



2021/2022 Sustainability Report



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About this report

As part of our commitment to transparency, we are pleased to publish our second annual Sustainability Report, prepared in accordance with the Global Reporting Initiative (GRI) Standards, Core option. This edition highlights the key results of Tereos Sugar & Energy Brazil for the 2021/2022 crop year, from April 2021 to March 2022. As an exception, GHG Protocol data covers the period from January to December 2021. [GRI 102-50](#)

The report covers our governance model, our approach to engagement with and commitment to employees, the value chain and the environment, and our ESG strategies. The material topics (materiality matrix) covered in this report are mapped to the relevant Sustainable Development Goals (SDGs). [GRI 102-46, 102-54](#)

The report provides qualitative and quantitative disclosures on topics that are deemed most relevant to our stakeholders. [GRI 102-40, 102-52](#)

If you have any questions about this report, please feel free to contact us at esg@tereos.com [GRI 102-53](#)

[Read on to learn about our crop year in 2021/2022.](#)



A word from our CEO

GRI 102-14

Throughout Tereos' 22-year presence in Brazil, each season has seen us strengthening our commitment to making the most of our raw material while delivering high-quality products. By operating within a virtuous circular economy model, sustainability is woven into everything we do and is at the forefront of our plans for the future.

We are clear that the success of our business is tied to the land, the climate, and people; our challenges and rewards of growth are shared in common with our entire value chain.

The 2021/2022 crop season was a challenging one for not just the sugar and energy sector, but for the world as a whole. We experienced impacts from climate change that put our business model to the test, adding further complexity to an already volatile business environment. Our focus during this cycle was on the essential activities required to keep the business running and on building the best possible team on the ground.

As we confront the current challenges, we also recognize our role in decarbonizing the planet and supporting the development of a low-carbon economy. Alongside producing ethanol (a vital fuel for Brazil's increasingly renewable energy mix), during the 2021/2022 period, we also pursued new pathways towards a more sustainable future.

Some of the highlights from the crop year include the completion of our first vinasse biogas power plant; a partnership with VLI that has boosted our logistics capacity; and new green loans and investments to sustainable targets, strengthening our commitment to sustainable business growth.

Our efforts also delivered other important results, such as reduced water consumption in our operations compared to the previous crop cycle, and national and international recognition for responsible practices, including certifications such as I-REC for our renewable cogeneration facilities. Collaborating closely with other players in our value chain, we have worked to create shared value by advancing sustainable agricultural

practices, with 42% of our sugarcane — both company — and third party-grown — now certified.

Navigating the complexities of our industry was a balancing act as we responded to emerging issues affecting the business while managing our day-to-day activities. But at each step, we have been fortunate to have a dedicated team that swiftly adapted to the new circumstances, remained highly engaged, and worked together to meet the challenges.

In this report, we describe the solutions we have implemented to address key issues that are critical to our own company but also common to the broader industry and society as a whole. We remain engaged and committed to building a more sustainable future, as we continue to cultivate sustainability to harvest the future. We hope you find this report informative and inspiring.

Pierre Santoul
CEO



2021/2022 – Tereos Sugar & Energy Brazil



700
partner growers,
which supply 49% of
our raw material



80%
of the sugarcane we process
is certified by Bonsucro
The foremost sustainability
initiative in our industry



1,209
gigawatt-hours of electric
power output
Enough to supply electricity to
610,000 homes or 2.4 million
people for a year



**Tereos' 1 MW
inaugural biogas plant
came on stream**
in September 2022 at Cruz
Alta (SP), in an investment of
R\$ 15 million

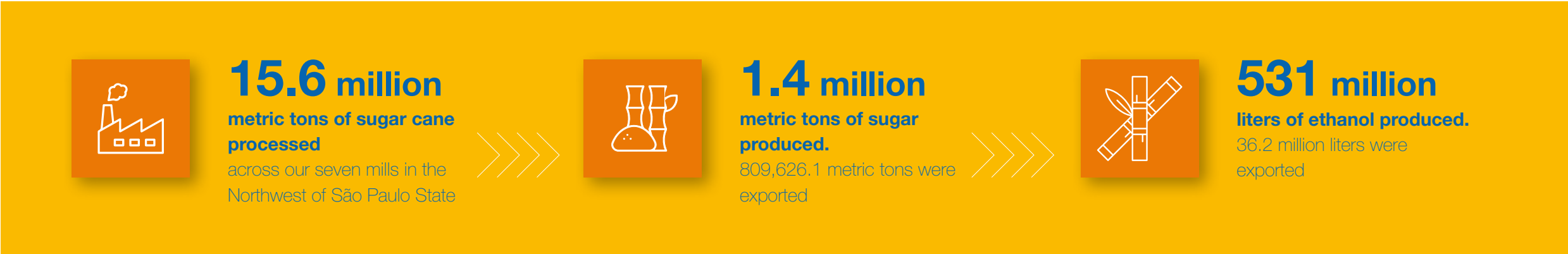


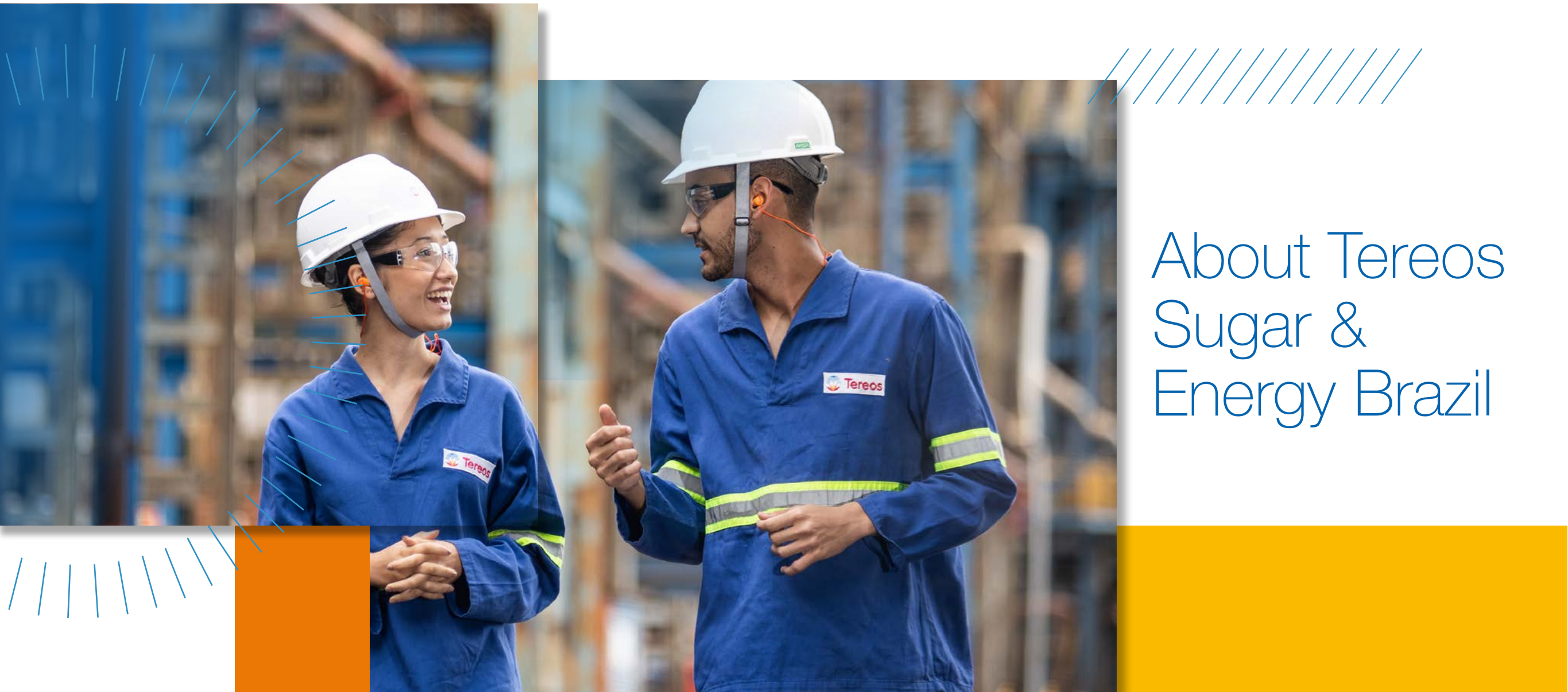
210
hectares of reforested
landscape
Increasing biodiversity
in the areas surrounding
our operations



**Certified by Great Place to
Work (GPTW)** in July 2022.
This certification recognizes
companies maintaining a best-
practice work environment and
organizational culture, in line with
our 2030 pledge

2021/2022 – Tereos Sugar & Energy Brazil





About Tereos Sugar & Energy Brazil



We are a cooperative at heart.

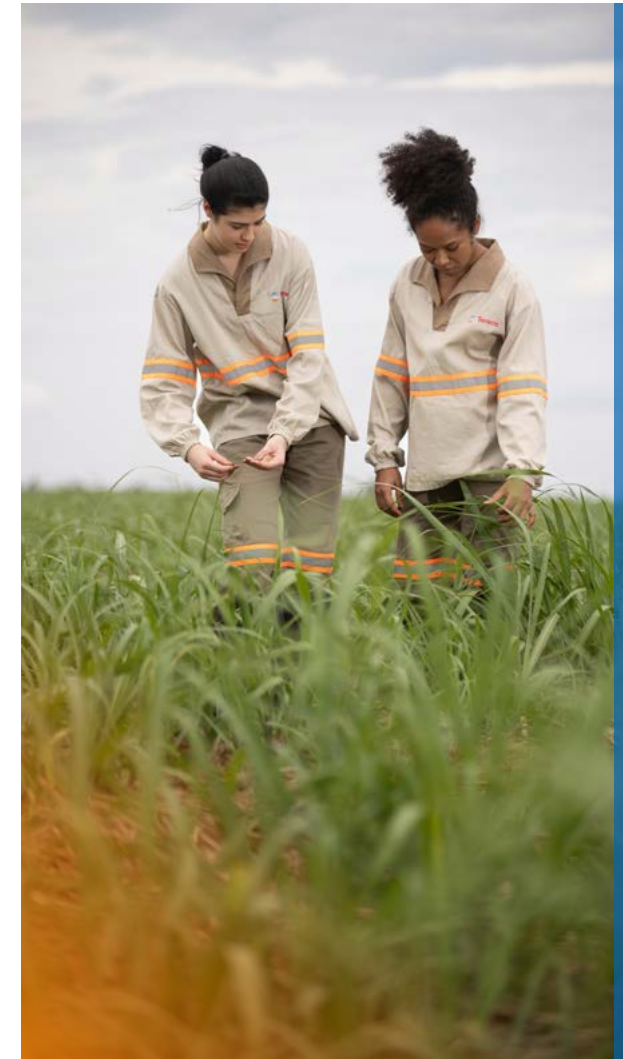
Our raw material is sugarcane.

Our passion for agriculture drives us to invest continuously in improvement.

Transformation and innovation are ingrained in our DNA.

Tereos has invested in sugarcane processing in Brazil for the last 22 years. We have a strong record of extracting maximum value from our raw material to produce high-quality products. More than just a player in the sugar and energy industry, we operate within a virtuous circular-economy model that places sustainability at the core of our activities (*see infographic on page 27*).

Tereos firmly believes that by operating responsibly, with well-defined goals for society and the environment, we can build a value chain that is sustainable in the long term, alongside our shareholders, customers, suppliers, employees and communities. We recognize that companies play a vital role in social and economic development, and in ensuring that the needs of the present will not compromise future generations to meet their own needs.



Inside our operations

Our product portfolio includes sugar, biofuel (ethanol), renewable electricity generated from sugarcane bagasse, and recently, biogas from vinasse (a byproduct of ethanol distillation). We cater to customers in the food and beverage, energy and animal nutrition industries, in both local and international markets (Venezuela, United States, Netherlands and Asia). [GRI 102-2, 102-6, 102-7](#)

Our commitment to being socially and environmentally responsible and constantly improving our operations management drives us to make sustainable choices that benefit both the business and the environment. By implementing efficient logistics, we are able to reduce our CO₂ emissions while optimizing exports. Our partnership with VLI, which operates the North-South and Center-Atlantic railroads and intermodal terminals, helped reduce Scope 3 greenhouse gas emissions compared to the previous crop year *(learn more on page 32)*.

This collaboration also enabled us to build two new sugar warehouses in Santos and Guará, in São Paulo State, with a combined capacity of 240,000 metric tons, supporting our growth in overseas sales. In December 2021, our terminals handled 955,000 metric tons of sugar, an increase of 30.6% from 731,000 metric tons in the previous crop year, before the new terminals opened.



