permanent preservation areas (APP) and legal reserves. CTC maintains protected or restored habitat areas, such as the areas of Fazenda Santo Antônio and Fazenda Boa Sorte, located in Piracicaba-SP and Camamu-BA.

## CTC mapped the biodiversity of its areas to improve its management of the topic

We implement a proactive approach to preserving and restoring habitats, respecting the Brazilian Forest Code. We conduct detailed, non-mandatory studies to map biodiversity in the regions where we operate, identifying species and monitoring their conservation status. Additionally, we promote environmental awareness through programs such as Educa CTC, which shares knowledge about local biodiversity with employees and communities. Our efforts also include internal training to prevent negative impacts on fauna and flora.

In recent cycles, we have strengthened initiatives related to biodiversity in our operations. Monitoring done in Camamu/BA stands out. There we have identified over 300 species, including birds and mammals classified as vulnerable. In Piracicaba, a recent study revealed the presence of emblematic species, such as the giant anteater and the puma. These actions were complemented by restoration projects in degraded areas, consolidating our responsible actions in the operational regions.

In the future, we aim to enhance our research efforts and broaden restoration initiatives within our areas of operation. We are investing in geoprocessing tools to improve the mapping and management of protected areas. Furthermore, environmental education initiatives will continue to be a priority, strengthening the engagement of employees and communities in the commitment to preservation.



Blue-backed Manakin (*chiroxiphia pareola*), found in the preservation areas of the Camamu/BA hybridization station



## PROTECTION OF THE BIODIVERSITY

CTC utilizes tools such as the IUCN Red List and the National Lists of Endangered Species of Fauna and Flora to guide the identification and protection of biodiversity in its operational areas, in conjunction with state legislation. We undertake surveys of the species present in the areas where we operate, classifying them based on their risk of extinction.



Further details on how CTC manages the "Biodiversity and ecosystems" material topic and on the Company's indicators can be found in the GRI Indicator Book, page 75.

### INITIATIVES

**Conducting volunteer studies** to understand the typology and diversity of species;

**Promoting awareness-raising campaigns**, such as photography competitions, to raise awareness among employees;

**Identification of Camamu/BA** as an area of greater biodiversity in operations.

### STUDIES CONDUCTED

**Piracicaba/SP:** Monitoring conducted in February 2022, and a second study held between August 2023 (dry period) and February 2024 (rainy period), recording 228 species;

**Camamu/BA:** A study conducted in April 2023 recorded 315 species, including the rare Margaretta's Hermit (*Phaethornis margarettae*);

**Valparaíso/SP:** A study conducted in June 2023 identified 137 species;

A **total** of 547 species were recorded in the sampled locations, including 60 endemic to the Atlantic Forest, 2 to the Caatinga, and 2 to the Cerrado biomes.

### SPECIES IDENTIFIED

**Critically endangered:** None;

**Threatened with extinction (20 species):** Among which the lowland tapir (*Tapirus terrestris*), rare flora species, such as the *Pseudoxandra spiritus-sancti*, and birds, such as the Margaretta's Hermit (*Phaethornis margarettae*), highlighted in Camamu/BA;

**Vulnerable (27 species):** These include the giant anteater (*Myrmecophaga tridactyla*), the puma (*Puma concolor*), and the juçara palm (*Euterpe edulis*), distributed in Piracicaba/SP, Valparaíso/SP and Camamu/BA.



# Financial capital

Results ●

Risks and opportunities ●



# Results

In the last two cycles, the Sugarcane Technology Center achieved steady growth, balancing operational expansion with effective cost control. Our performance during this period confirms CTC's ability to continue developing solutions for the sugar-energy industry, maintaining equilibrium in growth, innovation and financial discipline.

In the 2023/2024 harvest, we reached a net revenue of BRL 382 million, reflecting a 4.1 percent increase compared to the previous cycle. This performance resulted from the expansion of protected varieties, which now represent 30 percent of planting in Brazil, and the increased adoption of genetically modified varieties, with sales volume growing by 38 percent compared to the previous harvest.

The Company's gross profit was BRL 255 million, up 20.4 percent compared to the previous harvest. This result reflects the expansion of the product portfolio, which includes varieties with greater added value, such as genetically modified ones. The gross margin reached 66.7 percent, above the 57.7 percent in the previous period. At the same time, we have noted an expansion in our market share, particularly with elite and GM varieties, which now account for 20 percent of the protected varieties used in the sector.

Operating expenses totaled BRL 104 million, a slight drop compared to the previous harvest. This reduction was impacted by agreements made with defaulting customers, reflecting stricter control of financial operations. Investments in R&D increased by 2.7 percent, highlighting CTC's continued commitment to innovation and sector competitiveness.

Regarding investments, CTC allocated BRL 206 million to its R&D program during the 2023/2024 harvest. These resources were fundamental for the advancement of the synthetic sugarcane seed project and for the development of new genetically modified varieties. Additionally, a significant portion of this amount was allocated to our subsidiary, CTC Genomics, in Saint Louis, which focuses on second-generation biotechnology research, including genome editing.



Our EBITDA reached BRL 186 million, with an EBITDA margin of 49 percent, nine percentage points higher than the previous cycle. Net income was BRL 152 million, 67 percent above the previous year. This increase reflects not only the expansion of sales, but also the focus on controlling expenses and optimizing operations.

We concluded the harvest with a net cash position of BRL 447 million, a 19 percent increase compared to the previous period, enabling us to maintain the investment pace required to sustain the Company's technological evolution and ensure its long-term competitiveness.

### FINANCIAL SUMMARY (IN BRL MILLION)

	2021/2022	2022/2023	2023/2024
<b>NET EARNINGS</b>	<b>421</b>	<b>367</b>	<b>382</b>
<b>GROSS INCOME</b> GROSS MARGIN	<b>284</b> 67.4%	<b>212</b> 57.7%	<b>255</b> 67.7%
<b>EBITDA</b> EBITDA MARGIN	<b>221</b> 52.3%	<b>145</b> 39.4%	<b>186</b> 48.6%
<b>NET PROFIT</b> NET MARGIN	<b>134</b> 31.8%	<b>91</b> 24.9%	<b>152</b> 39.9%
<b>R&amp;D*</b>	<b>168</b>	<b>200</b>	<b>206</b>
<b>NET CASH</b>	<b>268</b>	<b>376</b>	<b>447</b>

\*Includes intangible



## DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED (BRL THOUSAND) GRI 201-1

	2022/2023	2023/2024
Operating income	393,672	422,175
Financial income	40,054	49,123

Note: The economic value generated and distributed has a national scope. This relevance is determined based on the Value-Added Statement (VAS), which reflects the wealth generated by the organization and its distribution among various economic agents, such as employees, government, shareholders, suppliers, and the company itself, taking into account its operations across the national territory.

## ECONOMIC VALUE DISTRIBUTED (BRL THOUSAND) GRI 201-1

	2022/2023	2023/2024
Operating costs	164,673	137,086
Employee salaries and benefits	96,281	97,361
Payments to providers of capital	31,826	36,173
Payments to government	81,335	84,544
<b>Total</b>	<b>374,115</b>	<b>355,164</b>

## ECONOMIC VALUE WITHHELD (BRL THOUSAND) GRI 201-1

	2022/2023	2023/2024
<b>Total</b>	<b>59,611</b>	<b>116,134</b>

# Risks and opportunities

We strategically manage risks and opportunities related to sustainability, acknowledging that this is a crucial lever for the future of both the company and the sugar-energy sector. In the current scenario, we view sustainability not only as a regulatory requirement but also as a source of competitive advantages that can strengthen our position in the global decarbonization process.

Among the biggest opportunities is the synthetic sugarcane seed project, an innovation that promises to transform the way the industry manages sugarcane fields. For CTC, this project represents a significant new source of revenue, especially with the anticipated scalability of the variety portfolio and the development of a robust industrial infrastructure. The commercial launch of the seeds is scheduled for the upcoming harvests, with expectations for rapid adoption by customers due to the benefits they offer.

In the context of genetically modified varieties, which have already become a crucial part of our operations, royalties will continue to account for a significant portion of our revenue. Long-term projections suggest that the GM variety portfolio could represent a significant share of revenue in the coming decades, driven by the launch of new generations that are resistant to borers and tolerant to herbicides. The expectation is that this will further strengthen the company's market share in Brazil.

Global energy transition  
scenario generates  
opportunities for CTC

However, we acknowledge that there are challenges associated with research and development, particularly concerning the synthetic sugarcane seed project. Furthermore, significant investments will be needed in the coming years to make large-scale production feasible. We are dedicated to mitigating these risks through strategic partnerships and specialized financing, in addition to leveraging our own resources, to support the development of this initiative.

The intensification of extreme weather events presents challenges, but also creates opportunities for innovation. CTC is focused on developing varieties adapted to more severe climate conditions and on management solutions, which can ensure greater resilience to crops. Furthermore, the growth of the biofuels market represents a significant opportunity to increase our involvement in the global energy transition.

In the long term, we are well positioned to capture these opportunities. With a clear strategy that blends disruptive innovations, such as synthetic seeds, with the strengthening of current operations, CTC forecasts solid growth in the coming years, solidifying its leadership in the sector and reinforcing its commitment to sustainability and innovation.

**Adaptation to the climate emergency requires innovative solutions like those of CTC**





# GRI Attachment

- Indicators Book
- GRI Content Summary

This book contains supplements to the indicator responses presented in previous chapters and information that had not yet been covered. We aim to provide our stakeholders with a comprehensive overview of the performance, management model, and plans of the Sugarcane Technology Center (CTC).

## 2-1 – Organization details

The organization is legally called CTC – Centro de Tecnologia Canavieira S.A. and its commercial name is CTC – Centro de Tecnologia Canavieira (Sugarcane Technology Center). The company is a for profit publicly traded corporation. Headquartered in Piracicaba, São Paulo, Brazil, CTC operates in Brazil and the United States.

## 2-2 – Entities included in the organization's sustainability reporting

CTC Genomics LLC, a subsidiary of the organization, is mentioned in the financial statements but was excluded from the Sustainability Report. The information has not been amended due to minority interests. Regarding mergers, acquisitions, and disposals of entities or parts of entities, there are no differences in the treatment of material topics or the information presented throughout the report.

## 2-3 – Reporting period, frequency, and point of contact

Supplementary information for the indicator content presented on page 4 of the Sustainability Report:

CTC's financial reports are published quarterly in accordance with regulatory standards, while the Sustainability Report is released biennially. For additional information on the organization's sustainability strategy and management and ESG aspects, please e-mail us at: [luciane.leaes@ctc.com.br](mailto:luciane.leaes@ctc.com.br), [murilo.merloto@ctc.com.br](mailto:murilo.merloto@ctc.com.br), and [renan.lima@ctc.com.br](mailto:renan.lima@ctc.com.br).

## 2-6 – Activities, value chain, and other business relationships

The organization operates in Research and Development (R&D) and Agriculture, specializing in the development and supply of sugarcane varieties. Its value chain includes logistics, operations, marketing, sales, services, infrastructure, human resource management, technology development, procurement, raw materials, and suppliers.

In the 2022/2023 harvest, it licensed 34 products or services, generating net sales of BRL 367,142 million. In the 2023/2024 harvest, 28 products or services were sold, with net sales of BRL 382,068 million. All products and services are intended exclusively for the Brazilian market, without prohibited or controversial items.

The supply chain consisted of 1,046 partners during the 2022/2023 harvest and 1,122 in the 2023/2024 harvest, with payments totaling BRL 152.67 million and BRL 171.56 million, respectively. Suppliers are categorized based on location (local, national, international), size (small, medium, large), and type of activity (products, services, inputs), including third parties, wholesalers, and retailers.

In the downstream supply chain, the organization collaborates with logistics partners, subcontractors, and outsourced companies. The main partners include suppliers of seedlings, laboratory supplies, cloud storage services and laboratory analyses.