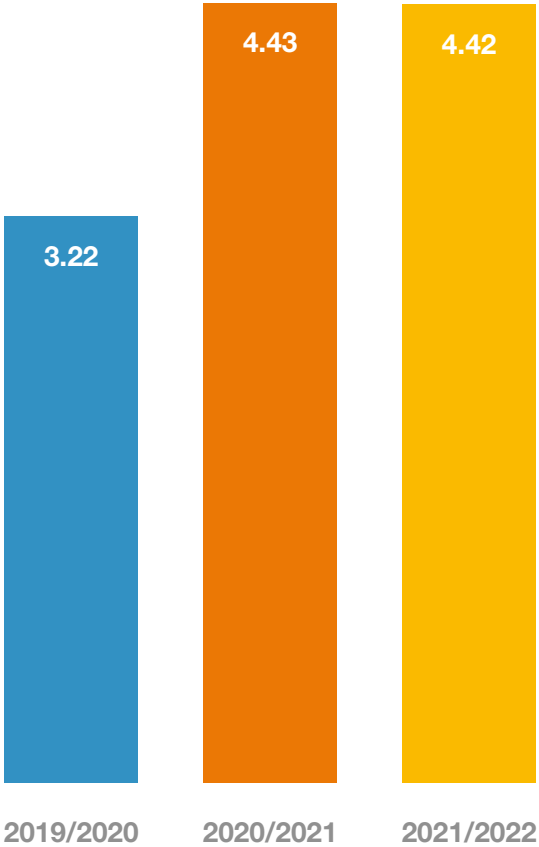
We invest continuously in our sugarcane operations to make the most of our raw materials while delivering high-quality products

Economic performance

Reflecting adverse weather conditions in the Central-Southern region of Brazil, where our plants are located, we processed 15.6 million metric tons of sugarcane in the 2021/2022 crop year, 25% less than the previous season and 20% less than average over the last five years. Drought and three episodes of frost affected crop yields and our financial performance in the crop year. As a result, we posted a net loss of R\$ 178 million, net revenue of R\$ 4.42 billion and adjusted EBITDA of R\$ 937 million, respectively decreasing 15%, 0.23% and 47% from the previous crop year.

To reduce exposure to Brazil's currently volatile ethanol market, we plan to expand our ethanol exports, taking advantage of our newly obtained certification to sell to California. In March 2022, we secured certification with the lowest carbon intensity score among Brazilian mills registered under California's new methodology. Other international markets being considered are Europe and Asia.

Direct economic value generated
in R\$ billion



Economic value distributed ¹ (R\$ billion)			
Distributed	2019/2020	2020/2021	2021/2022
Operating expenses	2.42	3.29	3.5
Employee salaries and benefits	0.52	0.55	0.56
Payments to providers of capital	0.26	0.21	0.35
Payments to government ¹	ND	ND	ND
Community investments ¹	ND	ND	ND
Total	3.20	4.05	4.42

¹ Information not available.

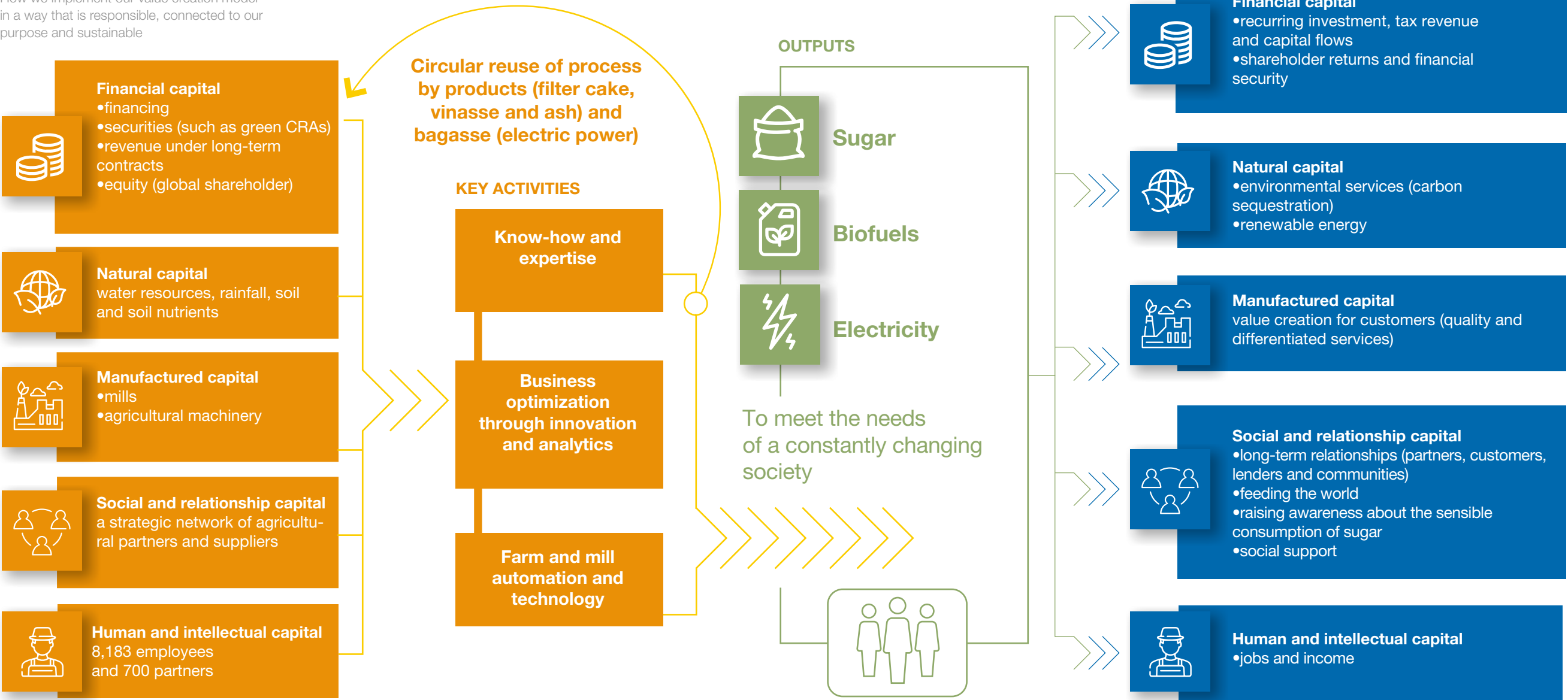
Economic value distributed ¹ (%)			
Distributed	2019/2020	2020/2021	2021/2022
Operating expenses	75.44	81.11	79.38
Employee salaries and benefits	16.30	13.61	12.73
Payments to providers of capital	8.26	5.28	7.89
Payments to government ¹	ND	ND	ND
Community investments ¹	ND	ND	ND
Total	100	100	100

¹ Information not available.

Economic value retained (R\$ billion)			
	2019/2020	2020/2021	2021/2022
"Direct economic value generated" less "Economic value distributed"	0.01	0.38	0.01

Business model

How we implement our value creation model in a way that is responsible, connected to our purpose and sustainable



Sustainability strategy

A sustainable agenda creates value for the business, generates positive long-term impact, and helps chart a clear path forward. Recognizing this, Tereos has increasingly incorporated ESG aspects into the Group's global strategy.

Our global sustainability roadmap is structured around five pillars: Sustainable agriculture; Protection of the environment; Positive industry; Responsible, healthy and quality nutrition; and Employees and local development. Read on to learn about our progress on KPIs for each pillar, in line with Tereos' global ambitions and our sustainability policy. Implementation of related initiatives is being tracked by specially designated tactical committees (*read more in Our Corporate Governance*).



Sustainable agriculture

Ambition: combine environmentally friendly agricultural practices with the economic viability of our growers' farms.

KPIs	Status
75% of agricultural raw materials assessed/certified as sustainable	42% of sugarcane certified (own farms: Bonsucro; partner farms: SAI platform)



Protection of the environment

Ambition: conserve biodiversity and minimize our waste by making the most of our agricultural raw materials.

KPIs	Status
Have at least one biodiversity protection project being carried out on each one of our mills	All sites have implemented beekeeping projects and three sites have spring recovery programs
Continue investing to make the best possible use of raw materials, in line with circular economy principles	We have continued to expand our precision vinasse application capabilities; as part of this, we have purchased seven new application units and have standardized and optimized their performance. Relatedly, we built our first vinasse biogas power plant in the crop year
Embed climate-change aspects and air emissions in decision-making.	We established a Tactical Climate Change Committee that supports the Executive Sustainability Committee in decision-making





Positive industry

Ambition: optimize water and energy consumption in our plants and reduce our carbon footprint.

KPIs	Status
Reduce water consumption in our operations by 21.5% from a 2017/2018 baseline	Water consumption reduced by 12% from baseline
Fuel 100% of our sugarcane fleet with biomethane	Biomethane production has not yet started, but our new biogas plant is now operational and tests are underway with trucks and tractors fueled by biomethane



Responsible, healthy and quality nutrition

Ambition: to become a leading partner for our customers in reformulation, and to develop education programs on the sensible consumption of sugar.

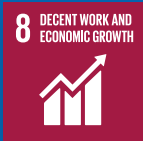
KPIs	Status
Ensure that our sugar packaging makes the general public aware of sensible consumption	Our sugar packaging provides nutritional facts and recommendations on daily intake values



Employees and local development

Ambition: protect the health and safety of our employees and partners. Promote diversity and equal opportunities and fight against discrimination. Help make the regions in which we operate more attractive.

KPIs	Status
17.5% women in leadership positions and 15% women in our overall workforce by 2030	6.4% women in leadership positions and 8.4% women in our overall workforce



Our material topics

GRI 102-21, 102-40, 102-42, 102-43, 102-44, 102-46, 102-47, 102-49

We built our first materiality matrix in the previous crop year in accordance with the Global Reporting Initiative (GRI) Standards, formalizing our sustainability journey. Our belief is that embedding sustainable development in our operations is the only ethical approach to doing business, within a model that reconciles economic growth, governance, environmental preservation and social inclusion.

In developing our materiality matrix, we surveyed our key internal and external stakeholders to identify eight topics affecting value creation in the short, medium and long term. The materiality assessment used a four-stage approach — identification, prioritization, analysis and validation — that included an assessment by top management and a review of social-related literature.

Each of the material topics was then mapped to the relevant GRI disclosures and Sustainable Development Goals (SDGs).



Environmental, social and governance topics are connected to our business strategy, particularly those concerning operations efficiency, advancing the circular economy in our operations, and taking care of our people and putting them at the center of our decisions. *(Read more on page 15)*