## 2-7 – Employees

Supplementary information for the indicator content is featured on page 25 of the Sustainability Report:

### EMPLOYEES BY REGION AND GENDER [GRI 2-7](#)

2022/2023			
	Males	Females	Total
North	0	0	0
Northeast	25	4	29
Midwest	22	1	23
Southeast	235	177	412
South	6	0	6
<b>Total</b>	<b>288</b>	<b>182</b>	<b>470</b>
2023/2024			
	Males	Females	Total
North	0	0	0
Northeast	24	4	28
Midwest	24	1	25
Southeast	276	195	471
South	7	0	7
<b>Total</b>	<b>331</b>	<b>200</b>	<b>531</b>



**TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER** GRI 2-7

	2022/2023			2023/2024		
	Indefinite term	Specified period	Total	Indefinite term	Specified period	Total
Males	288	0	288	328	3	331
Females	180	2	182	194	6	200
<b>Total</b>	<b>468</b>	<b>2</b>	<b>470</b>	<b>522</b>	<b>9</b>	<b>531</b>

**TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND REGION** GRI 2-7

	2022/2023			2023/2024		
	Indefinite term	Specified period	Total	Indefinite term	Specified period	Total
North	0	0	0	0	0	0
Northeast	29	0	29	28	0	28
Midwest	23	0	23	25	0	25
Southeast	410	2	412	462	9	471
South	6	0	6	7	0	7
<b>Total</b>	<b>468</b>	<b>2</b>	<b>470</b>	<b>522</b>	<b>9</b>	<b>531</b>

**TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT TYPE AND GENDER** GRI 2-7

	2022/2023			2023/2024		
	Full time	Part-time	Total	Full time	Part-time	Total
Males	288	0	288	331	0	331
Females	182	0	182	200	0	200
<b>Total</b>	<b>470</b>	<b>0</b>	<b>470</b>	<b>531</b>	<b>0</b>	<b>531</b>

**TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT TYPE AND REGION** GRI 2-7

	2022/2023			2023/2024		
	Full time	Part-time	Total	Full time	Part-time	Total
North	0	0	0	0	0	0
Northeast	29	0	29	28	0	28
Midwest	23	0	23	25	0	25
South	6	0	6	7	0	7
Southeast	412	0	412	471	0	471
<b>Total</b>	<b>470</b>	<b>0</b>	<b>470</b>	<b>531</b>	<b>0</b>	<b>531</b>

**EMPLOYEES WITHOUT GUARANTEED WORKING HOURS BY GENDER** GRI 2-7

	2022/2023	2023/2024
Males	0	0
Females	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**EMPLOYEES WITHOUT GUARANTEED WORKING HOURS BY REGION** GRI 2-7

	2022/2023	2023/2024
North	0	0
Northeast	0	0
Midwest	0	0
Southeast	0	0
South	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

Note: The data reported were extracted from the organization's Payroll and Indicators System. The total number of employees was determined using a direct counting methodology, which included all registered employees, both full-time and part-time. The total number of employees is based on consolidated data at the end of the reporting period, with no employees in the organization lacking guaranteed working hours.

## 2-8 – Workers who are not employees

Contractual relationship	2022/2023	2023/2024
Apprentices	9	10
Outsourced	118	124
Temporary	91	73
Interns	15	17
<b>Total</b>	<b>233</b>	<b>224</b>

Note: The methodology used to count the number of workers was direct counting, considering all workers who are not employees, regardless of whether they work full-time or part-time. The total number of workers was based on data consolidated at the end of the reporting period. During the reporting period there were no significant fluctuations in the number of workers.

## 2-9 – Structure and composition of governance

The organization's governance structure consists of the following elements: Partners, Board of Directors, advisory committees to the Board of Directors, CEO/President/Executive Director, executive committees, Fiscal Council, Compensation Committee, Audit Committee, internal audit, and governance department.

CTC's Bylaws, regulations and corporate policies establish the responsibilities of each

governance body, which makes its performance transparent and effective. The minutes of the General Meetings also contain guidelines to be followed by the entire Company.

The Board of Directors consists of up to 11 full members elected by the General Shareholder's Meeting, with at least two or 20 percent — whichever is greater — serving as independent directors. Among the elected effective members, one is appointed chairman of the Board of Directors and another is appointed vice-chairman of the body. The term of office of members is two years, with unified terms, and re-elections are permitted.

The Board of Directors is made up of: 1. Pedro Isamu Mizutani does not hold an executive position and is not classified as an independent director, as he has ties to the organization and holds other roles, including serving on the IPO Committee and representing stakeholders from the Raízen Group; 2. Geovane Dilkin Consul performs functions in the organization, but without holding an executive position. He is not considered independent due to his connections with the organization and his role as a member of the Human Resources Committee. Furthermore, he represents the BP Bioenergia group; 3. Luis Roberto Pogetti holds executive positions in the organization and is not considered independent, as he has ties to the organization. He holds other positions as a member of the Human Resources Committee and the IPO Committee. Furthermore, he represents the stakeholder

Copersucar. Fabio Venturelli does not hold an executive position within the company and is not considered independent due to his ties to the organization. He holds other positions, including being a member of the Related Companies Committee and the IPO Committee. He represents the stakeholder group São Martinho; 5. Pedro dos Passos does not hold an executive role in the organization and is not considered independent. He holds other positions, including being a member of the Related Companies Committee. He represents the group of stakeholder BNDESPAR; 6. Mario Luiz Lorencatto does not hold an executive position within the company and is not considered independent due to his ties to the organization. He holds other positions, including being a member of Human Resources Committee. He represents the stakeholder Group Coruripe; 7. Pierre Louis Joseph Santoul does not hold an executive position within the company and is not considered independent because he has ties to the organization. He does not hold any other positions in the organization and represents the group of stakeholder Tereos Group; 8. Fernando de Castro does not hold an executive position within the organization and is considered independent as he has no ties to the organization. He holds other positions, including serving on the Scientific Committee and as a member of the Related Companies Committee; 9. Pedro Wongtschowski does not hold an executive position within the organization and is considered independent as he holds

no ties to the organization. He holds other positions, including being the coordinator of the Audit Committee and coordinator of the Related Companies Committee. He does not represent any stakeholder group.

The Board of Directors and committees are made up of people with different experiences and ages. As of 2024, no members have self-declared as belonging to underrepresented social groups. All members of the highest governance body and its committees have qualifications and skills aligned with their roles, in accordance with the company's established nomination procedure.

## 2-10 – Nomination and selection of the highest governance body

The organization has established a formal process for the nomination and selection of directors who serve on the highest governance body and its committees. This process includes guidelines such as the skills profile, transparency, diversity, candidate evaluation, independence, time and dedication, nomination and governance committee, and continuing education.

The criteria for selecting board members include stakeholder involvement,



independence, skills and experience, senior management participation, and diversity.

The appointment and selection of members of the highest governance body follow the Policy for Appointing Members of the Administration, Committees and Statutory Board, approved by the Board of Directors on 06/17/2021. This policy is available on the company's Investor Relations website. Its general objective is to ensure a diversified Board of Directors, with an adequate number of independent directors and a structure that enables the creation of committees for debates and informed technical decisions.

In addition to promoting diversity of profiles on the Board, the policy seeks to form a Statutory Board comprising professionals who balance the interests of the company and its stakeholders while upholding social and environmental responsibility, legality, and ethics. The committees adhere to criteria outlined in the policy and the Novo Mercado Regulation, requiring at least two members or 20 percent of the Board of Directors to be independent, as documented in the minutes of the General Shareholder's Meeting.

The specific criteria for nominating members include alignment with the company's values, an unblemished reputation, a suitable academic background, relevant professional experience, absence of conflicts of interest, and availability to fulfill the responsibilities of the position. Regarding the procedure, nominations may be submitted by

the company's management or shareholders, in accordance with the Corporations Law.

Directors are appointed by the General Shareholder's Meeting, where shareholders elect the members, including the Chairman of the Board. Interested shareholders may notify the Company up to 30 days before the Meeting to nominate candidates. The selection of the members of the Board of Directors is made by the Board of Directors, in accordance with the policy. For committees, members may be appointed by the Board or Executive Board up to 15 business days before the meeting that will decide the new composition, in accordance with the established criteria.

## 2-11 – Chair of the highest governance body

The chairman of the CTC Board of Directors does not hold an executive position in the Company.

## 2-12 – Role of the highest governance body in overseeing the management of impacts

The Board of Directors, as the highest governance body, plays a crucial role in developing and updating sustainability policies, as well as establishing guidelines related to sustainable

development. The Board of Directors is supported by advisory committees, both statutory and non-statutory, which assist in interacting with executives and areas of the Company, providing a strategic and detailed analysis of sustainability issues. This support enables the Board of Directors to make informed decisions and ensure the alignment of the company's practices with its objectives and social purpose.

Senior executives are responsible for implementing and updating the sustainability guidelines defined by the BD, integrating sustainable practices into daily operations and ensuring that established objectives are achieved. They provide operational insights and feedback on the effectiveness of sustainability initiatives, enabling adjustments to the guidelines to ensure the company remains aligned with sustainable development goals and the expectations of the Board of Directors.

The BD actively participates in overseeing the processes of identifying and managing economic, environmental and social impacts. The organization has implemented processes including due diligence, financial risk assessment, supply chain analysis, cost-benefit analysis, monitoring of economic indicators, environmental impact assessment, waste management, social impact assessment, stakeholder engagement, and corporate social responsibility.

To support the identification and management of impacts, the BD also engages directly with stakeholders, primarily through reporting and information dissemination. The results of these processes are incorporated into business management, influencing strategic decisions. Regarding the effectiveness of processes, the role of the BD includes evaluating results, making strategic decisions and continuous monitoring. This analysis is conducted continuously and during strategic planning cycles, ensuring that the company monitors and adjusts its practices to enhance positive impacts and mitigate risks.

## 2-13 – Delegation of responsibility for managing impacts

The organization's highest governance body delegates responsibility for managing impacts to an executive. This person's responsibilities include developing and implementing sustainability strategies, evaluating and monitoring sustainability performance, ensuring compliance with regulations and standards, integrating sustainability into processes and operations, and publishing sustainability reports.

Information on impact management is communicated to the highest governance body through the ESG Steering Committee and during Board of Directors meetings.

## 2-14 – Role of the highest governance body in sustainability reporting

The highest governance body is responsible for reviewing and approving the information reported in the organization's reports. This process involves analyses by the ESG Steering Committee, followed by review and approval by the highest governance body, including commentary, communication, and disclosure. Additionally, the process includes an assessment of internal controls and a feedback mechanism for continuous improvement.

Likewise, the highest governance body also reviews and approves the organization's material topics. This involves reviewing and approving strategies and policies related to issues critical to the company's performance and sustainability, ensuring that these material issues are aligned with the company's objectives and values and are managed effectively and transparently. The process also includes evaluating internal controls and implementing feedback to drive continuous improvement.

Aligned with the best market practices, the Sustainability Report is reviewed by those responsible for the reported information before being assessed and approved by the Executive Board.

## 2-15 – Conflicts of interest

The organization has a series of processes in place to prevent and mitigate conflicts of interest, including clear policies and procedures, education and training programs, and the operation of an ethics or review committee. Regular policy and procedure reviews, the promotion of an organizational culture of integrity, compliance, and transparency, along with maintaining detailed records of decisions, are essential aspects of managing potential conflicts.

Conflicts of interest are disclosed to stakeholders and include related companies, covering their relationships, transactions, and outstanding balances; cross-shareholdings with suppliers and other stakeholders; and the presence of controlling shareholders. The organization has a Related Company Transactions Policy, approved on 06/17/2021, which includes specific guidelines on conflicts of interest. Additionally, the internal regulations of the Board of Directors, also approved on the same date, grant the Board the authority to prevent and manage conflicts of interest, ensuring that the Company's interests prevail.

Transactions with related companies follow the best corporate governance practices and

the procedures required by legislation and internal policy, being conducted under market conditions and without favoritism, in order to comply with the principles of competitiveness and transparency. In these operations, the Company prioritizes alignment with the market and the inclusion of relevant information in the financial statements.

Board members are instructed to declare any conflict of interest situation when a decision could directly benefit them. By declaring a conflict of interest, the board member abstains from participating in the discussion or vote and is required to leave the meeting during the debate. Information about the matter in conflict is not shared with the board member involved. It is the responsibility of the Chairman of the Board to notify the Board members of possible conflicts and ensure that they respond in a timely manner.

## 2-16 – Communication of critical concerns

Critical concerns are communicated to the highest governance body through a variety of channels and formats. This communication includes periodic reports and presentations, formal Board meetings, communication through governance committees, internal and external audit reports, risk and compliance reports, financial performance presentations, strategic analyses, business plans, and sustainability and

corporate social responsibility reports. We have not taken into account the critical concerns that have already been communicated. They are usually reported at Board of Directors meetings. All the reports we received via the 0800 toll-free number were not considered crucial.

## 2-17 – Collective knowledge of the highest governance body

The organization adopts various measures to enhance the Board of Directors' (BD) knowledge, skills, and experience in sustainable development. The BD is directly involved in defining materiality, building the sustainability strategy and approving the report, which strengthens its understanding and commitment to the topic. Additionally, participation in relevant events and the engagement of external consultants to provide expert guidance are encouraged. The BD also has access to updated reports and participates in periodic reviews of sustainability guidelines, adjusted based on new information and feedback. These practices ensure that the Board is well-informed, aligned with best sustainability practices, and prepared to lead the company effectively in accordance with sustainable development goals, enabling continuous adaptation of guidelines to evolving market conditions.



## 2-20 – Process to determine remuneration

The process of developing compensation policies involves several steps, starting with the establishment of compensation objectives and a compensation philosophy, followed by the formation of a Compensation Committee. A market analysis is then conducted to develop compensation packages, considering performance evaluations and carrying out periodic reviews. Transparency and ongoing disclosure are part of this process, overseen by the Compensation Committee. Stakeholders, including shareholders, were not directly consulted on governance remuneration.

## 2-23 – Policy commitments

The organization has a series of policies and documents that establish commitments to responsible business conduct. Standing out among these instruments are the Code of Ethics and Conduct, approved by the Board of Directors, and internal policies such as: Policy on Disclosure of Material Acts or Facts and Trading of Company Shares; Anti-Corruption Policy; Policy on Related-Party Transactions; Policy on the Allocation of Results; Policy on Compensation for Members of the Board of Directors, Committees and Executive Board;

Policy on Gifts, Presents and Hospitality; Policy on Nomination of Members of the Board of Directors, Committees and Statutory Board; Policy on Corporate Risk Management.