Material topics

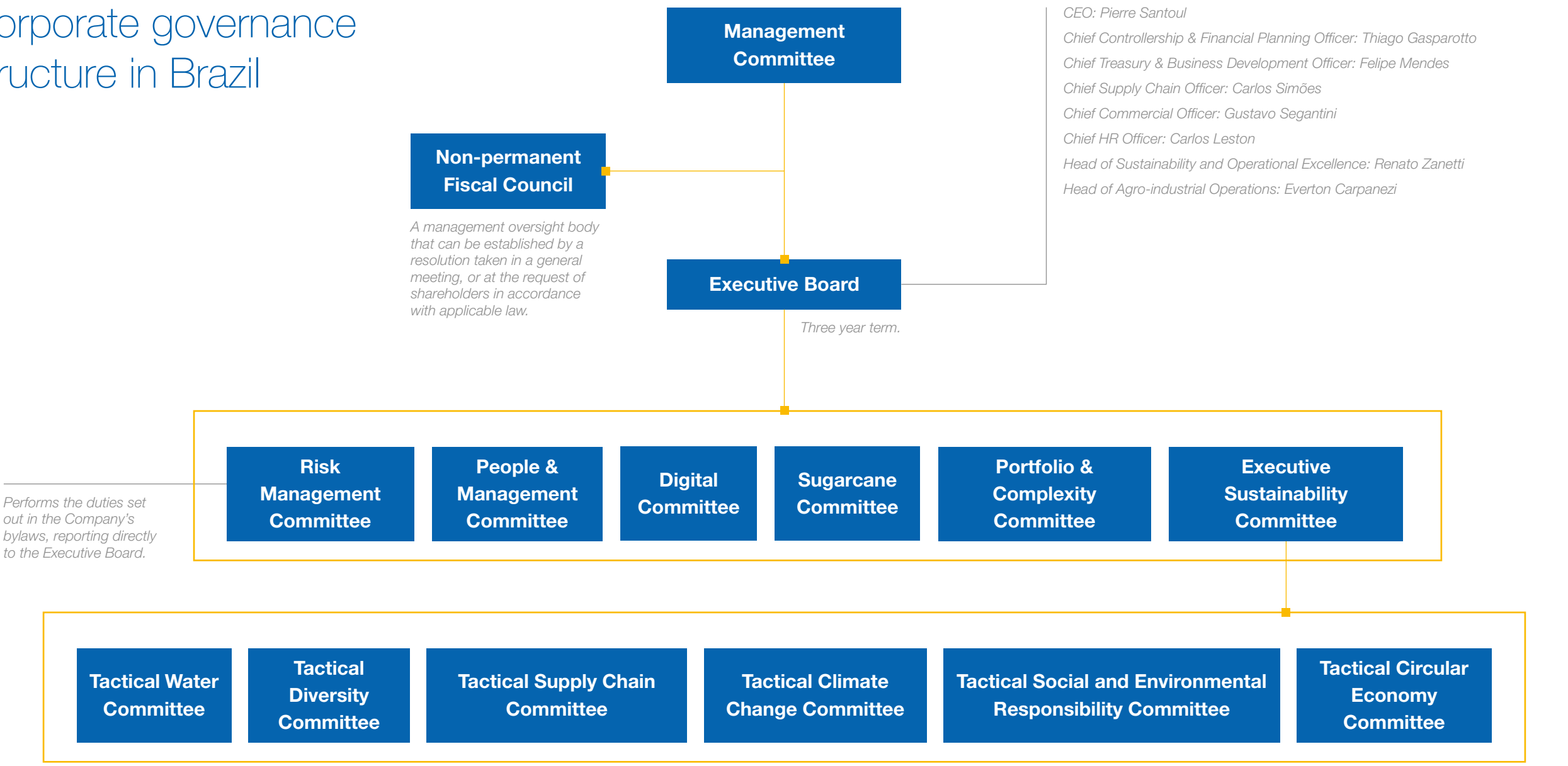
GRI 102-47, 103-1

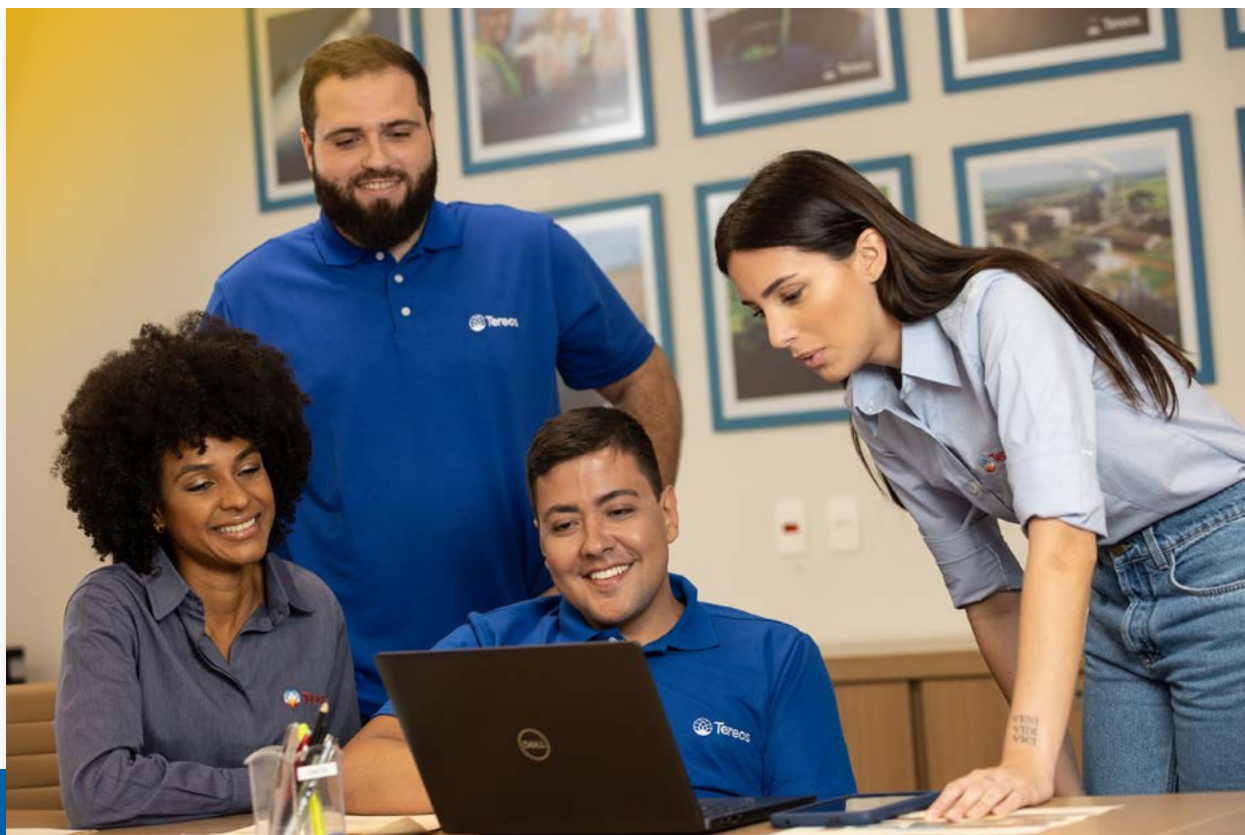
In line with the Sustainable Development Goals (SDGs), a global agenda adopted in 2015 by the member states of the United Nations (UN), we have identified the following material topics:

Material topic ¹	Description	GRI disclosure	SDG	2029/2030 Target
1. Water stewardship	Managing risks related to water withdrawals: ensuring water is used efficiently; managing water stress; permits and quality. Effluent management: promoting policies on water reuse, treatment and efficiency.	303-1, 303-2, 303-3, 303-4, 303-5	612	Reduce water withdrawals per metric ton of sugarcane by 21.5% from a 2017/2018 baseline.
2. Social and environmental certifications	Implementing good agricultural and operational practices, audited and certified against social and environmental standards; enhancing credit worthiness and developing institutional partnerships.	(SASB)- FB-AG-430 a.1	215	Maintain current certifications and obtain Great Place to Work certification. ✔ Target met.
3. Sustainable supply chain	Screening and selecting suppliers based on social and environmental criteria; implementing best practices for responsible sourcing in our supply chain.	102-9, 308-1, 308-2, 414-1	81215	Achieve 75% sustainably sourced raw materials.
4. Circular economy and operational efficiency	Managing resources and inputs; driving operational excellence, including responsible waste management and higher value capture throughout the sugarcane lifecycle; generating electricity from renewable sources.	302-1, 302-2, 302-3, 306-1, 306-2, 306-3, 306-4, 306-5	7815	Expand initiatives to use organic rather than mineral fertilization; replace 100% of diesel fuel used by sugarcane haul trucks with biomethane.
5. Climate change	Managing greenhouse gas (GHG) and pollutant emissions; managing climate-related risks and opportunities, including physical and transition risks (regulatory and carbon-tax risks); investing in climate-change mitigation and response initiatives; measuring progress on these initiatives and commitments.	201-2, 305-1, 305-2, 305-3, 305-4, 305-6, 305-7	713	Embed climate-change aspects and air emissions in decision-making.
6. Occupational health and safety	Implementing best practices in occupational health and safety; driving continuous improvement in safety management and reducing accidents and injuries; ensuring workers are provided with decent working conditions in our value chain.	403-1, 403-2, 403-3, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10	3	Enhance our occupational safety culture.
7. Diversity, inclusion and human rights	Ensuring gender equity and representation at all levels of the organization; promoting social inclusion; supporting public policies that promote equal opportunity without discrimination; engaging with and conducting human rights due diligence on our suppliers.	405-1, 405-2, 406-1, 408-1, 409-1, 412-1, 412-2	5810	17.5% women in leadership positions and 15% women in overall workforce.
8. Innovation and technology	Deploying remote crop monitoring technology; information security and data privacy; advancing research, development and innovation in product design; prioritizing renewable energy solutions and technologies; engaging in research and development on energy efficiency; innovation in services.	418-1	789	Achieve vertical integration in our value chain; improve forecasting for better-informed decisions, through cooperation and collaboration.

¹ The boundaries of impact for all eight topics are both within and outside the Company.

Corporate governance structure in Brazil





Risk management

GRI 102-11, 103-2, 103-3

Our approach to managing business risks is underpinned by compliance with applicable national and international laws and regulations. This approach is clearly articulated in our Code of Ethics and Good Practices Guide, which establish principles of integrity and ethics to ensure the long-term sustainability of the business.

Risk management is a key tool in strengthening governance, enhancing transparency and protecting our reputation and our business. We work to actively identify and assess potential business risks, and implement controls to mitigate their impact.

Our sustainability strategy cuts across our business operations, and guides our approach to identifying risks and opportunities

Ownership structure

Tereos Sugar & Energy Brazil is majority-owned by Brazilian holding company Tereos Internacional S.A., which holds a 57.27% equity interest, and minority-owned by Tereos Group company Tereos Participations S.A.S. (France), with a 42.73% interest.

Tereos Group is controlled by Tereos SCA, a French agricultural cooperative with approximately 12,000 cooperative members.

Ethics and compliance

GRI 102-16, 103-2, 103-3 | 418

We have a dedicated Compliance department tasked with identifying and addressing violations and risks, protecting our reputation and advancing good practices. This department is continuously improving our integrity program by implementing internal policies on ethics, integrity and communication, providing training on related topics and investigating concerns.

All new hires are required to sign a commitment to comply with our Code of Ethics. The Code underscores the importance of equal treatment, non-discrimination, respect for human rights and compliance with internal policies.

It also guides our approach to protecting customer privacy and the personal data of our employees, suppliers, contractors, customers, and other stakeholders in accordance with the Brazilian General Data Protection Regulation (BR GDPR; Law no. 13 709/2018). Customer privacy is also protected under our Privacy and Personal Data Protection Policy, via our website's Cookie and Pop up Management Panel and under our Cookie Policy.

Reported violations of these policies are addressed through a dedicated channel (contatolgpd@tereos.com). Tereos has designated Data Protection Officer (DPO) within the company as required by law. **GRI 418-1**

Whistleblowing Channel

Any reports on potential violations of our policies or applicable laws and regulations can be submitted to our Whistleblowing Channel, which is widely communicated and independently managed. The Whistleblowing Channel can be reached 24 hours per day by employees, contractors, business partners and other stakeholders. All reports are treated confidentially and impartially. Of the 250 reports received during the 2021/2022 crop year, 246 were investigated and resolved. **GRI 103-2**

Contact details:
Whistleblowing Channel
0800.424.1000
ouvidoria@tereos.com
<https://denuncia.iaudit.com.br/sistema/tereos>



Our Integrity Program is continuously evolving to ensure we consistently adopt best practices



Grievance mechanisms GRI 103-2		
2021/2022 Crop Year	Whistleblowing Channel ¹	Solvace System ¹
Number of grievances identified	250	438
Number of grievances resolved	246	438
Total number of grievances filed prior to the reporting period that were resolved during the reporting period	3	37

¹ This crop year we have included all reports received via the Whistleblowing Channel and not only those related to sustainability, as in the previous crop year. We also report the number of grievances received from customers via our Solvace System, which were not included in the previous crop year.

Respect for human dignity and diversity

GRI 103-2, 103-3 | 406 | 408 | 409 | 412 | 414

Tereos' Code of Ethics commits us to promoting diversity and inclusion, and fighting all forms of discrimination. We have enhanced our efforts in this regard through campaigns advertising our Whistleblowing Channel. All reports of discrimination are received and reviewed by our Diversity Committee, which investigated and resolved nine cases during the reporting period.

GRI 406-1

We are also committed respecting people's dignity and human rights, International Labor Organization (ILO) conventions and the UN Convention on the Rights of the Child. During the crop year we provided 76 hours of human rights training through our Tereos Academy platform, which employees can access at their convenience. GRI 412-1, 412-2

Adherence to these principles is ensured through our Whistleblowing Channel and by our procurement policy, which applies to all contracts with suppliers. Our business partners sign a Code of Ethics and Supplier Social Responsibility Code, which include provisions on employment, health and safety, environmental protection, anti-corruption, fraud and money laundering, land grabbing and conflicts of interest.





Solutions that deliver food and energy

GRI 103-2, 103-3 | 302 | 308

The success of our business is tied to the land, the climate, and people. Sustainability is at the core of our strategy and we recognize that improving our supply chain with this mindset is an ongoing effort. We are passionate about transforming agricultural practices. Through continuous investments and a focus on process excellence, we are developing solutions to build a more sustainable economy with less waste and reduced greenhouse gas emissions. This is our approach to processing sugarcane into sugar, biofuels (ethanol and biomethane) and electricity.

We currently have nearly 300,000 hectares of sugarcane fields, including 173,000 hectares owned by our company and 122,000 hectares by partner growers. More than 49% of our raw materials are supplied by 700 local partner sugarcane growers. Our close collaboration with them is key to the success and sustainability of our business. We work to create value, together.

In 2020 we set up a pre-sprouted seedling (PSS) biofactory in Guaíra (SP), to accelerate production of

new varieties with superior phytosanitary and genetic quality. The new biofactory—the largest in the industry—has been developed as part of our plan to improve sugarcane yields, alongside other initiatives such as crop management methods and technology-enabled harvesting.

Due to unfavorable weather conditions—a combination of drought and frost—the 2021/2022 crop year (ending in March 2022) closed with a sugarcane crush of 15.6 million metric tons, down 25% on the previous crop year. This is 20% lower than the average over the last five years. We ended the crop year with a product mix of 62% sugar (1.4 million metric tons) and 38% ethanol (531 million liters). In the 2022/2023 crop year our total crush volume recovered, increasing by 11%.

We are constantly seeking innovative solutions that meet society's needs and make the most of our raw materials. For example, we sell dry yeast to the animal feed sector through a partnership with ICC. The yeast, produced at our Mandu facility in Guaíra (SP), is derived from drying



the residual yeast cream from the fermentation process in ethanol production. It is rich in amino acids, vitamins and proteins and thus ideally suited as an animal feed ingredient. In 2021, Tereos produced 3,615.974 metric tons of the product.



Bioelectricity

We generate clean electricity from sugarcane bagasse (biomass). In the 2021/2022 crop year we generated 1,209 GWh of electricity, compared to 1,531 GWh in the previous crop year. Due to the drought and the resulting reduction in raw material for crushing, our electricity exports to the grid fell by 39% compared to the previous season.

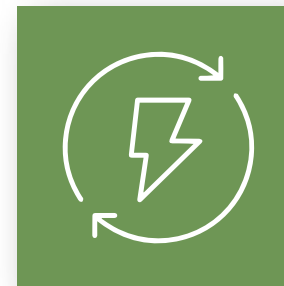
We sell our electricity both in the free and in the regulated contracting environment, either via government-mediated auctions or directly to end consumers. Our power export capacity is up to 1,454 GWh per year based on the capacity of the power plants at our mills. However, power output is limited by our sugarcane crush volume, as we generate electricity by burning a byproduct from sugar cane processing, known as bagasse.

We have invested in new and efficient technologies for generating electricity. For example, in 2022 we started operation of our first biogas power plant (running on biogas produced by biodigesting vinasse) at our Cruz Alta facility in Olímpia/SP, with a generation capacity 1 MW, in an investment of R\$ 15 million.

The Cruz Alta facility produces a vinasse byproduct that is particularly high in organic matter, and was therefore selected to host the inaugural power plant. The facility is also ideally located from a logistics standpoint.

The entire output is supplied to commercial facilities in the state through a partnership with Lemon Energia, a marketplace connecting sustainable energy generators to small and medium-sized businesses. Approximately 85 small businesses, or the equivalent of 1,000 residential customers, are currently being supplied with electricity from the plant.

The facility is also preparing to produce biomethane, a renewable fuel derived from biogas, to fuel our vehicles. Our goal is for 100% of our sugarcane transportation fleet—around 220 vehicles—to run on biofuel. Our next steps will be to adapt the facility and build a fueling station, as well as increasing the installed production capacity, with a goal of gradually phasing out the use of diesel in our fleet by 2030.



The success of our business is tied to the land, the climate, people and transforming agricultural practices

Reconciling growth with social and environmental responsibility

We are fully committed to sustainable agriculture, and work towards implementing and promoting environmentally responsible farming practices across our value chain. We share insights, challenges and progress, and use performance metrics to track and manage environmental and social issues. These practices have earned us recognition from organizations such as Bonsucro, one of the leading sustainability initiatives in the sugar and energy industry, and EcoVadis, a sustainability rating platform. Additionally, some of our partner suppliers have also been assessed via the SAI/FSA platform. Through implementing circular economy principles, our production process creates a virtuous cycle, utilizing nearly 100% of our raw materials and their resulting by-products.

This commitment to sustainable practices gives us access to unique finance opportunities for future ventures. To date, Tereos has successfully raised over R\$ 2.3 billion in green finance across five transactions which currently represent approximately 50% of our gross debt.

Under our two sustainability-linked loan agreements, we have pledged to meet four key targets. In addition to reducing greenhouse gas emissions and water withdrawals and increasing the percentage of certified cane used in our operations, we have now added a social indicator related to health and safety (total recordable incident rate) to our finance facility.

Business decisions are more effective when guided by a commitment to being socially and environmentally responsible



In a circular economy, nothing goes to waste

Recognizing that raw materials are scarce and valuable, we are constantly scanning our entire value chain for value-adding opportunities. Tereos is dedicated to sustainable agricultural practices and makes full use of its raw materials, ensuring that nothing is wasted but is instead transformed into valuable products.

Our continuous improvement process works toward two main priorities: reducing water and energy consumption and developing new ways to reuse non-food waste in our facilities. To achieve these objectives, we have placed the circular economy at the center of our efforts—our industrial waste is converted into electricity, organic fertilizers, and animal feed, creating a positive industry model.

After extracting juice from sugarcane to produce sugar and ethanol (a renewable biofuel), the bagasse byproduct is used to generate renewable electricity (cogeneration). Vinasse, another byproduct from ethanol production, is directed to a biodigester to produce biogas and the residual material is used for fertigation of our sugarcane fields. We also use filter cake (another byproduct) as an organic fertilizer, which helps reduce

greenhouse gas emissions by minimizing the need for nitrogen fertilizers.

All Group operations currently employ localized vinasse application methods that allow for greater precision in application and flow control, improving our agricultural operations. We are investing around R\$ 23.5 million in a project to expand the use of precision vinasse application in our sugarcane fields, expanding the coverage area by around 40,000 hectares. In our agricultural operations, our focus in the crop year was on standardizing and optimizing application equipment. We also implemented improvements to our vinasse loading and pumping infrastructure, as well as strategies to reduce logistical bottlenecks during transportation. Additionally, we expanded our vinasse application systems by acquiring seven new application units, bringing the total number to 26 group-wide.

The biogas we produce can be used either to generate renewable electricity, by combusting the biogas in generators, or to produce biomethane, a renewable biofuel that can substitute diesel to reduce emissions. In the process of purifying biogas, elemental sulfur is

removed that could potentially be used as an organic fertilizer in the future.

Sugarcane is a versatile crop that can be used as a raw material for sugar production as well as a renewable source of fuel and energy, with an impressive utilization rate of virtually 100%.

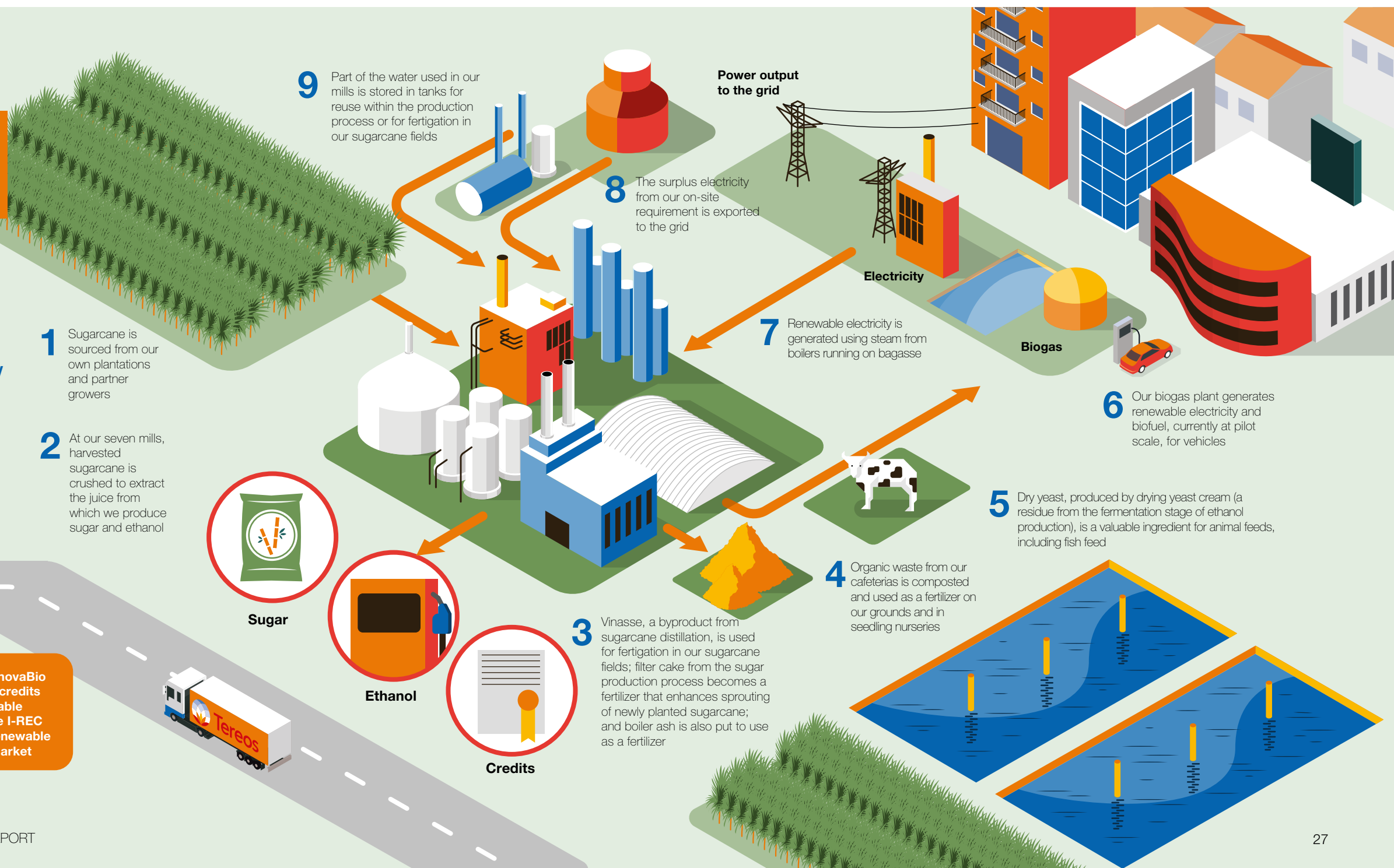


We aim to be recognized for our virtuous circular-economy model

Circular economy

Tereos pursues growth within a sustainable model that makes the most of our agricultural raw materials, and makes sustainability central to our activities

Tereos is certified by Brazil's RenovaBio program to sell decarbonization credits (CBios), by Bonsucro for sustainable sugarcane production, and to the I-REC standard for eligibility to issue renewable energy credits in the voluntary market



Waste management

GRI 103-2, 103-3 | 306 | 306-2

Under our Sustainability Policy, we have committed to implement waste management practices that optimize waste segregation. All areas of our operations—including industrial, administrative and supporting areas (laboratory, cafeteria, etc.)—have designated waste bins for separating materials. A contractor is responsible for collecting and sorting the waste materials at our waste centers and scrapyards. Sorted materials are sent to partner companies for compliant disposal, such as co-processing, recycling, refining, composting or landfilling. **GRI 306-1**

We work to minimize pollution through reverse logistics, particularly for IBC containers, pesticide packaging, batteries, and consumer product packaging made of plastic and paper. Our reverse logistics operations are managed by specialized firms and are compliant with the Brazilian Solid Waste Policy (PNRS).

We have also built on-site composting facilities for organic waste generated in our cafeterias. The compost is used in our grounds and sapling nurseries. Boiler ash waste is mixed with filter cake at on-site yards and used

for fertilizing our sugarcane plantations. We track weekly waste shipments to disposal via a partner firm. Tereos has committed to compliantly disposing of 100% of the waste we produce, while reducing the generation of hazardous waste.

Waste management improves the utilization of raw materials and minimizes environmental impacts

Waste generated (t) GRI 306-3				
Categories	Type	2019/2020	2020/2021	2021/2022
Category A ¹	Hazardous	477.54	534.30	550.23
Category B ²	Non-hazardous	362.77	316.73	370.24
Category C ³	Non-hazardous	3,268.45	3,028.20	3,286.43
Category D ⁴	Non-hazardous	0	36.82	91.32
Category E ⁵	Non-hazardous	1,121.14	2479.75	1,744.95
Total		5,229.90	6,395.79	6,043.17

¹ Category A: Class 1 hazardous waste – We have optimized annual waste generation, and improved sorting and disposal of water-oil separator waste and waste treatment plant sludge;

² Category B: Landfilling – We maintained our waste management programs to optimize the sorting and salvaging of recyclable, recoverable (composting) and reusable waste materials;

³ Category C: Third parties (metal scrap) - We continued our program, launched in 2018, to decommission inactive and obsolete assets. Dismantled materials were sent to a scrap metal salvaging company along with metal scrap from inter-harvest plant maintenance activities;

⁴ Category D: Recovery (composting) – As employees gradually returned to on-site work, the number of meals served increased and, consequently, the amount of organic waste sent for composting;

⁵ Category E: Third party (Recyclables) – We maintained our waste management programs to optimize the sorting and salvaging of recyclable and reusable waste materials.



Total waste directed to disposal, by operation, in metric tons (t) GRI 306-5

	2019/2020			2020/2021			2021/2022		
	Onsite	Offsite	Total	Onsite	Offsite	Total	Onsite	Offsite	Total
Nonhazardous waste									
Landfilling	0	362.77	362.77	0	316.73	316.73	0	370.24	370.24
Total	0	362.77	362.77	0	316.73	316.73	0	370.24	370.24
Total waste directed to disposal	0	362.77	362.77	0	316.73	316.73	0	370.24	370.24

Onsite = Within the organization
Offsite = Outside the organization



We work to minimize pollution through reverse logistics, in accordance with the Brazilian Solid Waste Policy (PNRS)

Reducing water consumption is a daily effort

GRI 103-2, 103-3 | 303 | 303-1

Water plays a core role in sustainable development as a limited resource that is essential for our production process. Tereos is actively working to increase our water efficiency across all of our operations. We have set water targets by 2030 that include a 21.5% reduction in water withdrawals per metric ton of sugarcane from a 2017/2018 crop-year baseline. To meet these targets, we are investing in water reuse improvements and have established a tactical committee (supporting the Executive Sustainability Committee) to oversee the management of water resources across all of our operations.

Our operations use water from both underground and surface sources, which is then treated for use in both our industrial processes and for human consumption. We successfully reduced our water withdrawals by 33% in the 2021/2022 crop year compared to 2020/2021, through a range of projects aimed at reducing water consumption in our mill processes. Water withdrawal intensity was 0.677 m³/metric ton of sugarcane, which is below our target of 0.739 m³/metric ton of sugarcane.