The Company also has internal regulations for the committees: Related Company Transactions Committee, Statutory Audit Committee, Human Resources Committee, Scientific Committee and Board of Directors. These documents are available on [CTC's Investor Relations website](#).

These commitments are aligned with internationally recognized intergovernmental instruments, including the United Nations Guiding Principles on Business and Human Rights and the International Labour Organization (ILO) Labour Standards. They include conducting due diligence, applying the precautionary principle and respecting human rights.

The documents establishing these commitments are publicly available at <https://ri.ctc.com.br/>. All documents have been approved by the highest governance body and apply equally to all of the organization's activities and business relationships. Commitments are communicated to employees, business partners, and other relevant parties through internal communications, the organization's website, and official documents.

## 2-24 – Incorporating policy commitments

The Board of Directors is the highest body responsible for overseeing the implementation of the organization's commitments. To ensure the effective implementation of these commitments at different organizational levels, the company adopts a structured approach that includes defining clear goals and commitments, identifying the hierarchical levels that will actively participate. Responsibilities are assigned based on the skills and competencies of professionals, establishing authority and accountability. Responsibilities are communicated effectively and tracked by a monitoring system that promotes collaboration and teamwork.

The organization adjusts these responsibilities as needed, recognizing and rewarding performance and periodically evaluating the delegation process. The integration of commitments into organizational strategies, policies and operations is done through the definition of goals aligned with the commitments and their incorporation into operational policies and procedures. The development of training and awareness activities is crucial to ensure that commitments are understood and effectively applied in the organization's day-to-day operations. In addition, impact assessments, internal communication, and continuous monitoring ensure that these commitments are regularly reviewed and improved, with

feedback and employee involvement serving as the foundation for adapting to best practices.

The organization also implements its commitments in its business relationships, through a careful selection of partners and the inclusion of contractual clauses that require compliance with established practices. In addition, it conducts audits and monitoring, offers training and qualification to these partners and promotes open and transparent communication. Problem solving and the pursuit of continuous improvements are part of this process, with the periodic publication of sustainability reports and the regular assessment of business partners. This integration encompasses the entire supply chain and reinforces the commitment to the established goals.

CTC's commitments are supported by specific training, with emphasis on the course based on the Code of Ethics and Conduct. Its governance and risk management policies and practices have been approved by the Board of Directors and are aligned with applicable laws, regulations and guidelines. These policies and standards are accessible to all employees, as well as third parties and suppliers, who receive the necessary information about the Company's guidelines. The organization promotes continuous corporate governance initiatives to address concerns and ensure employee understanding. During the hiring process, all new employees receive a copy of the Code of Conduct, reinforcing their commitment to a

culture of ethics and responsibility from the beginning of their activities at the company.

## 2-25 – Processes to remediate negative impacts

CTC has no formal commitments to repair negative impacts that it has identified as caused or contributed to by the organization. However, the organization has internal and external complaint mechanisms in place, including an internal ombudsman and external reporting hotlines, allowing stakeholders to report issues or concerns. Stakeholders, however, are not directly involved in the operation or monitoring of these grievance mechanisms. To date, there have been no complaints.

## 2-26 – Mechanisms for seeking advice and raising concerns

The organization provides various mechanisms for individuals to seek guidance on implementing responsible policies and practices, including training and capacity building, manuals and reference documentation, sharing best practices, and a reporting channel. Specific telephone numbers and reporting mechanisms

are available for reporting concerns about the organization's conduct ensuring that everyone has access to safe and effective communication channels to express their concerns.

## 2-27 – Compliance with laws and regulations

The organization has not recorded any fines for non-compliance with laws and regulations in the current period, totaling zero monetary violations. However, it was subject to two non-monetary sanctions for non-compliance issues. The total amount of fines for non-compliance in previous reporting periods was BRL 13,635.48.

According to the Sustainability Report, during the fiscal years 2022 and 2023, CTC did not record any significant cases of non-compliance with laws and regulations that required reporting or resulted in relevant fines. The Company has maintained a consistent compliance history, with no significant incidents that compromised compliance with current regulations.

The organization defines a non-compliance case as significant based on criteria such as financial, operational and legal impact, in addition to the effect on the company's reputation and the scope of the non-compliance. Recurrence and frequency of occurrence are also determining factors in assessing the severity of the case.

## 2-28 – Membership in associations

The organization participates in a few of the main associations and strategic organizations, both nationally and internationally, which contribute to its operations and objectives. They include:

- CropLife: Non-profit civil association that represents companies specialized in research and development of solutions for sustainable agricultural production, focusing on the sectors of germplasm (seedlings and seeds), biotechnology, chemical pesticides and bioinputs.
- UNICA (Brazilian Sugarcane Industry and Bioenergy Association): Entity representing the main sugar, ethanol (fuel alcohol) and bioelectricity producing units in the South-Central region of Brazil, especially in the state of São Paulo.
- Bonsucro: International, non-profit, multi-stakeholder governance group founded in 2008 that promotes sustainability in sugarcane production. Its objective is to reduce the environmental and social impacts associated with production, also ensuring the economic feasibility of the sector.
- ILSI (International Life Sciences Institute): A global non-profit organization, headquartered in Washington, in the United States, that publishes peer-reviewed studies on nutrition and food safety, contributing to the development of safer and more sustainable agricultural practices.
- Amcham (American Chamber of Commerce): Non-profit, non-governmental organization that promotes dialogue between Brazil and the United States and the improvement of Brazilian competitiveness. The institution holds events, forums, training and committees. Amcham is also responsible for the ECO Award, the oldest recognition in corporate sustainability in the country.
- APLA (Local Alcohol Production Arrangement): Fostering interaction between its members, agents of the sugarcane agro-industrial chain, in an organized and structured manner, creating opportunities to add value throughout the production chain at national and international levels.
- ABPI (Brazilian Intellectual Property Association): A non-profit organization that disseminates knowledge and discusses the importance of intellectual property in Brazil and the world. Acting as a guardian of the subject, with credibility and reputation, ABPI is an entity at the forefront of academic and legal debates on the topic.



## 2-29 – Approach to stakeholder engagement

The organization actively engages with various stakeholder groups, including business partners, customers, employees and workers, governments, local communities, shareholders, investors, and suppliers. This relationship is promoted through transparent and accessible communication, using diverse channels to ensure that messages reach all audiences effectively. Corporate social responsibility is a fundamental area in this engagement, as it demonstrates the organization's commitment to the well-being of society and sustainable business practices. Sustainability reports, along with training and awareness programs, are used to inform and empower stakeholders about the company's policies, goals, and initiatives, fostering ongoing and trusted dialogue.

The purpose of this engagement with stakeholders is both broad and strategic. The organization aims to first identify the real and potential impacts of its operations, taking into account the interests and concerns of each stakeholder group. Building lasting relationships enables a deep understanding of stakeholders' needs and expectations, ultimately enhancing decision-making. Furthermore, this engagement helps the company manage risks and identify opportunities more effectively, promoting innovation by incorporating

new ideas and perspectives. At the same time, the organization complies with regulatory requirements and drives its sustainability initiatives, aligning itself with the expectations of investors and society in general.

To ensure that this engagement is meaningful and impactful, the organization adopts a series of practices based on transparency and collaboration. Open and transparent communication with stakeholders, along with an active listening approach, enables the company to fully understand the concerns and suggestions provided. Consultations and collaborations are encouraged to facilitate direct stakeholder participation in discussions, fostering the development of long-term relationships. The organization also invests in training and awareness initiatives for stakeholders, educating them on its policies and practices, while conducting continuous monitoring and evaluation of interactions.

Furthermore, the organization systematically assesses the social and environmental impacts of its activities, incorporating stakeholder feedback into its business processes. This integration allows the company to adapt its operations as needed, maximizing benefits and minimizing potential negative impacts. In this way, engagement with the stakeholders not only strengthens relationships, but also contributes to more responsible, innovative management aligned with best sustainability and corporate governance practices.

## 2-30 – Collective bargaining agreements

The organization ensures that 100 percent of its workforce is covered by collective bargaining agreements. CTC maintains all clauses of the collective agreement in force and liberally applied the accumulated and full INPC adjustment percentage in the period for all employees, despite the fact that there was no conciliation between the union and the company during negotiations for the 2023 salary campaign.

## 3-1 – Process of determining material topics

The CTC materiality and impact identification process, conducted in 2024, was conducted comprehensively and carefully, involving consultations with stakeholders such as customers, consumers, workers, suppliers, communities, regulators, as well as banks, investors, and in-house experts.

To engage these audiences, we use the following methods: Interviews, surveys, online consultations, work meetings and the review of internal and external documents. To

ensure a comprehensive view of our impacts, we include both upstream and downstream activities within the company's value chain.

As a methodology, we adopted the concept of double materiality, considering both the impacts of our activities on the external environment and the possible financial impacts, for CTC, of the external scenario.

At CTC the materiality process is conducted according to strategic needs, without a defined frequency. Topic prioritization was based on their relevance to stakeholders and criteria such as probability, severity, intensity, extent, and reversibility of impacts.

## 3-3 – Management of material topics

Below, we present the impacts related to CTC's material topics, also describing how we manage risks and opportunities related to them.

## INNOVATION AND TECHNOLOGY

CTC's Vision for 2040 (read more on page 22 of the Sustainability Report) is a program directly related to this material topic, as it aims to double the productivity per hectare of Brazilian sugarcane fields by 2040.

The impacts of innovation and technology associated with our activities encompass the environment, human rights, economy and society, at different levels. The development of safe and sustainable technologies in sugarcane has high potential for positive impact, at a global level. By promoting bioenergy, it consistently reduces greenhouse gas emissions into the atmosphere. Additionally, through productivity gains — without expanding the area or impacting biodiversity — it contributes to a reduction in water consumption and in the use of diesel, fertilizers, and pesticides.

As these are disruptive technologies, the main challenges are related to the response time of scientific research and regulations. To mitigate these risks, we invest in employee training and development, cutting-edge equipment and infrastructure, as well as partnerships with organizations, universities, and innovation hubs. We have a robust regulatory department composed of highly qualified professionals, ensuring the reliability of our products in alignment with the strictest quality standards, in compliance with current legislation, and actively engaged in advocacy efforts.

The effectiveness of measures related to this material topic is continuously assessed through audits, progress indicators, stakeholder feedback, certifications, and benchmarking.

## CLIMATE CHANGE

Standing out among CTC's real positive impacts related to climate change is our contribution to the decarbonization of the sector. This is achieved through actions aimed at reducing the carbon intensity of ethanol and by implementing technologies and management practices with a lower emissions profile, thereby reducing the environmental impact in the production of sugarcane and its derivatives. The development of sugarcane varieties that are more adapted and less susceptible to climate variations is also part of our research scope.

To manage these positive impacts, we have intensified our efforts to measure the industry's emissions reduction through the use of our products. We seek to standardize, certify and present to the market a detailed study on the potential for mitigating GHG emissions through the use of our products and their impact on the environment, with a view to 2040. Furthermore, we invest in constant updates, both for professionals and for equipment and infrastructure in laboratories and research areas, aiming to accelerate the development of varieties that are better adapted to climate change.

At the same time, we are concerned with being judicious and consistent with our own emissions. To minimize the negative impacts caused by our operations, we work on mitigation projects and continuously improve the data collection and interpretation mechanisms for scopes 1 and 2, obtaining benchmark certifications in the market.

The effectiveness of these actions is assessed by external audits and monitoring tools, with advances in traceability and measurement practices.

Extreme weather events pose significant financial risks to the sector. To CTC, losses of experimental fields (R&D).

The company aims to formalize ESG policies and enhance emissions management in scope 3, reinforcing its commitment to decarbonization and sustainability.

## ATTRACTION, DEVELOPMENT AND RETENTION OF EMPLOYEES

Impacts related to this material topic include aligning personal and organizational values with a greater purpose, promoting cultural evolution. Furthermore, continuous investment in technical and managerial training enhances employee engagement and performance, contributing to the creation of an innovative and collaborative environment.

The company manages these impacts by fostering an environment that values agile collaboration, high performance, an innovative attitude, and customer success. We work to align our organizational values with our employees' personal values, offering training opportunities, internal job openings and transparency in communication. These efforts reinforce talent development and strengthen our organizational culture.

Committed to our human capital, we actively work to mitigate the negative impacts of potential reductions in employee engagement, compromised work-life balance, high turnover rates, and the risk of employee burnout. We also focus on addressing concerns such as the perception of limited development opportunities or the loss of strategic talent for the company.

We implement action plans based on organizational climate surveys, such as the Great Place To Work (GPTW) award, we establish flexible work models, promote the exchange of ideas and modernize environments to provide spaces for interaction and innovation, we streamline processes, provide appropriate tools, offer mentoring for high-potential leaders, recognize extraordinary achievements and respect and encourage diversity. Furthermore, we strengthen a safety culture that prioritizes human value in the face of challenging goals, promoting a balanced and sustainable environment.