GRI 303-3

We support and implement projects to protect and restore protected areas and springs and are active members of River Basin Committees where we follow and provide inputs into discussions on water management. The sub-drainage basins in which we operate include Córrego do Cervo, Rio Pardo, Ribeirão do Turvo, Córrego do Capim, Rio Grande, Rio Turvo, Ribeirãozinho and Rio Preto.

Tereos' Sustainability Policy includes a commitment to effectively managing the effluents from our operations. During the 2021/2022 crop year we allocated R\$ 1.8 million to effluent monitoring. All of our facilities have the environmental permits required to discharge effluents into water bodies in compliance with requirements issued by the national environmental regulator, CONAMA.

Municipal wastewater is treated at sewage treatment plants and plant wastewater (residual water and vinasse) is mixed and reused as fertilizer in our sugarcane fields, after it is tested for compliance with established standards. **GRI 303-2**



Water withdrawals by source¹ (thousand liters) **GRI 303-3**

	2019/2020	2020/2021	2021/2022
Surface water / Freshwater ²	11,626.01	12,075.01	7,690.19
Groundwater / Freshwater ²	4,272.41	3,922.21	2,903.39
Total	15,898.42	15,997.22	10,593.58

¹ Data compiled from the GATEC system. No water is withdrawn in known areas with water stress.

² ≤1000 mg/l of Total Dissolved Solids.

Water — and effluent — related projects to reduce consumption and improve processes are discussed within water subcommittees in each of our operations.



Commitment to a low carbon economy

GRI 103-2, 103-3 | 305, 305-1

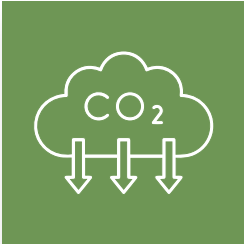
Climate change is high on our agenda as it directly affects our business and industry. This makes it essential that we manage and reduce our greenhouse gas emissions and air pollutants, identify risks and opportunities related to climate change.

We work to ensure compliance with recommendations and standards on climate change such as those issued by the Intergovernmental Panel on Climate Change (IPCC), the Brazilian GHG Protocol Program (which we use as a basis for our annual emissions inventories) and ISO 14064-1. Tereos has raised a series of green finance loans linked to a target of reducing emissions intensity (kgCO₂eq per metric ton of sugarcane) by 4% per year by 2025.

In support of this goal, we are implementing a variety of initiatives such as replacing nitrogen fertilizers with vinasse, organic compost and organic alternatives in our

sugarcane operations. In addition, we are experimenting with biomethane to fuel our truck fleet as we phase out diesel by 2030, significantly reducing emissions.

Tereos has posted annual reductions in absolute emissions as a result of these mitigation initiatives. In the 2021/2022 crop year our sugarcane crush volumes were significantly reduced due to an extended drought in Brazil's Southeast. This reduced demand for farm machinery fuel and shortened the harvest season, directly affecting our absolute greenhouse gas emissions. All forms of emissions were affected, especially in electricity, heat, and steam generation, and in transportation.



We aim to minimize impacts on the environment while supporting jobs and local development



Direct greenhouse emissions¹ – Scope 1 (tCO₂ equivalent) GRI 305-1

	2019/2020	2020/2021	2021/2022
Production of electricity, heat or steam	88,643.14	104,178.33	75,408.35
Physical-chemical processing	182,758.10	181,598.76	151,198.83
Transportation of materials, products, waste, employees and passengers	97,271.79	109,131.80	84,145.66
Fugitive emissions	877.28	1,018.33	503.38
Total gross CO₂ emissions	369,550.32	395,927.24	311,256.22

¹ Source of factors: Brazilian GHG Protocol Program / Consolidation approach for emissions: Operational control. The main standards we have relied on are: IPCC (Intergovernmental Panel on Climate Change, 2006); ABNT NBR ISO 14064-1: 2007; GHG Protocol.

In July 2022 we determined that the company's business activities should be reclassified from "Residential, Agriculture, Forestry or Fishing" to "Manufacturing and Energy". This resulted in a change in the CH₄ emission factor for bagasse combustion in boilers (Scope 1 point emissions). Accordingly, our Scope 1 emissions in the previous crop year have been restated from 742,050 tCO₂e to 395,927 tCO₂e. Our total emissions (scope 1, 2 and 3) were restated from 955,296 tCO₂e to 609,173 tCO₂e.

Biogenic CO₂¹ emissions – Scope 1 (tCO₂ equivalent) GRI 305-1

2019/2020	2020/2021	2021/2022
4,240,335.72	5,377,321.39	3,882,033.40

¹ The gases included in this disclosure were: CO₂, CH₄ and N₂O. Emission factors and global warming potential (GWP) values were sourced from the Brazilian GHG Protocol Program; the selected baseline year was 2018, the year of our first audited inventory, in which our total emissions were 752,993.28 t CO₂ equivalent. The consolidation approach we used for emissions is operational control. The main standards we have relied on are: IPCC (Intergovernmental Panel on Climate Change, 2006); ABNT NBR ISO 14064-1: 2007; GHG Protocol.

Energy indirect (Scope 2) GHG emissions (tCO₂ equivalent) GRI 305-2

2019/2020	2020/2021	2021/2022
1,073.93	783.10	2,291.68

¹ Gases included in disclosures: CO₂ – Carbon Dioxide. Total baseline (2018) emissions: 2,543.10 t CO₂ equivalent. The consolidation approach we used for emissions is operational control. The main standards we have relied on are: IPCC (Intergovernmental Panel on Climate Change, 2006); ABNT NBR ISO 14064-1: 2007; GHG Protocol.



We work to reduce our absolute emissions each year through mitigation initiatives





Other indirect (Scope 3) greenhouse gas emissions¹ – Scope 3 (tCO₂ equivalent) GRI 305-3

Upstream	2020/2021	2021/2022
Goods and services purchased	38,333.83	36,931.2
Fuel — and energy — related activities	26,360.18	19,586.31
Transportation and distribution (upstream)	22,000.91	18,592.3
Waste generated in operations	338.48	880.32
Business travel	20.00	63.4
Commuting	5,613.34	1,540.71
Downstream		
Transportation and distribution (downstream)	119,796.23	102,593.63
Investments	-	9,589.98
Total	212,462.97	189,777.85

¹ Brazilian GHG Protocol Program. The main standards we have relied on are: IPCC (Intergovernmental Panel on Climate Change, 2006); ABNT NBR ISO 14064-1: 2007; GHG Protocol.

Biogenic CO₂¹ emissions (tCO₂ equivalent) GRI 305-3

	2020/2021	2021/2022
	12,980.96	9,517.80

¹ Our transportation and distribution (upstream and downstream) emissions were reduced as a result of lower sugarcane haulage and, consequently, product (sugar and ethanol) distribution volumes. Gases included in disclosures: CO₂ – Carbon Dioxide. Total baseline (2020) emissions: 212,462.96 t CO₂ equivalent. The main standards we have relied on are: IPCC (Intergovernmental Panel on Climate Change, 2006); ABNT NBR ISO 14064-1: 2007; GHG Protocol.

Greenhouse gas emissions intensity¹ (tCO₂ equivalent) GRI 305-4

	2019/2020	2020/2021	2021/2022
Total GHG emissions	563,656.25	609,173.30	503,325.75
tCO ₂ equivalent/metric ton of sugarcane	0.030	0.029	0.032

¹ The reported reductions in Scope 1 emissions are partly due to Tereos' initiatives and partly due to sugarcane crop failure in 2021/2022, which reduced the company's GHG emissions intensity in the crop year. The denominator used to calculate emissions intensity was metric tons of sugar cane processed: 2019 = 18,803,004; 2020 = 21,077,907; 2021=15,642,448. The gases included in this disclosure were: CO₂, CH₄ and N₂O. The main standards we have relied on are: IPCC (Intergovernmental Panel on Climate Change, 2006); ABNT NBR ISO 14064-1: 2007; GHG Protocol. In July 2022 we determined that the company's business activities should be reclassified from "Residential, Agriculture, Forestry or Fishing" to "Manufacturing and Energy". This resulted in a change in the CH₄ emission factor for bagasse combustion in boilers (Scope 1 point emissions). Accordingly, our Scope 1 emissions in the previous crop year have been restated from 742,050 tCO₂e to 395,927 tCO₂e. Our total emissions (scope 1, 2 and 3) were restated from 955,296 tCO₂e to 609,173 tCO₂e.

Significant air emissions¹ (t) GRI 305-7

	2019/2020	2020/2021	2021/2022
NOx	2,541.87	2,029.80	864.41
SOx	477.08	390.96	540.79
Particulate Matter (PM)	5,168.26	3,954.82	1,602.42

¹ Source of emissions factors: sugarcane bagasse-fueled boilers. The methods used to calculate significant air emissions are in line with internal operational procedures for air emissions (POPATM 001, 002, 003, 004, 005, 008 and 009) and technical guidelines issued by the local environmental authority, CETESB (L9.221, L9.222, L9.223, L9.224, L9.228m and L9.229).



We produce renewable electricity from sugarcane bagasse

Investing in renewables



We are energy self-sufficient, producing enough electricity from sugarcane bagasse to power all our facilities. Since 2012, we have donated part of our surplus output to partner organizations, such as Hospital de Amor in Barretos, São Paulo. We sell surplus electricity both in the Free Contracting Environment (ACL)—directly to end consumers—and in the Regulated Contracting Environment (ACR), such as in government-organized auctions. We have also invested in renewable energy certification, such as the Green Energy Label awarded by the Brazilian Sugarcane Industry Association (UNICA) and, in 2021, our certification against the International REC (I-REC) Standard, a global system for renewable energy certificates.

Our cogeneration plants are located within the service area of local utility CPFL Paulista. In total, we have a capacity to export 1,454 GWh per year. In consuming and producing electricity, we ensure compliance with all power-sector regulations and standards issued by the Brazilian Ministry of Mining and Energy (MME), the power sector regulator (ANEEL), the National Grid Operator (ONS) and the Electric Energy Trading Chamber (CCEE), which is responsible for accounting and financial settlement in the spot electricity market.

In the 2021/2022 cycle, due to a shorter sugarcane harvest season, our mills spent less time generating electricity through cogeneration. As a result, we were required to purchase more electricity than in the previous season during the inter-harvest period. The higher Scope 2 emissions as a result were still lower compared to the previous crop year. [GRI 305-2](#)

Energy consumption within the organization¹

GRI 302-1

Fuel consumption from non-renewable sources (GJ) GRI 302-1

	2019/2020	2020/2021	2021/2022
Diesel ²	1,281,002.00	1,434,346.00	909,235.2
Gasoline ³	1,139.21	739.00	1,131.2
LPG ⁴	-	-	3,011.82
Total	1,282,141.21	1,435,085.00	913,378.22

¹ All data were taken from Tereos' enterprise planning and accounting management systems (GAtec and SAP); information on purchased electricity was derived from the CCEE and CPFL systems.

² Diesel consumed in agricultural, industrial, administrative and logistics activities (company fleet + stationary engines and diesel engine pump sets).

³ Gasoline consumed in agricultural, industrial, administrative and logistics activities (company fleet).

⁴ LPG used as forklift fuel and as cooking gas in cafeterias.

Fuel consumption from renewable sources (GJ) GRI 302-1

	2019/2020	2020/2021	2021/2022
Sugarcane bagasse ¹	37,638,275.62	41,360,258.91	37,827,548.01
Ethanol ²	3,9704.00	4,7641.00	49,943.71
Biodiesel ³	13,2806.00	182,500.00	121,412.43
Total	37,810,785.62	41,590,399.91	37,998,904.15

¹ Sugarcane bagasse used as boiler fuel to generate steam.

² Ethanol used as fuel in agricultural, industrial, administrative and logistics activities (company fleet).

³ Biodiesel used as fuel in agricultural, industrial, administrative and logistics activities (company fleet + stationary engines and diesel engine pump sets).

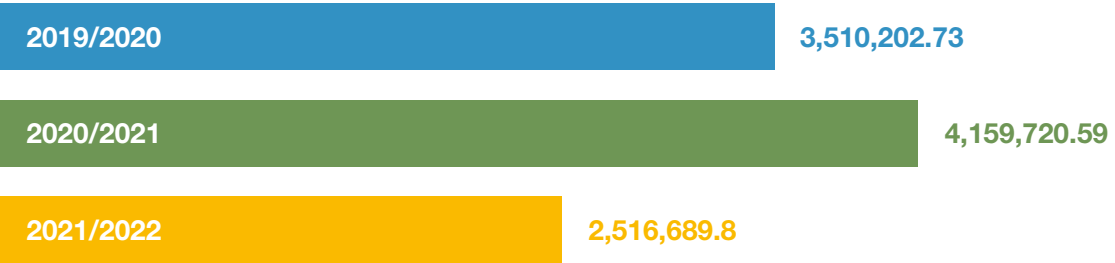


In the last ten years we have donated part of our surplus output to Hospital de Amor in Barretos, São Paulo



Electricity sold

(GJ) GRI 302-1



Energy consumed (GJ) GRI 302-1

	2019/2020	2020/2021	2021/2022
Electricity	2,093,081.69	2,251,311.77	1,533,779.18
Heating	29,026,418.83	33,597,289.27	0
Steam	34,307,811.20	37,062,542.98	26,687,752.23
Total	65,427,311.72	72,911,144.02	28,221,531.41

Total energy consumed (GJ) GRI 302-1

	2019/2020	2020/2021	2021/2022
Nonrenewable fuels	1,282,141.21	1,435,085.00	913,378.22
Renewable fuels	37,810,785.62	41,590,399.91	37,998,904.15
Energy consumed	36,400,892.89	39,313,854.75	28,221,531.41
Electricity sold	3,510,202.73	4,159,720.59	2,516,689.8
Total	65,427,311.72	72,911,144.02	69,650,503.58

¹ Conversion factors for specific mass and Lower Calorific Value were taken from the Brazilian Energy Report (Balanço Energético Nacional) 2022, for year 2021, published by Empresa de Pesquisa Energética (EPE).



Energy intensity¹ (GJ) GRI 302-3

	2019/2020	2020/2021	2021/2022
Within the organization ²	3.83	3.71	4.29
Outside the organization ³	0.03	0.03	0.02
Total	3.86	3.74	4.31

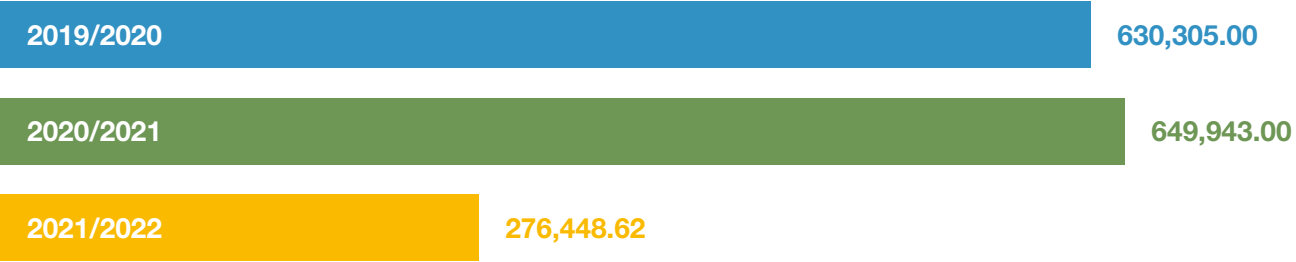
¹ Energy intensity within the organization: fuel, electricity, steam. Energy intensity outside the organization: fuel

² Consumption within the organization: includes all fossil and renewable fuels used in our operations, including both mobile and stationary combustion sources.
Total electricity consumed is also accounted for using the following rationale: Electricity Produced + Purchase Electricity – Electricity Sold to the Grid.
The steam consumed in our production process has also been accounted for. The entire steam requirement in our production process is generated by burning sugarcane bagasse in boilers during the harvest season; sugarcane bagasse is the only source of heating in our production process.

³ Consumption outside the organization: this includes third-party consumption of fossil and renewable fuels in agricultural, industrial and administrative operations.

Energy consumed outside the organization¹

(GJ) GRI 302-2



¹ Energy consumed outside the organization includes fossil and renewable fuels used by third-party fleets in agricultural, industrial, administrative and logistics operations.

Sustainable supply chain

GRI 102-9, 103-2, 103-3 | 204 | 408 | 409

We have an extensive supply chain with around 3,500 suppliers, covering the entire spectrum from raw materials such as sugarcane to agricultural, industrial and general supplies. Most of our suppliers are located in the northwest region of São Paulo State, where our operations are based. Our total supplier spend amounts to around R\$ 5 billion, which includes materials, sugarcane and labor for both our field and mill operations. Tereos' procurement policy is designed to ensure that our purchasing practices are sustainable in the long term.

All supplier contracts contain provisions on human rights; child, degrading or forced labor; and anti-corruption, labor and social security requirements. Our Social Responsibility Code provides suppliers with guidance on complying with environmental laws and regulations to help them minimize impacts from their activities. [GRI 408-1, 409-1](#)

Around 49% of the sugarcane (7.6 million metric tons) we process comes from approximately 700 partner growers. To help strengthen our relationship with partner growers, we have launched a program, called *Amigo Produtor*, that is based on six key levers: safety, technical support, partner care, services, purchasing and sustainability. Through this program, we provide growers with advice on planting, harvesting, crop management and product quality.



Our *Amigo Produtor* program helps strengthen our relationship with partner growers

A sister program, called *Amigo Produtor Sustentável (APS)*, provides sustainability-related support including advice on environmental and labor legislation, encouraging farmers to adopt sustainable agricultural practices. On goal of the program is to assist partner growers in third-party Farm Sustainability Assessments (FSA) within the global SAI (Sustainable Agriculture Initiative) Platform. In 2021, five suppliers achieved silver or gold level equivalence. Suppliers assessed against the SAI Platform standard are reassessed every three years.

The program also offers growers services at lower costs, special perks at our industrial facilities, special arrangements with cooperatives, among other benefits.

As part of our efforts to build a strong partner network, our Supplier Relationship Management (SRM) department, working with the Procurement and Operations departments, has developed a Supplier Management Program that supports transparency, development and innovation, as well as fostering a collaborative environment and building closer engagement with our partners.

Proportion of spending on locally-based suppliers¹ GRI 204-1

Operation	2021/2022
Supplier spend (R\$ billion)	5
Spend on local suppliers (R\$ billion)	4.5
% budget spent on local suppliers ¹	90

¹ Tereos' geographical definition of "local" is the northwestern region of São Paulo State. This disclosure was not reported in previous crop years.



90% of our supplier budget is spent on local suppliers

Recognition for sustainable agricultural practices

GRI 102-12

Certifications attest that we use responsible practices in our operations—in accordance with local and international laws and regulations—while respecting labor and human rights. They provide assurance that our processes and management practices support environmentally compliant, socially beneficial and economically feasible agricultural operations.





Bonsucro: a certification program created by a multistakeholder organization with the aim of reducing environmental and social impacts from sugarcane production. We increased the percentage of Bonsucro-certified sugarcane from 29% in the 2020/2021 crop year to 41% in the 2021/2022 crop year, out of our total sugarcane crush.

Bonsucro EU RED: certification attesting that ethanol or other products are compliant with the EU Renewable Energy Directive (RED – 2009/28/EC) and Fuel Quality Directive (FQD – 2009/30/EC). This certification is required to market our ethanol in the European Union.

Farm Sustainability Assessment (FSA-SAI Platform): an independent organization that regularly assesses the sustainability of our agricultural raw materials along three lines: environmental protection and economic and social management.

ISO 22000 (Food safety): sets out the requirements for food safety management systems, covering all organizations in the food chain from harvest to dinner table.

FSSC 22000 (Food Safety System Certification): certification for food safety along a product's production and distribution chain.

Kosher: certification attesting that processes and products are compliant with Jewish dietary law.

Halal: certification attesting that processes and products are compliant with Islamic dietary law.

Organic: certification attesting that processes and products are compliant with regulatory requirements issued by the Brazilian Ministry of Agriculture and Food Supply (MAPA) and the requirements of the certifying organization.

GMP PLUS (Feed Safety): sets out requirements for feed safety management systems.

SMETA – SEDEX (SEDEX Members Ethical Trade Audit): a set of good practices for ethical trade audits.

CARB: certification awarded by the California Air Resources Board to market ethanol in the state of California.

EPA: certification awarded by the Environmental Protection Agency to export ethanol to the U.S.

Green Energy Label: a bioelectricity certification program.

Etanol Mais Verde (“Greener Ethanol”): a label denoting support for the goals under the São Paulo Protocol for the Sugar and Ethanol Industry (2007), which calls for efforts to implement sustainable practices in the sugar and energy industry, such as eliminating burnt-cane harvesting and conserving water resources, the soil and riparian vegetation.

RenovaBio: Brazil’s national biofuels policy, which supports Brazil’s commitments under the Paris Agreement by advancing the suitable expansion of biofuels in the energy mix, ensuring a reliable supply of ethanol fuel and creating a predictable fuel market. It also aims to support energy efficiency improvements and greenhouse gas emissions reductions in the production, marketing and use of biofuels. The RenovaBio program

comprises three strategic pillars: 1) Decarbonization Targets; 2) Biofuel Production Certification; and 3) Decarbonization Credits (CBIO).

UN Global Compact: Tereos Group signed up to the United Nations Global Compact in 2017, committing to its guidelines on promoting sustainable development, including its principles in the areas of human rights, labor law, the environment and fighting corruption.



Percentage of agricultural raw materials that are certified to a third-party environmental and/or social standard (%) (SASB)- FB-AG-430 a.1

Certificates	2019 / 2020	2020 / 2021	2021 / 2022
Bonsucro	29	29	41
Farm Sustainability Assessment (FSA- SAI Platform)	0	1	1

Certifications

Mill	Sugarcane		Ethanol				Electricity		Sugar					Yeast
	Bonsucro	SMETA	EPA	CARB	<i>Etanol Mais Verde</i>	RenovaBio	I-REC	Green Energy Label	FSSC 22000	ISO 22000	Kosher	Halal	Organic	GMP Plus
Cruz Alta	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	
Severínia	✓				✓	✓		✓			✓	✓		
Tanabi			✓	✓	✓	✓	✓	✓				✓		
Mandu	✓		✓		✓	✓	✓					✓		✓
São José	✓		✓		✓	✓	✓					✓		
Andrade	✓	✓	✓		✓	✓		✓			✓	✓		
Vertente ¹	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓		

¹ In 2022 our Vertente mill elected not to renew its ISO 9001 and ISO 14001 certification, while maintaining related internal management processes and commitments.



Analytical intelligence and crop care

The agribusiness sector is faced with the complex task of expanding agricultural production while tackling climate change. Tereos is rising to this challenge by increasingly leveraging innovation and technology. We have an ongoing research pipeline and are constantly deploying new technology to become more competitive. Some of our main innovation fronts include new sugarcane varieties, pest and weed control, crop management and harvesting, in-field drone use, and real-time information for in-field decision support, using a geolocalization software system for greater precision and efficiency.

Our Agricultural Experimentation and New Technology teams monitor our innovation and technology efforts using subject matter-specific assessment protocols and performance indicators. Tereos leverages development programs and initiatives such as the Sugar and Energy Industry Incentive Program (PAISS), research financing from the Brazilian Research Funding Agency (FINEP)

and partnerships with the São Paulo State Research Funding Foundation (FAPESP) and the Brazilian Agricultural Research Corporation (EMBRAPA).

We have extensively invested in digital technologies—including artificial intelligence, big data, advanced analytics, digital twin, real-time optimizers and the Internet of Things (IoT)—to strategically enhance business performance.





We have also launched a project, called Galileo, that uses statistical models and artificial intelligence for decision-making support to improve sugarcane yields and productivity. The project is led by an Analytical Intelligence team that works with other teams—including Agricultural Technology, Operations and Agribusiness—to improve cane field productivity using data analytics. The Galileo project started in 2017, covering our 150,000 hectares of sugarcane fields. Today, with the use of 75 weather stations and satellite data, we can monitor the weather and predict future sugarcane field conditions.

In 2019 we launched a “sugarcane mill of the future” program to implement Industry 4.0 projects in our facilities. The initiative was piloted at our Cruz Alta facility in Olímpia and has since led to operational improvements, increased safety and enhanced performance. The program uses real-time production data tracking to optimize the factory floor. Progress has been made on process flow modeling across the sugar, electricity and ethanol production processes, and in implementing process control algorithms using plant-wide sensor data captured by an Internet of Things (IoT) platform.

At some facilities, after passing through access control via face recognition, personal protective equipment is checked out automatically, and employee routines are more agile and integrated, enabling real-time decision-making.

Oasis, our new field operations system, has delivered positive results. This digital platform centralizes virtually all field-related information, including: grower contracts, harvest planning, operations records, harvest and price trends, and other data. Another in-house project, Tereos’ Business Opportunity Search System (B.O.S.S.), will support market analysis and faster commercial decision-making during negotiations.

In a collaboration with AgTech Garage, a leading agribusiness innovation hub, we are developing a sugarcane field modeling system that intersects climate, environmental and crop management data. The goal of the project is to accelerate our Industry 4.0 journey across the business.

Fire prevention is another key focus for our company. In recent years we have implemented a number of joint initiatives that have included investments in satellite-based fire detection technology and crop management planning to accelerate the sugarcane harvest in areas with increased fire risk. As a result of these efforts, we saw a significant reduction of more than 50% in sugarcane burn area compared to the previous crop year.



Operations driven by excellence

In 2014 we launched a Control Tower project as part of an effort to implement C3 (Connect, Communicate, Collaborate) principles and enhance cross-functional synergies and collaboration.

In 2022 we built further on this program with the official launch of our Agricultural Operations Center (AOC), with added features such as sugarcane traffic management and a tracking system for harvesting, infield transport and over-the-road shipping operations. We also carried out new studies to identify and maximize the potential benefits for the business from a centralized structure.