## DATA PRIVACY AND SECURITY

Positive impacts related to this material topic include rapid incident response and data recovery, thanks to investments in automated tools and information security. Creating a robust data architecture, including a data lake for artificial intelligence, machine learning, and big data drives innovation and enhances operational efficiency, benefiting both the company and its stakeholders.

To enhance these impacts, we promote the growth and continuous training of the Information Technology (IT) team. The company invests in cutting-edge infrastructure and adopts the best market practices to ensure innovation and efficiency, aligning itself with technological and regulatory demands.

We are constantly improving to mitigate the risks of exposing sensitive data from customers, employees and partners, as well as complaints about the ethical use of artificial intelligence. These challenges are related to both direct activities and relationships along the value chain, including suppliers. We also have a highly experienced and specialized IT team, equipped with the latest technologies and systems capable of detecting and mitigating risks, such as obsolescence of security technologies, increasing regulatory requirements, and the shutdown of critical systems, which could lead to additional costs and significant financial losses.

In addition, we provide annual training on information security and the General Personal Data Protection Law (LGPD). Frequent tests and constant updates are also conducted on our systems, following the guidelines outlined in internal policies and the Code of Ethics, which is publicly accessible on the company's website. These measures ensure regulatory compliance and the protection of sensitive data, minimizing vulnerabilities and ensuring the continuity of operations.

## MANAGEMENT OF GENETICALLY MODIFIED ORGANISMS (GMOs)

The main positive impact of genetically modified sugarcane was resistance to the main sugarcane pest, reducing the use of pesticides and increasing productivity. Furthermore, it is worth mentioning the potential positive impact of developing other varieties, with other characteristics that meet the expectations of the sugarcane sector and that contribute to more sustainable agricultural practices.

The company prioritizes efficient communication with its stakeholders on this topic, emphasizing the properties of transgenic varieties and the rigorous research and field experimentation processes involved. We work continuously to ensure the efficiency and quality of our products, promoting tangible benefits for the environment and society.

Although the scientific evidence accumulated over the last few decades is quite clear regarding the safety and efficiency of transgenics, produced from genetically modified organisms (GMOs), there are still discussions and negative perceptions about their impacts. To ensure full transparency, comply with all legal requirements — including the most restrictive ones — and provide clarity on the topic, we conduct annual biosafety training for all employees, while also involving third parties and visitors in discussions. We were the first Brazilian company to obtain the ETS (Excellence Through Stewardship) certification, awarded to companies that implement best practices in agricultural biotechnology. This certification attests to the quality of the entire biotechnology product development process and covers the full life cycle of sugarcane, from gene discovery to commercialization.

Information about our products and their package inserts is available for consultation by our customers, who are served by our sales team, including technical assistance. These professionals are highly specialized and trained to share validated information and resolve doubts that may arise in interactions with customers. Furthermore, our Communications area is responsible for addressing the issue in internal and external campaigns and our regulatory team works to ensure deregulation in countries of interest to our business.

Our actions are aligned through sustainability reports, certifications, and stakeholder feedback.

## WATER AND EFFLUENT MANAGEMENT

The reduction in water usage in sugarcane farming operations, to be achieved through new technologies in planting and the use of more productive CTC varieties, will contribute to the environmental and operational sustainability of the entire industry. This approach promotes the responsible use of water resources, benefiting the environment and the economy as a whole.

Internally, we continually invest in technologies that optimize water use and promote the sustainability of operations. The implementation of advanced irrigation systems and raising awareness of the importance of water efficiency are priorities in our management.

We are very strict about adhering to guidelines for preserving water bodies, as the inadvertent use of water resources could lead to shortages in the areas of operation. These challenges are connected to both direct activities and interactions with the surrounding environment. If not effectively controlled and managed, they could result in regulatory sanctions, costs associated with alternative sources, and negatively impact the capital market's perception of water-related risks.

To mitigate these risks, we adopt preventive and corrective measures, such as water and effluent management in operations. We have developed advanced agricultural irrigation systems to use the minimum necessary water resources in our operations, reinforcing our commitment to the environment and regulatory compliance.

## DIVERSITY, EQUITY AND INCLUSION

Promoting diversity, equity and inclusion (DE&I) brings significant benefits by including underrepresented groups in the workforce, strengthening empowerment and social equity. This approach creates a more inclusive, innovative and plural environment, benefiting both the company and society.

To expand these impacts, we promote initiatives that value representation, such as hiring programs focused on vulnerable groups and training for employees on DE&I. CTC has also initiated gradual discussions on these topics, in addition to forming partnerships with specialized companies to promote affirmative hiring and provide environmental, relational, and behavioral support for people with disabilities (PwD), while fostering the supported employment methodology. We believe that these actions strengthen our organizational culture and position the company as a benchmark in inclusion.

We are aware of the challenges that this topic entails and the structural issues that still persist in our society, including racism, sexism,

ableism, LGBTphobia, and ageism, as well as the lack of opportunities for vulnerable groups. To overcome these barriers, we adopt preventive and corrective measures, such as internal DE&I practices, mandatory anti-discrimination training and requirements for inclusive practices for suppliers and partners. In addition, we monitor incidents and apply corrective actions, reinforcing our commitment to a respectful environment aligned with best diversity and inclusion practices.

Regarding reputational and human rights risks, we understand the importance of advancing on the topic, both internally and in the value chain, involving suppliers and partners. This way, we avoid legal sanctions and costs for regularization, image recovery and compensation for direct damages to those involved.

As continuous improvement measures, internal multidisciplinary groups were created to encourage discussions and propose actions related to the topic. Objectives in this area include developing formal policies that align the company's material issues with the ESG agenda and establishing formal tracking indicators to measure progress in Diversity, Equity, and Inclusion (DE&I).

The goal is to implement these formal policies, define clear indicators with specific deadlines for measurement and consolidate an organizational environment that values diversity, equity and inclusion as part of its identity and strategy.

## ETHICS, INTEGRITY AND COMPLIANCE

Ethical and transparent management strengthens stakeholder trust and engagement, as demonstrated by the increased participation in reporting channels. Transparency in investigation processes and in resolving complaints promotes an environment of greater integrity and credibility.

This material topic is comprehensively addressed by the company through codes of ethics and conduct, public statements, sustainability reports, purchasing and supplier policies, as well as training and corporate education activities. These efforts help mitigate negative impacts, such as corruption and conflicts arising from unethical behavior by employees. These issues, when established, affect both the company's direct operations and its relationships in the value chain, and their financial effects may involve additional costs with legal sanctions, loss of revenue due to the drop in demand and difficulties in accessing the capital market, damaging the company's competitiveness and reputation.

To prevent and mitigate negative impacts, we promote Corporate Governance Week, highlighting the Code of Ethics and encouraging the use of the reporting channel. CTC adopts rigorous investigation and corrective measures for well-founded complaints, reinforcing its commitment to integrity. In such cases, the internal audit acts independently

from the controller, reporting to the Audit Committee and the Board of Directors.

In managing positive impacts, we prioritize maintaining low reporting rates, broad dissemination of ethics channels and strengthening employee satisfaction, promoting an environment of trust and transparency.

## COMMUNITY RELATIONS AND LOCAL DEVELOPMENT

The impacts of relationships with local communities affect people, human rights, the economy (at various levels), and the environment, directly influencing interactions between the company and its surroundings.

Standing out among the positive impacts of this material topic for CTC are the generation of local jobs, opportunities for partnerships, improvement in quality of life and social investments in education, inclusion, entrepreneurship and infrastructure. These actions promote sustainable development and strengthen relationships with communities.

To maximize these impacts, we strengthen social programs focused on training and education, in addition to creating opportunities for sustainable development. We invest in mapping and monitoring critical suppliers, ensuring ethical and legal compliance throughout the value chain. Supplier approval now includes specific sustainability criteria and respect for the rights



of local communities, aligning partners with the Company's socio-environmental commitments.

CTC adopts guidelines of respect, compliance, and partnership, significantly reducing the risks of conflicts with communities due to the company's operations, as well as minimizing social conflicts, sanctions, and environmental violations. These issues could generate additional costs, compromise reputation, make project licensing difficult and reduce demand for the company's services. We also implemented actions such as strengthening supplier approval with a focus on sustainable practices, training and investments in fire prevention, especially during dry periods. These initiatives underpin our commitment to corporate responsibility and sustainable development.

Finally, CTC's goals in this area include developing formal policies for ESG issues, expanding assessments of critical suppliers with a focus on human rights and document validation, and enhancing engagement with communities surrounding operations.

## GOVERNMENT RELATIONS AND ADVOCACY

Government relations and advocacy activities impact people, human rights, and the economy at local, regional, national, and global levels, directly influencing the

company's interaction with its stakeholders and the regulatory environment.

Among the positive impacts of this material topics for CTC are the contribution to regulatory changes in the industry through strategic articulations with influencers and regulatory bodies, in addition to the defense of collective interests through initiatives such as social investments in education and donations for research.

We manage these impacts through a Regulatory Board made up of multidisciplinary specialists trained to interact with regulatory and inspection bodies, as well as organizations in the sugar-energy sector. The ESG area, in turn, strengthens ties with communities, promoting actions in partnership with public bodies, associations and schools, ensuring the development of the regions where we operate.

Special attention is given to managing corruption risks, improper relationships with public officials, and challenges in aligning the regulatory environment with long-term sustainable objectives, both in the company's direct operations and in interactions with suppliers throughout the value chain.

To mitigate these risks, we address the issue in sustainability reports, training and corporate education activities, reinforcing our commitment to transparency and ethics. Policies related to the topic can be found on the

company's website, and public-private partnership contracts are thoroughly evaluated by our Legal department and approved by our legal representatives, ensuring alignment with best practices and adaptation to the constantly evolving regulatory and political landscape.

## BIODIVERSITY AND ECOSYSTEMS

The elimination of the need to expand planting areas in the sector, made possible by increased sugarcane productivity through new technologies in planting and the use of CTC varieties, will contribute to the preservation of biodiversity by preventing the advancement into new areas, thereby reducing the risk of deforestation. This approach promotes environmental preservation, directly benefiting biodiversity and the economy at local, regional and global levels, with significant repercussions on people.

Our research on sugarcane focuses on mitigating the negative impacts caused by deforestation due to agricultural expansion, soil degradation from the intensive use of pesticides, damage to permanent preservation areas and legal reserves, and disturbances to fauna and flora caused by noise and light pollution. These efforts aim to prevent violations of environmental legislation and protect ecosystems.

Regarding our operations, to enhance the positive impacts of these issues, we are guided

by strict environmental protection and respect guidelines. We conduct biodiversity studies in operational areas, promote environmental education programs, and engage stakeholders in awareness-raising activities. These actions ensure sustainable planning of operations and the active involvement of communities in the preservation of natural resources, in addition to reinforcing the importance of protecting ecosystems and leaving a sustainable legacy in the company's areas of operation.

To mitigate potential negative impacts, we expanded biodiversity studies, implemented mapping of lease areas and strengthened actions to combat forest fires, with training, modern equipment and partnerships with the Fire Department and Civil Defense. We strictly monitor compliance with and updates to environmental legislation and adopt strategies to prevent penalties and protect ecosystems.

CTC's objectives in this area include creating formal ESG policies, updating environmental mapping across all operations, detailing arable and conservation areas, and conducting biodiversity studies in regions that have not yet been assessed. Another crucial goal is the formalization of a comprehensive wildfire control plan.

These actions reaffirm our commitment to sustainable practices, regulatory compliance and biodiversity preservation, promoting positive impacts on both the ecosystems and communities in which we operate.

## 13.2.2 – Sector 13 – Climate adaptation and resilience

The climate scenarios analyzed by the organization highlight the risks and opportunities related to climate change in sugarcane production and its operational impacts. Production is vulnerable to adverse weather events, such as excessive rainfall, droughts, frosts and fires, as well as diseases and pests that increase costs and reduce productivity. These factors can negatively affect the quality, quantity of production and net revenues.

Historical volatility in weather conditions has caused fluctuations in the sugar and ethanol sectors, which are reflected in financial results. Extreme weather events can impact the customers' financial health, increasing default and harming the organization's performance.

To mitigate these risks, the company develops more resilient sugarcane varieties adapted to different environments, offering solutions

that reduce climate impacts. This strategy represents an opportunity for leadership in innovation in the sector, strengthening the organization's position in the market.

## 13.6.2 – Sector 13 – Use of pesticides

The organization has benchmark values based on areas subject to pesticide use, totaling 1,263 hectares in the 2022/2023 harvest and 1,282 hectares in the 2023/2024 harvest. The total volume of inputs used varies between 10,000 and 20,000 liters or kilograms of each product per harvest. The intensity obtained is given by the relationship between the total volume of inputs used and the total arable area in each period.

The objectives regarding pesticide use include enhancing information by location and assessing the impacts of each product used. This aims to refine the intensity of application, improve control over pesticide usage by plot, computerize the management system for these products, and expand testing with biological pesticides. These initiatives aim to reduce the use of chemicals, promote technological innovation and improve sustainability in the management of agricultural pesticides.

## 13.21.2 – Sector 13 – Decent income and living wage

All organization employees had their salaries adjusted based on the full accumulated INPC (National Consumer Price Index) for the period. This ensures that remuneration conditions are uniform, promoting transparency and compliance.

## 13.23.2 – Sector 13 – Supply chain traceability

The products and services purchased are traceable at the local level, allowing for the tracking of the supplier responsible for the sale. This ensures that monitoring takes place within the supplier's area of operation, guaranteeing control over the providers. Currently, suppliers include global, national and local agents. Although the level of traceability is limited to the immediate supplier, the organization plans to expand supply chain mapping and enhance tracking practices in future cycles. This advancement will allow for more detailed control, including the specific origin of products and services, such as farms, nurseries, incubators or feed mills, as applicable.

## 201-2 – Financial implications and other risks and opportunities due to climate change

The organization conducts comprehensive mapping of the risks and opportunities associated with climate change, considering significant impacts on its operations, revenues, and expenses. These risks are assessed for each product variety, under the governance of senior management, as described in the Reference Form. Growing concerns about climate change may result in new environmental regulations, increasing compliance costs, including those related to greenhouse gas (GHG) emissions.

Adverse climate events and stricter regulations can negatively impact the organization's activities and the market in which it operates, bringing financial and operational challenges. The governance system, consisting of the General Shareholder's Meeting, Board of Directors, and Statutory Board, oversees and manages these risks, setting short, medium, and long-term goals that take into account internal and external factors, as well as climate risk management criteria.



Management is supported by the Executive Board and specific committees, which assist in the implementation of climate-related sustainability practices. Although the organization does not yet have a specific system to directly measure the financial implications of climate change, it plans to continue enhancing its climate analysis and governance, in alignment with its strategic objectives.

## 201-4 – Financial support received from government

During the period covered by this report, the organization received financial support exclusively from the Brazilian government.

### BENEFITS AND TAX CREDITS (BRL)

2022/2023	2023/2024
15,726,013.80	21,791,480.32

## 202-1 – Ratios of standard entry level wage by gender compared to local minimum wage

The organization has a remuneration policy that establishes a minimum wage for its employees, higher than the local minimum

wage. Salaries are defined based on this policy, guaranteeing a minimum value in accordance with the stipulated minimum wage.

## 202-2 – Proportion of Executive Directors hired from the local community

CTC has ten members in its Executive Board, which covers the executive director and the directors responsible for areas, all from the local community.

## 204-1 – Proportion of spending on local suppliers

In 2022/2023, 76.40 percent of purchases made in important operating units were made from local suppliers, while in 2023/2024 this percentage was 67.40 percent.

The company defines “local” as a radius of 200 km around the CTC unit.

## 205-1 – Operations assessed for risks related to corruption

The organization has subjected its operations to assessments of corruption-related risks. These processes are conducted through internal control mechanisms aimed at combating and preventing corruption, supported by a governance structure that includes segregated areas of Compliance, Internal Controls and Auditing. Furthermore, the Company adopts an Anti-Corruption Policy approved by the Board of Directors, which guides its preventive practices and actions. Despite the implementation of these processes, no relevant corruption-related risks were identified or reported during this period.

## 205-2 – Communication and training about anti-corruption policies and procedures

CTC communicates its anti-corruption policies to various audiences, including investors, industry associations, civil society representatives,

financial institutions, government and regulatory bodies, as well as universities and research institutions. These policies are detailed in the Code of Ethics and Conduct, which is publicly accessible on the organization’s official website ([www.ctc.com.br](http://www.ctc.com.br)).

The Code addresses corruption and bribery, reinforcing the commitment to laws such as the Anti-Corruption Law, the Administrative Misconduct Law, the Money Laundering Law, and the Competition Defense Law. One excerpt highlights: *“We act in full compliance with the principles and guidelines set out in this Code of Ethics and Conduct and in current laws and regulations, especially those that prohibit corrupt and bribery practices [...]. We value honest negotiations and believe in free and fair competition in open and transparent markets.”*

We did not conduct training for business partners on anti-corruption policies and procedures during the reporting period. For this reason, there is no number or percentage of business partners informed or trained in this aspect.

**TOTAL NUMBER AND PERCENTAGE OF GOVERNANCE BODY MEMBERS THAT THE ORGANIZATION'S ANTI-CORRUPTION POLICIES AND PROCEDURES HAVE BEEN COMMUNICATED TO, BROKEN DOWN BY REGION**

	2022/2023		2023/2024	
	Informed	Trained	Informed	Trained
<b>Northeast</b>				
Total number of members informed/trained	0	0	0	0
Percentage of members informed/trained (%)	0	0	0	0
<b>Midwest</b>				
Total number of members informed/trained	0	0	0	0
Percentage of members informed/trained (%)	0	0	0	0
<b>Southeast</b>				
Total number of members informed/trained	3	0	4	0
Percentage of members informed/trained (%)	100	100	100	100
<b>South</b>				
Total number of members informed/trained	0	0	0	0
Percentage of members informed/trained (%)	0	0	0	0
<b>Total</b>				
Total number of members informed/trained	3	0	4	0
Percentage of members informed/trained (%)	13	0	17.4	0

**TOTAL NUMBER AND PERCENTAGE OF EMPLOYEES THAT HAVE RECEIVED TRAINING ON ANTI-CORRUPTION, BROKEN DOWN BY REGION**

	2022/2023		2023/2024	
	Informed	Trained	Informed	Trained
<b>Northeast</b>				
Total number of members informed/trained	29	29	28	28
Percentage of members informed/trained (%)	100	100	100	100
<b>Midwest</b>				
Total number of members informed/trained	23	23	25	25
Percentage of members informed/trained (%)	100	100	100	100
<b>Southeast</b>				
Total number of members informed/trained	412	398	471	455
Percentage of members informed/trained (%)	100	96.6	100	96.6
<b>South</b>				
Total number of members informed/trained	6	6	7	7
Percentage of members informed/trained (%)	100	100	100	100
<b>Total</b>				
Total number of members informed/trained	470	456	531	515
Percentage of members informed/trained (%)	100	97.02	100	96.99



**TOTAL NUMBER AND PERCENTAGE OF EMPLOYEES WHO HAVE RECEIVED TRAINING ON  
ANTI-CORRUPTION POLICIES AND PROCEDURES, BROKEN DOWN BY EMPLOYEE CATEGORY**

	2022/2023		2023/2024	
	Informed	Trained	Informed	Trained
<b>Office of the President</b>				
Total number of employees informed/ trained	1	1	1	1
Percentage of employees informed/ trained (%)	100	100	100	100
<b>Board of Directors</b>				
Total number of employees informed/ trained	8	8	7	7
Percentage of employees informed/ trained (%)	100	100	100	100
<b>Managers</b>				
Total number of employees informed/ trained	29	29	31	31
Percentage of employees informed/ trained (%)	100	100	100	100
<b>Coordination</b>				
Total number of employees informed/ trained	20	20	35	35
Percentage of employees informed/ trained (%)	100	100	100	100
<b>Supervision</b>				
Total number of employees informed/ trained	10	10	7	7
Percentage of employees informed/ trained (%)	100	100	100	100

	2022/2023		2023/2024	
	Informed	Trained	Informed	Trained
<b>Technicians</b>				
Total number of employees informed/ trained	150	147	157	153
Percentage of employees informed/ trained (%)	100	98	100	97.45
<b>Administrative</b>				
Total number of employees informed/ trained	82	82	92	92
Percentage of employees informed/ trained (%)	100	100	100	100
<b>Operational</b>				
Total number of employees informed/ trained	170	159	201	189
Percentage of employees informed/ trained (%)	100	93.53	100	94.03
<b>Total</b>				
Total number of employees informed/ trained	218	215	238	234
Percentage of employees informed/ trained (%)	100	98.62	100	98.32

### 205-3 Confirmed incidents of corruption and actions taken

The organization did not record any cases of corruption involving the company or its employees.

### 206-1 – Unfair competition

The organization has no pending or closed lawsuits in the reporting period related to unfair competition, trust or monopoly practices.

### 302-4 – Reductions in energy consumption

Reductions in energy consumption originated from behavioral and operational changes. The initiatives developed include raising awareness about the rational use of electrical energy and implementing changes in processes that directly impact fuel consumption.

The analysis demonstrated improvements in processes, which resulted in greater energy efficiency. The types of energy included in the reductions are fuels and electricity. To perform the calculations, electricity meter clocks and fuel consumption cards were used, ensuring accuracy in monitoring and evaluating the results.

### 302-5 – Reductions in energy requirements

Due to the variable nature of its research and development (R&D) activities on new sugarcane varieties, CTC does not have a fixed energy standard. Energy consumption depends on factors such as time, area and inputs used, making it unfeasible to measure consumption per unit of product, unlike industries with standardized processes, such as the automotive industry. Although total energy consumption increased, the intensity per employee decreased compared to the previous harvest, reflecting improvements in efficiency. On the other hand, there was a minor increase in electrical energy intensity, highlighting opportunities for improvements.

The objectives include reducing electrical and total energy intensity, using previous results as a reference, and implementing actions to optimize consumption and enhance energy efficiency in operational processes.

### 304- 2 – Significant impacts of activities, products, and services on biodiversity

The company does not cause significant impacts on biodiversity, conducting its

agricultural activities with a focus on environmental preservation and without utilizing protected areas or similar regions. A detailed mapping of the leased areas is conducted and incorporated into the contracts, while biodiversity studies are carried out to monitor the environmental conditions of the areas surrounding the operations. We offer onboarding training and specific training to raise employee awareness and prevent negative impacts on local fauna and flora.

### 304-3 – Protected or restored habitats

CTC maintains protected or restored habitat areas, such as the areas of Fazenda Santo Antônio and Fazenda Boa Sorte, located in Piracicaba-SP and Camamu-BA. Restoration initiatives, when necessary, were approved by independent external experts, ensuring their effectiveness and adherence to compliance standards. The organization currently does not collaborate with third parties to protect or restore habitat areas beyond those already within its scope. Protection and restoration actions adhere to standards and methodologies established by the Brazilian Forest Code, supported by environmental and biodiversity reports that ensure compliance with legal and environmental requirements.

### 305-1 – Direct greenhouse gas emissions (scope 1)

Emission factors and global warming potentials (GWP) are based on the Brazilian GHG Protocol Program, using the operational control approach to account for emissions directly associated with operations under the company's control. The gold seal of the Brazilian GHG Protocol Program was maintained in the 2022/2023 and 2023/2024 cycles, with a reduction in emissions from stationary combustion (motor pumps and generators) due to less variation in irrigation. Despite the increased consumption of diesel in trucks, machinery, and leased vehicles, total emissions remained unchanged.

The objectives include maintaining external reporting validated by an accredited body to ensure transparency in emissions monitoring, retaining the GHG Protocol Program's gold seal, and continuously improving emissions accounting and reduction efforts. Specific advancements focus on enhancing scope 3 reporting for greater comprehensiveness and accuracy.



## 305-2 – Indirect greenhouse gas emissions from energy acquisition (scope 2)

Scope 2 emissions were as follows in the harvests assessed:

- **2022/2021:** 448.52 t CO<sub>2</sub> eq;
- **2023/2022:** 150.25 t CO<sub>2</sub> eq;
- **2024/2023:** 163.15 t CO<sub>2</sub> eq.

During the period, the company acquired International Renewable Energy Certificates (I-RECs), ensuring that 100 percent of the energy consumed by the organization was sourced from renewable energy. Selecting certified non-emission sources strengthens the organization's commitment to sustainability and reducing its environmental impact.

## 305-4 – GHG emissions intensity

	2021/2022	2022/2023	2023/2024
Emissions intensity	2.29	1.99	1.70
<b>Total GHG emissions (tCO<sub>2</sub>e)</b>	<b>999.95</b>	<b>937.31</b>	<b>900.54</b>

\*Scopes 1 and 2 were considered. \*The gases included in the emission intensity calculation are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>).

## 305-5 – Reduction of GHG emissions

Difference in emissions compared to the base year:

### 2022/2023

- Scope 1: +236.03 tCO<sub>2</sub>e (increase).
- Scope 2: -298.67 tCO<sub>2</sub>e (decrease).

### 2023/2024

- Scope 1: -49.64 tCO<sub>2</sub>e (decrease).
- Scope 2: +12.87 tCO<sub>2</sub>e (increase).

In 2022/2023, CTC recorded an increase in direct emissions (scope 1), while there was a significant reduction in indirect energy emissions (scope

2). In 2023/2024, there was a reduction in direct emissions, with a slight increase in scope 2.

The reduction in scope 2 was attributed to improvements in the energy matrix and greater efficiency in electricity consumption post-pandemic. In scope 1, initiatives to minimize fuel consumption in machinery and vehicles have resulted in less stationary combustion. Scope 3 emissions are still in the maturation phase and do not yet fully account for upstream transportation and employee commuting. This currently limits the data, which will be refined in the future for more detailed assessments.

Emissions calculations cover gases such as CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>. CTC has established a strategic goal to expand scope 3 calculations, enhancing the scope and accuracy of emissions data throughout the value chain. This initiative seeks to strengthen the management of indirect impacts and align with best environmental reporting practices.

## 305-6 – Emissions of ozone-depleting substances (ODS)

HCFC-22 gas (R22) was not accounted for during the period, as it falls under the category of "other greenhouse gases not covered by the Kyoto Protocol."