The AOC project is being developed in separate phases, the first initiated in 2022 with a focus on stabilizing the process after centralizing controls and monitoring using a standard set of performance indicators. This has improved efficiency and predictability in our logistics and sugarcane haulage operations. The three major goals of phase 1 were to reduce our truck fleet size and diesel consumption while delivering on our harvest plan.

For phase 2, which we will implement over the next three years, several opportunities have been identified and grouped within seven different types of initiatives: enabling initiatives (farm connectivity and data lakes), AOC scope expansion (vinasse logistics, fire monitoring, supporting equipment and driver fatigue monitoring) and innovation (new systems and partnerships with AgTech startups).

A centralized vinasse control system will standardize and optimize vinasse transportation logistics, providing options for reducing the fleet and/or increasing the radius of vinasse application areas. In addition, as we continue to deploy telemetry technology we will be able to automatically measure application performance in real time. The operations center will also provide maps with data on vinasse application gaps and overlaps.

We anticipate significant performance improvements with a high-performance field team, enabled by connectivity, access to analytical tools and a focus on finding innovative solutions.



800 hours
of logistics and monitoring training

500
harvesters, infield transporters and over-the-road trucks monitored 24/7

160
soil preparation, planting and crop care machines monitored 24/7

Developed a robot
to send operations reports every 2 hours

7 new automated reports
published in Power BI

6 logistic studies
and 20 different scenarios



Cultivating relationships to harvest growth

Valuing our employees

GRI 102-8, 103-2, 103-3 | 202 | 401

We recognize that people are key to our success. That is why we work to foster a culture that values our employees, and invest in our in-house talent to provide opportunities for professional development and career growth. As a result, 80% of our job opportunities have been filled by internal candidates. We manage compensation based on Tereos' guidelines and policies, in accordance with industry best practices. All employees undergo performance assessments, and their scores are factored in their variable compensation and promotion opportunities.

An ambition to create long-term, sustainable value guides our efforts to develop, engage and train our employees. In recognition of our practices, in 2022 we were awarded GPTW (Great Place to Work) certification, a distinction given to companies that maintain a best-practice work environment and organizational culture.

We believe that companies have a responsibility to not only deliver financial results but also to care for their employees. With this belief and the welfare and quality of life of our workforce in mind, we provide a range of benefits to all of our employees, regardless of their contract type (permanent or seasonal, from April to November), such as health and dental insurance, life insurance and parental leave. [GRI 401-2](#)

This year we were proud to be awarded Great Place to Work (GPTW) certification in July



Training incentives

We believe that a productive workplace environment hinges on building a culture that supports employee development and growth. We invest in employee training to help drive excellence in each of our processes. An internal training policy sets out guidelines on training, professional and technical development courses. Employees have individual plans outlining the hard and soft skills they need to be better equipped to perform their tasks.

We also encourage employees to acquire new skills through specialization courses. In the 2021/2022 crop year, we invested approximately R\$ 3.8 million in professional training and development. We have also established training performance indicators to measure employee achievement in training programs and provide clear information on development opportunities within the Company.

Team development initiatives

Supervisors in action

- 80 people in supervisory roles attended a 12-month training program divided into 4 modules.
- The program aims to develop and enhance the performance of our supervisors by training them on people management and business skills. It also helps to align participants' purpose with Tereos' strategy.



High-performing managers

- 24 people per class; 7 modules; 4-day duration; more than 160 managers and specialist trained.
- The course develops skills with a focus on improving communication, agility, priority setting and time management.
- It encourages a holistic approach to the role of a manager/specialist, providing guidance and tools for managing people and processes.

Line managers

- 24 managers per class; 4 modules; more than 500 attendees.
- This program aims to improve leadership and line management skills, supporting participants' professional development.

Learn to lead

- 14 people per class; 4 modules over the course of the crop year.
- A leadership program for engineers and analysts who aspire and have the potential for leadership roles, with a focus on honing leadership skills to effectively manage, administer and lead teams and individual employees.

Performance program

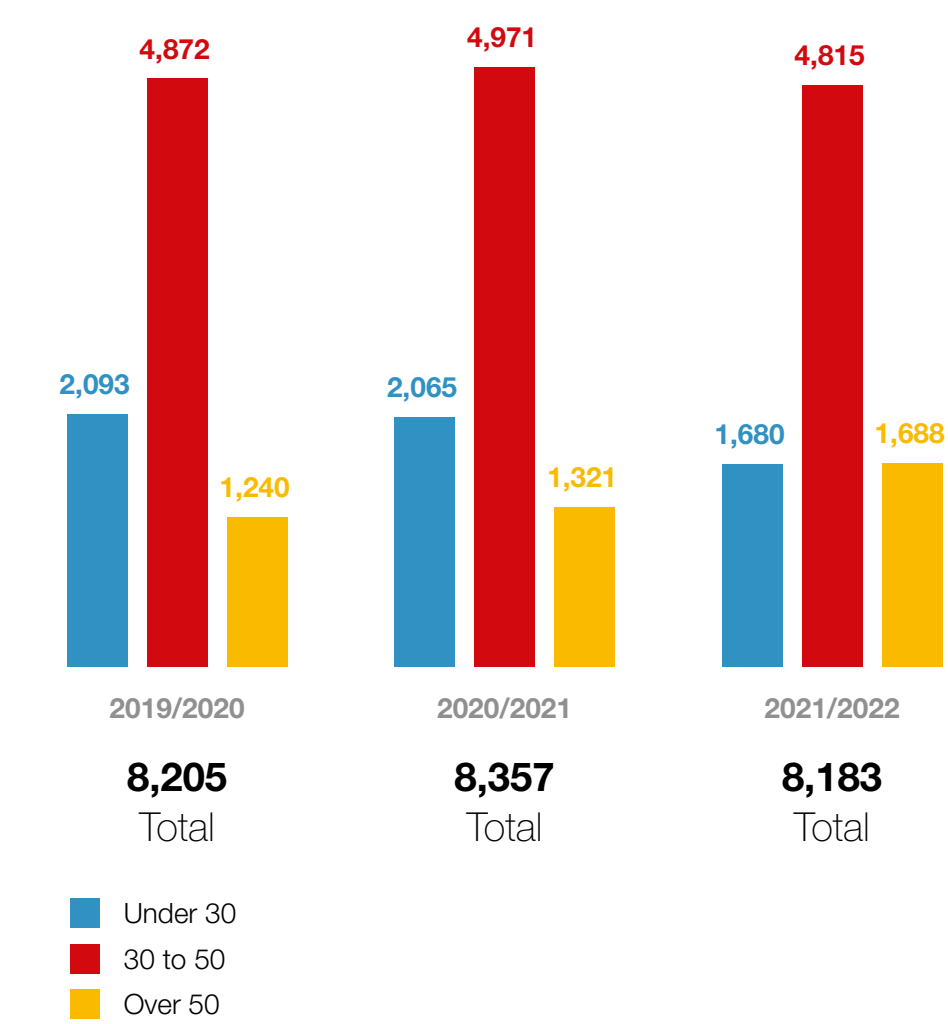
- 30 people per class; 4 months.
- Assistants, analysts, engineers, salespeople and buyers.
- This program develops soft skills with an emphasis on self-awareness and communication.

Leadership Program

- 30 managers per class in a one-week immersion course attended by a total of 60 employees.
- An experience-based program that incorporates case studies and practical workshops, with content aligned with Tereos' values and behaviors."

Employees by age group

GRI 102-8



Employees by employee category¹ GRI 102-8

	2019/2020	2020/2021	2021/2022
Executives	84	83	85
Managers	210	188	189
Leaders	488	552	588
Supervisors	59	79	84
Operational	6,635	6,790	6,579
Technical/Administrative	729	665	658
Total	8,205	8,357	8,183

¹ Tereos has not reported the number of members of governance bodies as its Board of Directors is based in France.

We invest in employee training to help drive excellence in each of our processes

New hires by age group GRI 401-1

	2019/2020		2020/2021		2021/2022	
	No.	Rate	No.	Rate	No.	Rate
Under 30	1,473	0.70	1,054	0.51	1,258	75
30 to 50	1,363	0.28	1,057	0.22	999	21
Over 50	207	0.17	133	0.10	113	7
Total	3,043	0.37	2,244	0.27	2,370	29

New hires by gender GRI 401-1

	2019/2020		2020/2021		2021/2022	
	No.	Rate	No.	Rate	No.	Rate
Men	2,632	0.39	1,962	3.17	1,932	26
Women	411	0.68	282	0.04	438	63
Total	3,043	0.37	2,244	0.27	2,370	29

Turnover by age group GRI 401-1

	2019/2020		2020/2021		2021/2022	
	No.	Rate	No.	Rate	No.	Rate
Under 30	839	0.40	990	0.48	954	57
30 to 50	1,219	0.98	1,138	0.86	1,174	24
Over 50	268	0.06	193	0.04	281	17
Total	2,326	0.28	2,321	0.28	2,409	29

Turnover by gender GRI 401-1

	2019/2020		2020/2021		2021/2022	
	No.	Rate	No.	Rate	No.	Rate
Men	2,030	0.27	2,048	0.26	2,124	28
Women	296	0.49	273	0.44	285	41
Total	2,326	0.28	2,321	0.28	2,409	29



We believe that companies have a responsibility to not only deliver financial results but also to care for their employees.

New hires by region¹ GRI 401-1

	2021/2022	
	No.	Rate%
Cruz Alta	622	30
Severínia	49	16
Tanabi	392	37
Mandu	332	29
São José	382	35
Andrade	386	38
Vertente	161	17
BSC	23	6
RJ Distribution Center	32	36
SP Office	0	0
Total	2,370	29

¹ The hiring rate was not reported for regional sites in previous crop year.

Turnover by region¹ GRI 401-1

	2021/2022	
	No.	Rate%
Cruz Alta	624	30
Severínia	79	25
Tanabi	344	32
Mandu	339	29
São José	396	36
Andrade	377	37
Vertente	200	21
BSC	27	7
RJ Distribution Center	20	22
SP Office	3	75
Total	2,409	29

¹ The hiring rate was not reported for regional sites in previous crop year.

Employees in minority groups, by employee category (%) GRI 405-1

	2019/2020		2020/2021		2021/2022	
	BB	PwDs	BB	PwDs	BB	PwDs
Executives	0	0	0	0	0	2.35
Managers	12	3	13	5	3.70	5.29
Leaders	25	2	22	2	6.12	3.57
Supervisors	14	0	11	0	1.19	0
Operational	42	2	42	3	7.35	3.73
Technical/Administrative	18	2	18	3	3.03	2.58
Total	38	2	38	3	6.69	3.61

BB = Black and brown/ PwDs = People with disabilities

Workers in minority groups, by employee category (%) GRI 405-1

	2019/2020		2020/2021		2021/2022	
	BB	PwDs	BB	PwDs	BB	PwDs
Apprentices	23	0	47	0	0.8	0.26
Interns	18	0	13	0	0	0
Trainees	0	0	0	0	0	0
Total	38	2	38	3	0.64	0.21

BB = Black and brown/ PwDs = People with disabilities



Ratio of standard entry-level wage compared to local minimum wage¹ GRI 202-1



¹ The minimum wage has been used as a benchmark for employee pay as from the beginning of this crop year.



Ratio of basic salary and remuneration of women to men, by employee category GRI 405-2

	2019/2020	2020/2021	2021/2022
Executives ¹	–	–	1.12
Managers	0.94	0.97	0.93
Leaders	0.96	0.85	0.89
Supervisors	0.90	0.94	1.0
Operational	0.89	0.89	0.79
Technical/Administrative	0.93	0.96	0.95

¹ The Executive employee category was not reported on in the 2019/2020 and 2020/2021 crop years.

Diversity, equity and inclusion

GRI 103-2, 103-3 | 405 | 406

We are committed to and have evolved as a company in promoting diversity, equity and inclusion—three of our core principles. Our related policies and commitments are outlined in our *Diversifica Tereos* handbook.

We are taking active steps to manage diversity, equity and inclusion effectively, with a focus on increasing the representation of women in all roles and levels across the company, as well as ensuring equal pay. We have set a target to have 15% of women in our workforce by 2030 and at least two women interviewed for every open position. Additionally, we aim to achieve 17.5% representation of women in leadership roles by 2030.

In March 2022, we established a new department dedicated to rehabilitating degraded land through reforestation, led by teams of exclusively female staff. These teams, comprising around 40 women, are currently working in three of our seven operations: Olímpia, Tanabi and Colina.

Our practices were recognized in the 2022 edition of the *Mastercana Social* awards, which spotlight social responsibility and sustainable development initiatives in the Brazilian sugar and energy industry. We received an

award in the “Valuing Diversity” category for a women-only machine operator course offered at our Tanabi (SP) facility. The course was offered to women living in the surrounding area, providing participants with training, skills development and hands-on experience. This helped in promoting socio-economic development and job opportunities in the area. After completion of the 80-hour training program, which included both theoretical and practical classes, around 65% of the participants were able to secure employment with our company for the following harvest season.

We also opened an exclusive apprenticeship selection process for women at our Cruz Alta facility in Olímpia, São Paulo. All positions were in agricultural operations including mechanization, crop management, and reforestation.