## 305-7 – NOx, SOx, and other significant air emissions

NOx emissions, totaling 0.04 kg, were accounted for based on emission factors from GHG Protocol tool, a widely recognized methodology for calculating and monitoring greenhouse gas emissions.

For N<sub>2</sub>O, used to recharge air conditioning equipment, the corresponding emission factor was applied, resulting in 11.395 tons of CO<sub>2</sub> equivalent (2022/2023) and 11.130 tons of CO<sub>2</sub> equivalent (2023/2024) accounted for in scope 1.

## 306-2 – Actions to prevent waste generation and to manage significant impacts

The organization implements various measures to prevent waste generation in both its own operations and across its value chain (upstream and downstream). Regarding recycling and re-use, the organization collaborates with recycling partners to regularly collect recyclable materials, promoting the proper reuse of waste. Furthermore, it adopts a circular economy approach for specific waste, such as cooking oil, lamps, batteries and medications, which are segregated and sent to specific destinations, ensuring their appropriate handling and disposal.

Regarding third-party waste management, the organization conducts a rigorous process to ensure compliance with contractual and legal obligations. This process involves collecting documentation and obtaining approval from the Health, Safety, and Environment (HSE) department for all suppliers to ensure environmentally responsible practices. It also includes continuous monitoring and improvement, with the company conducting periodic assessments of waste quantities based on their typology. This monitoring enables the verification of compliance with established practices and supports the implementation of continuous improvements in waste management.

To gather and monitor waste data, the organization follows several steps, including recording information through documents such as the Waste Transport Manifest (MTR) and the operating permits (LO) of the disposal sites. The process concludes with the issuance of the Certificate of Final Disposal (CDF) by the disposal locations. The organization also classifies waste based on its characteristics, which allows for detailed and adequate control of it. Periodic weighing and measuring are conducted to monitor waste quantities, ensuring compliance and efficiency in waste management.

In 2023, the Solid Waste Management Program (PGRS) underwent a comprehensive review, with all waste collected either by specialized companies or by the municipal network, ensuring environmentally responsible disposal. In Piracicaba/SP, the largest generating center, recyclable materials are segregated and collected by a partner social institution (Reciclador Solidário). All waste generated from laboratory activities is sent for co-processing, while packaging waste from agricultural products is returned to suppliers registered with Inpev, in accordance with the national reverse logistics system. As of January 2024, all non-recyclable waste in Piracicaba/SP, which previously had been destined to landfills, is now directed to co-processing. This sustainable technique eliminates environmental liabilities through high-temperature thermal destruction in clinker kilns, utilizing both the energy and mineral content of the waste material.

## 401-1 – Employee turnover & number of new hires

### NUMBER OF HIRES AND LAYOFFS, BY AGE GROUP

2022/2023				
Age group	Hirings	Hiring rate (%)	Dismissals	Turnover rate (%)
Aged fewer than 30 years	61	65.59	20	43.55
30 to 50 years	56	18.18	54	17.86
Aged more than 50 years	4	5.8	8	8.7
<b>Total</b>	<b>121</b>	<b>25.74</b>	<b>82</b>	<b>21.6</b>
2023/2024				
Age group	Hirings	Hiring rate (%)	Dismissals	Turnover rate (%)
Aged fewer than 30 years	55	53.92	19	36.27
30 to 50 years	70	19.77	42	15.82
Aged more than 50 years	7	9.33	10	11.33
<b>Total</b>	<b>132</b>	<b>24.86</b>	<b>71</b>	<b>19.11</b>

### NUMBER HIRES AND LAYOFFS, BY GENDER

2022/2023				
Gender	Hirings	Hiring rate (%)	Dismissals	Turnover rate (%)
Males	63	21.87	55	20.49
Females	58	31.87	27	23.35
<b>Total</b>	<b>121</b>	<b>25.74</b>	<b>82</b>	<b>21.6</b>



## NUMBER HIRES AND LAYOFFS, BY GENDER

2023/2024				
Gender	Hirings	Hiring rate (%)	Dismissals	Turnover rate (%)
Males	85	25.68	42	19.18
Females	47	23.5	29	19
<b>Total</b>	<b>132</b>	<b>24.86</b>	<b>71</b>	<b>19.11</b>

## NUMBER OF HIRES AND LAYOFFS, BY REGION

2022/2023				
Region	Hirings	Hiring rate (%)	Dismissals	Turnover rate (%)
North	0	0	0	0
Northeast	1	3.33	1	3.33
Midwest	1	7.14	1	7.14
Southeast	119	28.33	80	23.69
South	0	0	0	0
<b>Total</b>	<b>121</b>	<b>25.74</b>	<b>82</b>	<b>21.6</b>

2023/2024				
Region	Hirings	Hiring rate (%)	Dismissals	Turnover rate (%)
North	0	0	0	0
Northeast	0	0	2	3.57
Midwest	3	18.75	1	12.5
Southeast	128	26.67	68	20.42
South	1	14.29	0	7.14
<b>Total</b>	<b>132</b>	<b>24.86</b>	<b>71</b>	<b>19.11</b>

Note: For the calculation, the following formulas are considered: Hiring:  $\text{Hiring} \div \text{total number in the category} \times 100$ .  
Dismissals:  $\text{Hiring} + \text{dismissals} \div 2 \div \text{total number in the category} \times 100$ .

## 401-2 – Benefits provided to full-time employees that are not provided to temporary or part time employees

CTC provides a wide range of benefits to its employees across various contract types, including full-time, part-time, and temporary positions. The benefits offered include life insurance, health insurance, dental insurance, disability and disability support, maternity/paternity leave, private pension plans, stock acquisition plans, transportation, cafeteria services, daycare assistance, special assistance, gym access, workplace fruit availability, and medication assistance. These benefits reflect CTC's commitment to the well-being and quality of life of its employees, offering support across various aspects of both their professional and personal lives.

## 401-3 – Parental leave

2021/2022	2022/2023	2023/2024
<b>Total of employees who took parental leave in current year</b>		
Men 6	Men 12	Men 10
Women 7	Women 6	Women 6
<b>Total of employees who returned to work, in the reporting period, after the end of the parental leave</b>		
Men 5	Men 12	Men 11
Women 5	Women 6	Women 6
<b>Total number of employees who returned to work after the parental leave and who were still employed 12 months after returning to work</b>		
Men 4	Men 3	Men 9
Women 6	Women 3	Women 5
<b>Rate of return</b>		
Men 100%	Men 100%	Men 100%
Women 100%	Women 100%	Women 100%
<b>Rate of retention</b>		
Men 67%	Men 60%	Men 75%
Women 100%	Women 60%	Women 83%

Note: Data relating to the 2021/2022 harvest have been corrected in relation to that published in the previous report.

## 402-1 Minimum notice regarding operational changes

The organization does not have a formal minimum notice period for informing workers of significant operational changes but employs various methods to ensure effective and transparent communication. Information about changes is regularly shared through quarterly events like “CTC em Pauta” and, for extraordinary changes, via official channels such as CTCOne, e-mail, the intranet, corporate social networks, and leadership meetings.

Communication practices include Board meetings, leadership meetings, and the use of digital channels to keep employees and stakeholders well-informed. The strategic approach integrates active listening to align decisions with the demands of workers, representatives and authorities.

The organization conducts an annual organizational climate survey (Great Place to Work – GPTW) to incorporate employee suggestions into planning. With customers, it promotes satisfaction surveys and field meetings, while projects for the community are based on studies and public consultations. Recognizing the need to improve active listening with suppliers and third parties, the company is developing initiatives to strengthen these relationships in future cycles.

## 403-1 – Occupational health and safety management system

CTC has an occupational health and safety management system that fully covers all workers, activities and workplaces. This system complies with legal requirements, including labor laws, collective agreements and conventions, and meets the necessary licensing and authorization requirements. It is based on the Regulatory Standards (NRs) of the Ministry of Labor and Employment, ensuring strong compliance with legal guidelines and industry best practices.

The company has a multidisciplinary HSE (Health, Safety, and Environment) team that operates based on legal frameworks and best industry practices, including environmental legislation and standards for preventive medicine and health. In addition, the company implements customized programs for each area of activity, with the support of specialized consultancies for the preparation of technical documents, monitoring and audits.

To reinforce safety, CTC trains firefighters annually in all areas and has a CIPA (Internal Accident Prevention Committee) that holds monthly meetings and an annual event for all employees. In 2023, the company significantly increased resources allocated to the HSE area, expanding internal audits and enhancing its presence in agricultural hubs. This effort

strengthened the safety culture and emphasized preventive actions to minimize risks, covering agricultural operations, laboratory activities, and outsourced vehicle operations.

New driving policies were introduced, including defensive driving training and monthly monitoring of driver exposure rates, which track factors such as speed limits, traffic violations, and vehicle incidents. The company also launched the OPA (Observar, Pensar e Agir, or Observe, Think, and Act) Program, aimed at prevention and advancing the safety culture.

The main objectives of the system are the evolution of the area's indicators, prioritizing preventive actions and the consolidation of a safety culture that aims for zero accidents. The central goal is to achieve continuous improvements in these indicators and, above all, to achieve a work environment with a total focus on prevention and without accidents.

## 403-2 – Hazard identification, risk assessment, and incident investigation

CTC implements a series of rigorous processes to identify and assess workplace hazards and risks. These processes include:

- Safety inspections: Conducted regularly to identify and correct potential hazards in the workplace.
- Ergonomic risk assessment: To ensure that working conditions are adequate and comfortable, minimizing ergonomic-related health issues.
- Accident and incident analysis: This action focuses on identifying root causes and implementing preventive measures to promote a safer work environment and prevent future occurrences.
- Assessment of chemical and physical risks: This involves identifying and controlling exposure to hazardous substances and physical agents that may pose risks to workers' health and safety.
- Project and change assessment: Performed to predict and mitigate risks associated with new projects or changes in the environment and operations.
- Task-specific risk analysis: Approaching each task individually to identify role-specific risks.
- Emergency drills: Practical preparations to ensure staff are ready to respond effectively to emergencies.
- Risk assessment in construction projects: Focused on identifying and mitigating specific construction risks, ensuring worker safety.



- Risk assessment in cases of non-compliance: Ensuring that processes comply with health and safety standards.
- Assessment of impacts of organizational changes: Review of risks involved in any organizational change that may affect workplace safety.
- Risk analysis for special projects: This focuses on assessing risks associated with unique or specific initiatives, ensuring a preventive and safety-focused approach.

These processes contribute to a broad and detailed approach to safety management, promoting a safe work environment aligned with industry best practices.

The organization uses different methodologies to ensure the quality of the hazard and risk identification and assessment processes. This includes training, qualifications and certifications for everyone involved, as well as specific training in communication and security awareness. To maintain process consistency, the company implements clear procedures and guidelines, including the assignment of responsibilities, action prioritization, control measures, continuous improvement, documentation, and incident and accident response protocols. The active involvement of senior management is also a key factor, with the approval of financial and human resources, promotion of a safety culture, periodic performance reviews,

commitment to continuous improvement and strategic decisions for workplace safety.

The results of these hazard and risk identification and assessment processes are used to improve the occupational health and safety management system. This improvement occurs through monitoring performance indicators, continuous training and qualifications, process improvements and investment in technology and equipment.

The company provides workers with structured channels to report hazards and dangerous situations. These include dedicated e-mail addresses for the occupational health and safety team, health and safety committees, opportunities to speak during routine safety meetings, communication through leadership, and direct contact with the health and safety team. The company guarantees that workers will not suffer punishment or persecution when reporting these hazards, underpinning this commitment in the Code of Ethics.

The organization does not currently have a formal policy that ensures workers the right to withdraw from work situations that may cause an accident or occupational illness. The company is in the process of improving its HSE processes to establish this formalized safety policy. Protection against punishment or retaliation for reporting hazards and dangerous situations is guaranteed through the commitment outlined in the Code of Ethics.

The organization follows rigorous processes to investigate work incidents, considering the associated risks and level of danger. One of the key methods is root cause investigation, which involves a detailed analysis to identify the underlying causes of the incident. This approach enables the implementation of preventive measures to keep the issue from occurring again. Furthermore, incident investigation focusing on improvements in the management system is applied to evaluate the incident from the perspective of the safety management system, identifying possible failures and implementing necessary improvements. These processes ensure a complete understanding of the factors that contributed to the incident, promoting a safer and more effective work environment through well-founded corrective and preventive actions.

The Company is enhancing its approach to workplace deviations, near misses and accidents, with an increasing focus on prevention. These efforts include developing a safety culture through the OPA ("Observar, Pensar e Agir," or Observe, Think, Act) Program, which promotes a proactive attitude at all levels of the organization. Since 2023, senior leadership has demonstrated greater engagement with the topic, which includes monitoring and detailing safety indicators, allowing for more in-depth discussions and active involvement of all employees.

Key objectives include creating a formal Security Policy that establishes clear and

comprehensive guidelines for all of the Company's security processes and practices. The goals include eliminating and minimizing risk situations, investing in necessary improvements, and continuously expanding the OPA Program to strengthen the safety culture and promote a safer, more preventive work environment.