Our beliefs

- 1 Respect as an overarching value in our treatment of all people, regardless of their gender, ethnicity, race, sexual orientation, background, generation and physical or mental ability
- 2 Valuing diversity in our teams, combining the power of the individual with the strength of the team
- 3 Fostering an inclusive culture and workplace environment that promotes open discussion
- 4 Providing reporting channels (whistleblowing channel) for any person who experiences distress or discrimination
- 5 Taking a no-tolerance approach to discrimination, whether direct or indirect, and taking appropriate action against anyone engaging in such conduct within Tereos



Attracting and retaining talent

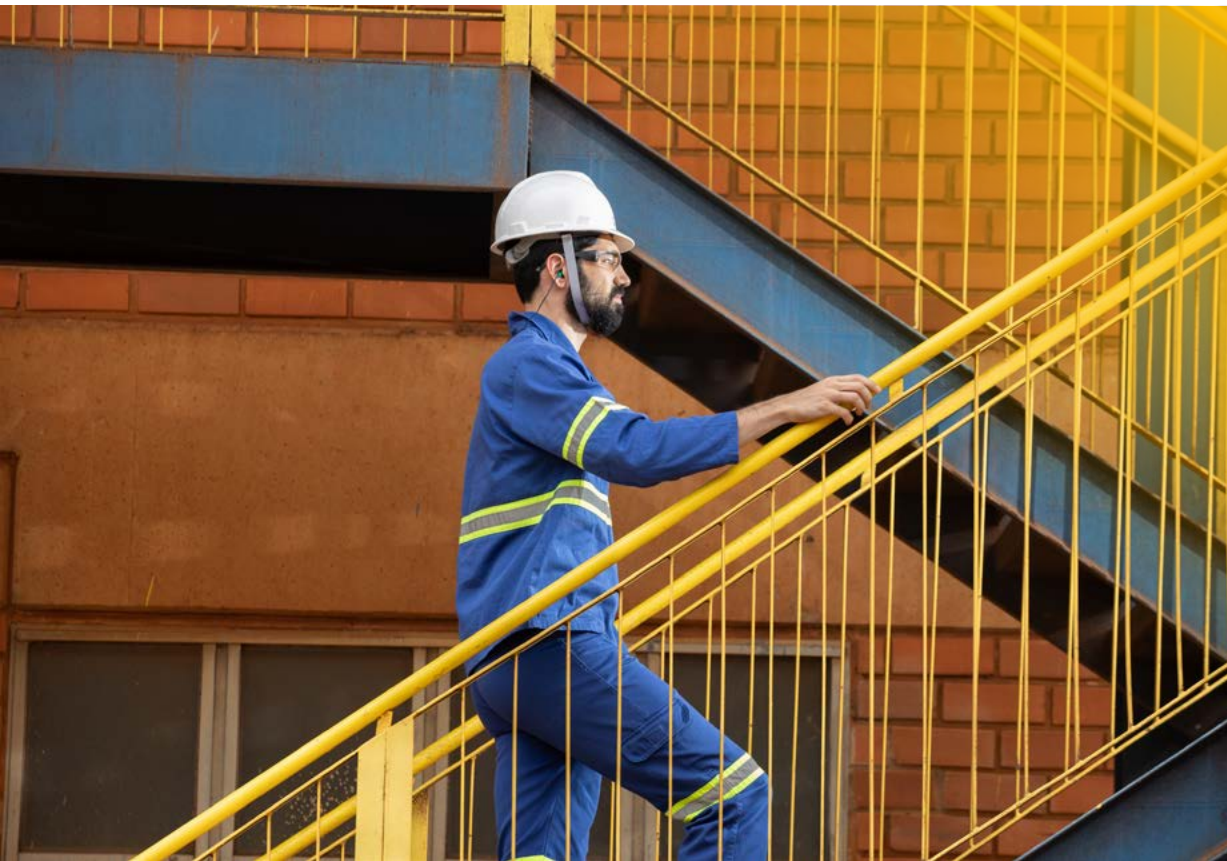


To support us in fulfilling our purpose as a company, we actively seek out and recruit individuals who align with our values, culture and way of working. Our recruitment process is conducted in a way that is respectful and considerate toward each candidate, and we make sure our conduct consistently reflects our values from our first interaction with candidates. In addition to an affirmative-action program for recruiting people with disabilities (PwDs), we have four other gateway programs to support professional development and career growth:

- **Jovens Talentos (“Young Talents”):** a program for university students joining the Company as interns — in the 2021/2022 crop year we had a total of 103 interns within the program, a 13.2% increase compared to the previous period.
- **Tereos Summer Experience:** a summer internship program for undergraduate students during the summer break. During the crop year, students from nine universities participated in activities in our field and mill operations.
- **Apprentice Program:** this program helps to improve youth employability by offering theoretical courses at schools and hands-on training at our mills. During the 2021/2022 crop season, 348 students attended the program, 10% more than in the previous crop year. In collaboration with the Pescar foundation, the program also offers courses to youth from disadvantaged backgrounds.
- **Trainee Program:** this program gives newly graduated candidates an opportunity to learn about our processes and build a leadership career with Tereos. A total of eight trainees were hired in 2021/2022.

Occupational health and safety

GRI 103-2, 103-3 | 403



We are committed to providing a safe and healthy work environment for all employees, a number one priority for Tereos. Our health and safety management system is based on corporate requirements and procedures issued by our headquarters in France, adapted as necessary for compliance with Brazilian occupational health and safety regulations (NRs). [GRI 403-1](#)

We operate on the principle that all accidents can be prevented, and lives saved. Accident prevention at Tereos is supported by: our Sustainability Policy; tone from the top; regular quantitative and qualitative risk assessments in the workplace; our Internal Accident Prevention Committee (CIPA); a Specialized Occupational Health and Safety Service (SESMT); and the proper use of personal protective equipment (PPE). All job roles are assessed for related health and safety risks. [GRI 403-7](#)

To assist employees in implementing best practices, we have developed a safety reference manual that is distributed to all employees and provide training on health and safety. Each of our sites has a team of

firefighters, safety engineers and technicians, physicians and occupational health analysts. All occupational health cases are monitored against a specific performance indicator. Our goal is to continuously improve our procedures, practices and safe behaviors in order to further strengthen our health and safety culture. [GRI 403-3](#)

We operate on the principle that all accidents can be prevented

To identify hazardous activities, we rely on evaluations conducted by external consultants, while conducting regular risk assessments internally. Employees are trained to detect risks on the job and are empowered to refuse to perform a task that threatens their safety. Managers are trained as part of our Safe Behaviors Program to listen to employees and respond appropriately in different scenarios. [GRI 403-2](#)

Working with all operations areas, we have developed a medium-term program addressing incidents in the previous crop years, which is implemented as part of daily routine management. Within the program, employees practice preventive behaviors, working toward a set of targets and commitments on identifying and managing health and safety risks and implementing related controls.

Our employee safety programs are overseen directly by an occupational physician. All health checkup notes and test results are stored in medical records that are protected against unauthorized access to ensure employee privacy and confidentiality.

We have an employee health program that encourages employees to eat healthy and exercise regularly and provides people with chronic diseases with support

in managing comorbidities. We also run annual health campaigns, including vaccination, breast cancer prevention, prostate cancer prevention and mental health campaigns. [GRI 403-6](#)

Although we do not have formal occupational health and safety committees, Tereos organizes weekly and monthly meetings that are attended by sustainability managers, heads of operations and operational excellence, executive and site managers, and the CEO.

All operations organize monthly performance meetings attended by managers from all operational and supporting functions. During these meetings, health and safety KPIs are presented to senior management and actions are agreed to address deviations as necessary.

We provide training on risk awareness, critical tasks, accident investigation, occupational health and other topics to enhance our behavioral practices and the use of proactive safety tools to protect people’s integrity. [GRI 403-5](#)

During the 2021/2022 crop year we assessed 26 hazardous tasks (hot work, work at heights, among other risks) and took appropriate action using the

hierarchy of controls approach, including at least one upper hierarchy action for each event. [GRI 403-4, 403-9](#)

In the 2022/2023 crop year we launched a program, called *SEJA*, that aims to strengthen our safety culture through efforts across three pillars: Risk management; H&S (Occupational Health & Safety) Management System; and Management accountability.

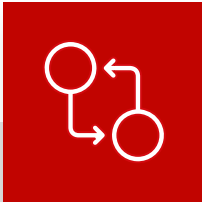


Our three global principles



Develop and strengthen our health and safety culture

Each Tereos Group employee receives information and training on maintaining a safe work environment. Personal and operational safety practices are based on Group standards and initiatives that are then adapted to the local setting. Best practices are shared across sites to optimize operational safety as part of a continuous improvement process.



Adapt our organizations and procedures

Roles and responsibilities are defined at each level of the organization to improve health and safety for all employees. Process and site safety is ensured through a clear approach to identifying and managing risks. Lessons learned from incidents are addressed and communicated to prevent recurrence at any other Tereos sites.



Take ownership of our responsibilities

Each of us is responsible for identifying risks, preventing them and protecting ourselves and our coworkers. Each of us abides by the rules and procedures in place to ensure we perform our tasks safely. Each of us is fully transparent in reporting any incidents we have experienced or witnessed.

We have adopted eight Golden Rules in our production facilities to raise employee awareness about unsafe behaviors. By following these rules, we can minimize the most frequently occurring incidents in our operations.

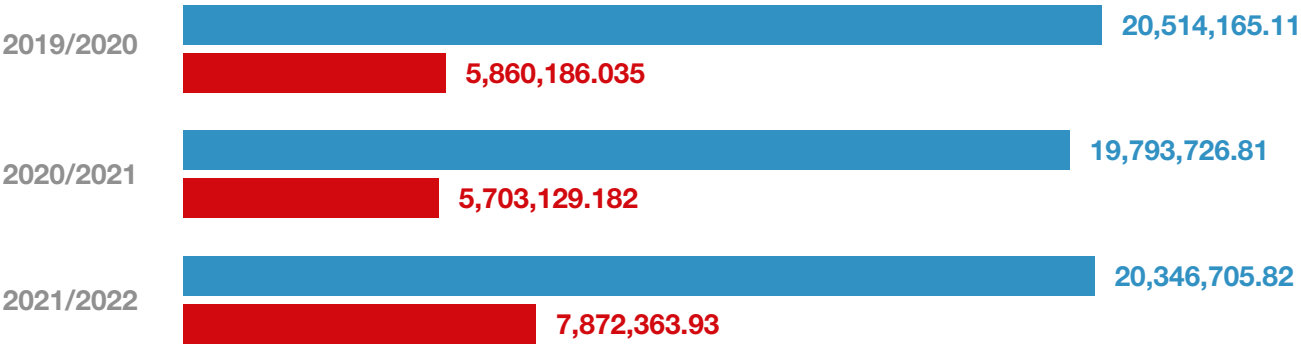
Our safety priorities

1. Deploy the eight Golden Rules
2. Report and act on unsafe actions and conditions and near misses
3. Manage contractor personnel
4. Implement permit to work and LOTO (Lock Out-Tag Out) procedures
5. Assess and manage workplace risks
6. Report and address process incidents
7. Assess and manage process risks
8. Identify, draft and implement key HSE procedures



Work-related injuries GRI 403-9

Number of hours worked¹



■ Employees

■ Workers²

¹ Based on 1,000,000 hours worked.

² Workers: workers who are not employees, but whose work and/or workplace is controlled by the organization.

Work-related injuries GRI 403-9

	2019/2020		2020/2021		2021/2022	
	E	W	E	W	E	W
Rate of fatalities as a result of work-related injury ¹	0	0.17	0.05	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities)	0.34	0	0.15	0	0.39	0.25
Rate of recorded work-related injuries (including fatalities)	6.92	6.28	5.40	2.27	4.67	2.03

E = Employees

W = Workers

¹ The high-consequence work-related injuries that occurred in the 2021/2022 crop year were primarily related to the following hazards: Hot work; Hot fluid; Energy (LOTO), Work at heights; and Moving parts. There were no fatalities in the 2021/2022 crop year.

GRI Content Index

GRI 102-55

General disclosures

GRI Standard	Disclosure	Page/URL	Omission	SDGs
GRI 101: Foundation 2016				
GRI 101 contains no disclosures				
Organizational profile				
GRI 102: General disclosures 2016	102-1 Name of the organization	9		
	102-2 Activities, brands, products, and services	10		
	102-3 Location of headquarters	9		
	102-4 Location of operations	9		
	102-5 Ownership and legal form	9		
	102-6 Markets served	10		
	102-7 Scale of the organization	10		
	102-8 Information on employees and other workers	50, 52, 53		8, 10
	102-9 Supply chain	16, 39		
	102-10 Significant changes to the organization and its supply chain	Not applicable.		
	102-11 Precautionary principle or approach	19		
	102-12 External initiatives	41		
102-13 Membership of associations		CETESB (Environmental Chamber for Climate Change) River Basin Committees ABAG (Brazilian Agribusiness Association) UNICA (Sugarcane and Bioenergy Industry Association)		

Sustainable Development Goals



Credits

TEREOS SUGAR & ENERGY BRAZIL
General Coordination
Sustainability, Environment & Communication

Project management, GRI consulting, Content and Design
[grupo report](#) – [rpt sustentabilidade](#)

Infographic
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