### 403-3 – Occupational health services

The company provides a comprehensive range of occupational health services to promote a safe and healthy work environment through carefully planned actions, including:

- Worker health protection: Occupational health services focus on protecting the physical and mental health of employees, preventing the emergence of workplace-related illnesses and providing support for the general well-being of workers. The company takes continuous action to ensure that each employee has adequate conditions to perform their activities safely.
- Accident prevention: The company adopts preventive measures to avoid accidents in the workplace, including awareness programs and regular training on safe practices. These initiatives aim to identify potential risks before they cause incidents, promoting a culture of safety.

- Legal compliance: Occupational health services ensure that all company practices and policies comply with legal requirements, ensuring compliance with labor and safety standards. This compliance is essential to protect workers' rights and maintain the work environment in accordance with current regulations.
- Improving quality of life: The company promotes actions that go beyond occupational health, with initiatives that aim to improve the quality of life of employees inside and outside of work. These include programs for physical and mental well-being, access to health campaigns, and leisure and socialization activities, all aimed at promoting worker satisfaction and balance.
- Promoting a culture of safety: The organization cultivates a strong safety culture, in which all employees feel responsible for contributing to a safe environment. Through training, campaigns, and initiatives like the OPA ("Observar, Pensar e Agir," or Observe, Think and Act) Program, the company promotes preventive and proactive practices, fostering awareness about the fact that safety is a shared priority for all.
- Monitoring worker health: The employees' health is monitored continuously, with occupational medical examinations and periodic assessments to identify and treat possible health conditions. This monitoring ensures

that workers get the necessary assistance to prevent illnesses and avoid issues arising from their occupational activities, promoting longevity and well-being at work.

These actions demonstrate the company's commitment to maintaining a healthy and safe work environment, promoting the overall well-being of employees, and incorporating health and safety as fundamental pillars of the organizational culture.

#### **403-4 – Worker participation, consultation, and communication on occupational health and safety**

The company actively involves workers in the process of developing, implementing and evaluating the occupational health and safety management system. This involvement occurs through direct participation and representation in the CIPA (Internal Accident Prevention Committee), with the election of management representatives. Additionally, workers engage through formal committees and have the opportunity to directly contact the HSE team to report their health and safety concerns.

Workers are involved in several stages of the process, including hazard identification, risk assessment, application of the hierarchy of controls, incident investigation and audits. Health and safety information is widely disseminated through awareness campaigns and corporate e-mails, ensuring that everyone is informed about the company's safety practices and policies.

We have formal health and safety committees composed of both employers and workers. Their key responsibilities include monitoring hazard and risk identification processes, proposing measures to prevent accidents and illnesses, promoting worker awareness, education, and training, conducting periodic inspections, and organizing awareness campaigns. These committees meet monthly and have significant relevance in decision-making processes related to occupational health and safety. In recent years, the CIPA underwent an empowerment process that positioned it as "moderately relevant," and, in late 2024, this level of importance was raised to "relevant" within the organization.

Occupational health services cover full-time workers, temporary workers and third parties, ensuring that all applicable types of employees have access to the health care services that the Company offers.

The objectives include the evolution of the CIPA to a "very relevant" level and the increase in the

participation of employees and leadership in the organization's health and safety actions. The goals include risk minimization and prevention, in addition to the evolution of the OPA ("Observar, Pensar e Agir," or Observe, Think and Act) Safety Program, reinforcing the company's commitment to a safe work environment and the promotion of a robust safety culture.

#### **403-5 – Worker training on occupational health and safety**

CTC offers a wide range of health and safety training and development actions to all applicable employees, including full-time, temporary and outsourced employees. The training programs provided include guidance and onboarding for new employees, firefighting, handling of chemicals, first aid, proper use of PPE, machine and equipment safety and operation, and emergency response.

All employees get training aligned with Regulatory Standards and preventive measures tailored to their specific field of activity. In addition, the company requires supporting documentation from external suppliers in all service contracts, ensuring that third parties are also properly qualified. During the initial onboarding, all direct, temporary and third-party



employees receive explanations about security and have their documents approved.

The company offers specific training for activities that require specialization, such as handling pesticides and activities involving electricity for outsourced workers. All fire-fighters and CIPA members get annual training to keep their knowledge and skills up to date. In 2023, defensive driving training was introduced, targeting employees with a higher risk of exposure to accidents.

Other specialized training includes a course on venomous animals, provided to agricultural employees and firefighters. This training is supported by the acquisition of specific equipment for animal capture, reducing associated risks. On December 6, 2023, an internal Occupational Safety Workshop was held with the Supply team, bringing together approximately 50 representatives from all of the company's hubs. The workshop focused on minimizing risks in agricultural activities.

Objectives include minimizing labor and reputational risks in direct and outsourced activities. Among the company's goals is the digitalization of the entire supplier onboarding process, using a computerized platform, and the expansion of vehicle driving training for all applicable employees, reinforcing the commitment to safety and prevention.

## 403-6 – Promotion of worker health

We safeguard the confidentiality of the workers' health-related personal information, ensuring that it is not used in any manner that could either benefit or disadvantage any employee. This is done in compliance with legislation, through a strict privacy policy, restricted access to information, data security and a reporting channel to report any privacy violations.

We also develop programs and initiatives to facilitate workers' access to non-work-related medical and health services. These include providing an outpatient clinic with psychological assistance, health education and training. The clinic has a qualified team, including an occupational health nurse and medical care available three times a week with a specialized physician. It also features a lactation room for support. Specific emergency services, such as "help-móvel" (mobile help) assistance, are also available. Full-time employees, temporary workers and third parties have access to these services.

Additionally, the company promotes health and prevents non-work-related illnesses through exercise and activity programs and vaccination, mental health and emotional well-being, and chronic disease prevention campaigns. The initiatives include educational lectures, annual flu vaccination campaigns and complementary exams. These initiatives are available to employees, third parties and family members.

Workers can participate in these programs during working hours, with information about the services shared through awareness campaigns, corporate e-mails, and both in-person and remote care at the medical clinic.

Examples of recent actions include:

- Annual flu vaccination campaigns, conducted in April 2022 and 2023, with 1,027 doses applied in 2022 and 1,227 doses in 2023, available to employees, third parties and family members.
- On September 28, 2023, a lecture entitled "The Importance of Prevention" was held with Dr. Graziela, a gynecologist and obstetrician. It was aimed at all employees and encouraged adherence to the annual complementary examination campaign.
- Specific lectures, such as "Women's Health", held on October 27, 2022, with medical examinations aimed at women during the month of October, reinforcing the Pink October campaign.
- Since 2022, the company has been offering the Gympass, which allows free access to fitness centers.
- Starting in 2024, the organization placed additional emphasis on mental health training, with specific sessions conducted by the Jungle Company in February 2024.

Objectives include maintaining the Company's high standard of prevention, with a specific goal of strengthening mental health care and awareness among employees and leadership.

## 403-7 – Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

CTC identifies and maps the hazards and risks associated with the activities of workers in operations or business partnerships that are not under its direct control. This mapping is conducted in workplaces not directly controlled by the organization, including contracts involving remote work, field operations, external environments, customer and supplier facilities, business partner-controlled sites, and during business travel.

The main hazards and risks identified include falls, musculoskeletal injuries, vehicle accidents, falling objects, exposure to chemicals and biological agents, burns, equipment accidents, electric shocks, traumatic injuries, accidents at height, fire and explosion, vibration and noise injuries and radiation exposure. Reviewing documents provided by third parties, such as the Risk Management Plan (RMP), is an essential practice to ensure that all risks

associated with temporary workers and third parties are adequately mapped and managed.

To prevent and mitigate these risks, the company adopts a comprehensive approach that includes training and capacity building, workplace safety, compliance monitoring, and employee communication and engagement programs. All third-party documentation is assessed and approved based on the risks reported, and these workers are monitored by the Risk Management Program of the contracted companies, being periodically assessed by CTC's Occupational Health & Safety area.

The company implements the OPA ("Observar, Pensar e Agir," or Observe, Think and Act) Program, with a special focus on driving activities considered high risk. Forums and training are held for drivers with higher risk exposure, and exposure rates are monitored monthly and shared with leadership. In August 2023, the company conducted a compliance review of 12 suppliers, examining key aspects such as contract type, conditions akin to slavery, child labor, working hours, and occupational health and safety. This process included on-site inspections of suppliers' facilities and a thorough review of the submitted documentation.

The primary objectives are to mitigate risks related to employees' external activities and to ensure compliance across the Company's entire value chain. The goals include providing annual training for all Company drivers on vehicle operation, enhancing vehicle

inspection standards, ensuring compliance among external suppliers, and strengthening security and compliance within the Company's operations and partnerships.

## 403-8 – Workers covered by an occupational health and safety management system

The company has implemented an occupational health and safety management system that complies with all legal requirements and adheres to recognized industry standards and guidelines. This system fully covers all workers, including full-time employees, temporary workers and third parties. Data for health and safety management was compiled through inspections and assessments, as well as information from training and awareness programs.

The system is based on several Regulatory Standards (NRs), such as NR-10, NR-12, NR-31, NR-1 and NR-7, in addition to other applicable standards and occupational health and safety regulations. Among the main premises adopted is the objective and impartial analysis of data, ensuring a precise and reliable approach.

To collect and evaluate data, the company uses methodologies that involve inspections, assessments, training data and awareness. The techniques and tools utilized

include forms and checklists to ensure strict adherence to all processes and protocols.

The Health, Safety and Environment (HSE) team is multidisciplinary and serves all employees, temporary residents and third parties. This management system adopts the best market practices, supported by an increase in the budget and investments for this area compared to the previous cycle. In addition to the Ministry of Labor's Regulatory Standards, the management system takes into account environmental legislation and personalized programs, integrating the regulations of the field of preventive medicine and health.

The company's objectives include continuous improvements based on monitoring indicators, prioritizing the efficient use of natural resources, minimizing accidents and increasing prevention practices. The goals are aligned with these objectives, with a focus on reducing incidents and strengthening a culture of safety and environmental responsibility.

## 403-9 – Work-related injuries

During the reporting period, the organization recorded workplace accidents, including falls, dropped objects, and trauma injuries. Specific incidents included finger pinching, slipping on administrative flooring, and puncture wounds caused by sugarcane chips. Two accidents resulting in lost time were reported: One involving an

object falling on an employee's head and another involving eye irritation caused by contact with sugarcane leaves. No serious accidents were recorded during the period. The associated hazards had already been identified and classified, with the organization implementing robust risk mitigation measures. These measures included equipment replacement, engineering and administrative controls, the use of personal protective equipment (PPE), regular training, and thorough accident investigations. The safety culture is encouraged through ongoing risk assessments and employee incentives.

In the 2023/24 harvest, monitoring was expanded to include outsourced employees and accidents without lost time, resulting in a reduction in severity rates and days lost due to leaves. This progress reflects the organization's commitment to strengthening workplace safety. The organization adopts the OPA ("Observar, Pensar e Agir," or Observe, Think and Act) Program as a strategy to prevent accidents, promoting the proactive reporting of risk situations.



## WORK ACCIDENTS

Class	2022/2023		2023/2024	
	Employees	Third parties	Employees	Third parties
Number of hours worked	1,301,639	0*	1,419,441	259,560
Base of the number of hours worked	1,000,000	0*	1,000,000	1,000,000
Number of fatalities resulting from work-related injuries	0	0	0	0
Index of fatalities resulting from work-related injuries	0	0	0	0
Number of work-related injuries with serious consequences (except for fatalities)	0	0	0	0
Index of work-related injuries with serious consequences (except for fatalities)	0	0	0	0
Number of work-related injuries of mandatory reporting (including fatalities)	3	0*	2	4
Index of work-related injuries of mandatory reporting (including fatalities)	2.3	0*	1.41	15.41
Severity rate (SR)	16	0*	3	54
Number of work accidents without lost time during the period	0*	0*	14	8
Days lost due to leaves	21	0*	4	14
Index of occupational accidents without lost time	0*	0*	9.86	30.82

\*There was no data mapping during the period.

## 403-10 – Work-related ill health

No cases of occupational diseases were recorded during the period under review. The company periodically maps and monitors key hazards that could lead to occupational diseases. These include chemical, biological, and physical risks, as well as ergonomic factors, exposure to dust and smoke, psychosocial risks, vibration, temperature and humidity extremes, radiation, biomechanical risks, fall hazards, and exposure to toxic vapors, gases, and mechanical/accident risks. These risks are identified and reviewed through both quantitative and qualitative assessments, in alignment with the Risk Management Program (PCR) under NR 01 and the Occupational Health and Medical Control Program (PCMSO) under NR 07.

The identification of occupational disease hazards follows a rigorous process that involves identifying tasks and processes, recognizing risk agents, assessing exposure levels, and implementing control measures to minimize these risks.

All workers, including full-time employees, temporary workers and third parties, are included in occupational disease monitoring, ensuring a comprehensive approach to occupational health.

The company's objective is continuous monitoring to prevent possible occupational diseases, conducting periodic examinations for early detection. The goal is to not record cases of occupational diseases, reinforcing the commitment to the health and safety of all employees.

## 404-3 – Percentage of employees receiving regular performance and career development reviews

	2022/2023		2023/2024	
	Men	Women	Men	Women
<b>Office of the President</b>				
Percentage	100	0	100	0
<b>Board of Directors</b>				
Percentage	100	100	100	100
<b>Managers</b>				
Percentage	100	100	100	100
<b>Coordination</b>				
Percentage	100	100	100	100
<b>Supervision</b>				
Percentage	100	100	0	100
<b>Technicians</b>				
percentage	100	100	100	100
<b>Administrative</b>				
Percentage	100	100	100	100
<b>Operational</b>				
Percentage	23.21	82.76	22.79	83.08

## 404-2 – Programs for improving employee skills and career transition assistance

Supplementary information for the content presented on page 27 of the Sustainability Report:

For career transitions, the company offers outplacement programs to support professional relocation and adaptation to new career opportunities. However, it does not have specific programs to support employees in retirement processes.

## 405-1 – Diversity of governance bodies and employees

All (100%) individuals in governance bodies are males. There are no individuals from minority and/or vulnerable groups who are members of the organization's governance bodies.

### INDIVIDUALS WHO MAKE UP THE BOARD OF DIRECTORS, BY AGE GROUP

	2022/2023	2023/2024
Aged fewer than 30 years	0	0
30 to 50 years	11.11%	11.11%
Aged more than 50 years	88.89%	88.89%

### GENDER DISTRIBUTION BY EMPLOYEE CATEGORY (%)

	2021/2022		2022/2023		2023/2024	
	Men	Women	Men	Women	Men	Women
Office of the President	100	0.00	100	0	100	0
Board of Directors	62.50	37.50	62.5	37.5	71.43	28.57
Managers	66.67	33.33	68.97	31.03	70.97	29.03
Coordination	73.91	26.09	70	30	68.57	31.43
Supervision	41.67	58.33	30	70	0	100
Technicians	70.71	29.29	68	32	64.97	35.03
Administrative	46.25	53.75	37.8	62.2	44.57	55.43
Operational	69.66	30.34	65.88	34.12	67.66	32.34
<b>Total</b>	<b>64.91</b>	<b>35.09</b>	<b>61.28</b>	<b>38.72</b>	<b>62.34</b>	<b>37.66</b>



## PERCENTAGE OF EMPLOYEES BY EMPLOYEE CATEGORY AND AGE

	2021/2022	2022/2023	2023/2024
	Percentage	Percentage	Percentage
<b>Office of the President</b>			
Aged fewer than 30 years	0	0	0
30 to 50 years	0	0	100
Aged more than 50 years	100	100	0
<b>Board of Directors</b>			
Aged fewer than 30 years	0	0	0
30 to 50 years	37.50	25	28.57
Aged more than 50 years	62.50	75	71.43
<b>Managers</b>			
Aged fewer than 30 years	0	0	0
30 to 50 years	85.19	86.21	93.55
Aged more than 50 years	14.81	13.79	6.45
<b>Coordination</b>			
Aged fewer than 30 years	0	5	0
30 to 50 years	91.3	90	94.29
Aged more than 50 years	8.70	5	5.71
<b>Supervision</b>			
Aged fewer than 30 years	16.67	0	0
30 to 50 years	75.00	90	100
Aged more than 50 years	8.33	10	0

	2021/2022	2022/2023	2023/2024
	Percentage	Percentage	Percentage
<b>Technicians</b>			
Aged fewer than 30 years	11.43	17.33	15.92
30 to 50 years	81.43	76	77.71
Aged more than 50 years	7.14	6.67	6.37
<b>Administrative</b>			
Aged fewer than 30 years	32.5	35.37	29.35
30 to 50 years	58.75	50	58.7
Aged more than 50 years	8.75	14.63	11.96
<b>Operational</b>			
Aged fewer than 30 years	17.93	26.47	31.34
30 to 50 years	58.62	54.71	49.25
Aged more than 50 years	23.45	18.82	19.4
<b>Total</b>			
Aged fewer than 30 years	16.06	21.49	21.66
30 to 50 years	69.27	64.26	65.35
Aged more than 50 years	14.68	14.26	12.99

Note: We do not measure the percentage of employees from minority and/or vulnerable groups by employee category.

## 406-1 – Cases of discrimination

No cases of discrimination were recorded during the reporting period.

## 409-1 – Operations and suppliers at significant risk for forced or compulsory labor

The organization identified risks of forced labor or labor akin to slavery in operations involving temporary and outsourced labor. In addition, agricultural service providers, such as seedling producers and mills, also presented related risks.

The organization has adopted several measures to mitigate these risks, including:

- Due diligence for supplier groups identified as being at high risk.
- Implementation of a third-party management policy with definition of indicators, action plans and continuous monitoring.
- Creation of a supplier approval platform that assesses the risks associated with each corporate taxpayer's ID (CNPJ) based on public data and specific information requested.

- Continuous monitoring of public data related to approved corporate taxpayer's IDs (CNPJs).
- Conduction of an annual re-approval process to ensure data verification and updating of supplier documentation.

These initiatives reflect the organization's commitment to preventing and combating forced or slave-like labor practices in its operations and supply chain.

## 413-1 – Operations with local community engagement, impact assessments, and development programs

During this period, the organization promoted actions with a positive impact on communities, prioritizing Piracicaba/SP, Camamu/BA and Valparaíso/SP, with expansion plans for Barrinha/SP, Mandaguaçu/PR, Quirinópolis/GO and Santa Rita/PB. In Camamu, BRL 140,000 were invested in the renovation of a health center, and BRL 700,000 in the renovation of a municipal school. In Piracicaba, BRL 800,000 were allocated to the Universidade das Quebradas project, and 615 students were involved in the Educa CTC program in 2023/24. It also

carries out actions such as CTC Solidário, with the distribution of items to needy children.

Although the company does not conduct participatory social or environmental impact assessments, it complies with environmental licensing requirements in accordance with the National Environmental Policy. The company maintains an independent ethics channel to receive suggestions and criticisms, ensuring confidentiality.

## 413-2 – Operations with significant actual and potential negative impacts on local communities

The company considers its operations to be low-impact and does not identify any significant negative effects on local communities. Specific situations, such as water consumption during dry periods, accidental fires in plantations, increased traffic accidents, and failures in the hiring of third parties concerning human rights are addressed through robust mitigating measures. Potential impacts include environmental pollution, biodiversity loss, natural resource degradation, excessive water consumption, risks associated with transportation, agricultural pesticides, and effluents, as well as crimes against biodiversity and unauthorized changes in land use.

Due to the remote location of operations, strict control and mitigating procedures, the company classifies these impacts as being of low magnitude. As a strategic priority, it seeks to continually minimize the real and potential effects of its activities, with goals that reinforce sustainable and socially responsible practices. Management includes initiatives to strengthen transparency, operational efficiency and interaction with communities, promoting balance between economic development and local well-being.

## 418-1 – Substantiated complaints concerning breaches of customer privacy and losses of customer data

We had no complaints concerning breaches of customer privacy or losses of customer data.



# GRI Content Summary

Statement of Use	The Sugarcane Technology Center reported the information cited in this GRI content summary for the 22/23 and 23/24 harvests based on the GRI Standards.		
GRI 1 used	GRI 1: Fundamentals 2021		
GRI STANDARD	CONTENT	LOCATION	SDGs
General disclosures	2-1 Organizational details	64	
	2-2 Entities included in the organization's sustainability reporting	10, 64	
	2-3 Reporting period, frequency, and contact point	4, 64	
	2-4 Restatements of information	There was no restatement of information.	
	2-5 External assurance	There was no external verification.	
	2-6 Activities, value chain, and other business relationships	64	
	2-7 Employees	25, 65, 66	8, 10
	2-8 Workers who are not employees	66	8
	2-9 Governance structure and composition	15, 67	5, 16
	2-10 Nomination and selection of the highest governance body	67	5, 16
	2- 11 Chair of the highest governance body	68	16
	2-12 Role of the highest governance body in overseeing the management of impacts	68	16
	2-13 Delegation of responsibility for managing impacts	68	
	2-14 Role of the highest governance body in sustainability reporting	68	
	2-15 Conflicts of interest	69	16
	2-16 Communication of critical concerns	69	
	2-17 Collective knowledge of the highest governance body	2-17	
	2-18 Evaluation of the performance of the highest governance body	N/A.	

GRI STANDARD	CONTENT	LOCATION	SDGs
GRI 2: General disclosures 2021	2-19 Remuneration policies	N/A.	
	2-20 Process to determine remuneration	70	
	2-21 Annual total compensation ratio	Confidential information.	
	2-22 Statement on sustainable development strategy	6	
	2-23 Policy commitments	70	16
	2-24 Embedding policy commitments	70	
	2-25 Processes to remediate negative impacts	71	
	2-26 Mechanisms for seeking advice and raising concerns	71	16
	2- 27 Compliance with laws and regulations	71	
	2-28 Membership in associations	71	
	2-29 Approach to <i>stakeholder</i> engagement	72	
	2-30 Collective bargaining agreements	72	8
<b>Material topics</b>			
GRI 3: Material topics 2021	3-1 Process of determining material topics	21, 72	
	3-2 List of material topics	21	
<b>Innovation and technology</b>			
GRI 3: Material topics 2021	3-3 Management of material topics	73	
<b>Climate change</b>			
GRI 3: Material topics 2021	3-3 Management of material topics	73	
GRI 201: Economic performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	77	13
GRI 302: Energy 2016	302-1 Energy consumption within the organization	52	7, 8, 12, 13
	302-3 Energy intensity	52	7, 8, 12, 13
	302-4 Reductions in energy consumption	81	7, 8, 12, 13
	302-5 Reductions in energy requirements for products and services	81	7, 8, 12, 13
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	48, 81	3, 12, 13, 14, 15



GRI STANDARD	CONTENT	LOCATION	SDGs
GRI 305: Emissions 2016	305-2 Indirect (scope 2) GHG emissions from energy acquisition	48, 49, 82	3, 12, 13, 14, 15
	305-3 Other indirect (Scope 3) GHG emissions	48, 49	3, 12, 13, 14, 15
	305-4 GHG emissions intensity	82	13, 14, 15
	305-5 Reduction of GHG emissions	82	13, 14, 15
	305-6 Emissions of ozone-depleting substances (ODS)	82	3, 12
	305-7 NOx, SOx, and other significant air emissions	82	3, 12, 14, 15
GRI 306: Waste 2020	306-1 Significant actual and potential waste-related impacts	50	3, 6, 11, 12
	306-2 Actions to prevent waste generation and to manage significant impacts	50, 83	3, 6, 8, 11, 12
	306-3 Waste generated by composition	50	3, 6, 11, 12
	306-4 Waste diverted a from disposal	50	3, 11, 12
	306-5 Waste directed to disposal	50	3, 6, 11, 12, 15
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.2.2 Describe the climate change-related scenarios used for identifying the risks and opportunities posed by climate change.	77	
<b>Attraction, development and retention of employees</b>			
GRI 3: Material topics 2021	3-3 Management of material topics	73	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	84	4, 5, 8, 10
	401-2 Benefits provided to full-time employees that are not provided to temporary or part time employees	85	3, 5, 8
	401-3 Paternal leave	85	5, 8
GRI 402: Labor/Management Relations 2016	402-1 Minimum notice regarding operational changes	85	8
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	27	4, 5, 8, 10
	404-2 Programs for improving employee skills and career transition assistance	27, 92	8
	404-3 Percentage of employees receiving regular performance and career development reviews	92	5, 8, 10
GRI 13: Agricultural, Aquaculture and Fisheries Sectors 2022	13.23.2 Describe any differences in terms of employment contract and approach to remuneration based on nationality or status of migrant workers, broken down by location of operations.	77	

GRI STANDARD	CONTENT	LOCATION	SDGs
<b>Biodiversity and ecosystems</b>			
GRI 3: Material topics 2021	3-3 Management of material topics	76	
GRI 304: Biodiversity 2016	304-1 Operational units owned, leased or managed within or adjacent to environmental protection areas and areas of high biodiversity value located outside environmental protection areas.	56	6, 14, 15
	304- 2 Significant impacts of activities, products, and services on biodiversity	81	6, 14, 15
	304-3 Protected or restored habitats	81	6, 14, 15
	304- 4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	56	14, 15
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	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, and describe the assessment methods used.	56	
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.21.2 Report the 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 and frequency of wage payments at significant locations of operation.	76	
<b>Diversity, equity and Inclusion</b>			
GRI 3: Material topics 2021	3-3 Management of material topics	74	
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	90	5, 8
	405-2 Ratio of the basic salary and remuneration of women to men	Confidential information.	5, 8, 10
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.15.5 Describe any differences in terms of employment contract and approach to remuneration based on nationality or status of migrant workers, broken down by location of operations.	N/A.	
<b>Ethics, integrity and compliance</b>			
GRI 3: Material topics 2021	3-3 Management of material topics	73	
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	61	8, 9
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	77	16
	205-2 Communication and training about anti-corruption policies and procedures	77	16
	205-3 Confirmed incidents of corruption and actions taken	80	16
GRI 206: Unfair competition 2016	206- 1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	80	16
GRI 406: Non-Discrimination 2016	406- 1 Incidents of discrimination and corrective actions taken	94	5, 8



GRI STANDARD	CONTENT	LOCATION	SDGs
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GRI STANDARD	CONTENT	LOCATION	SDGs
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