

# 2022 ANNUAL REPORT



**GERDAU**

O futuro se molda

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# PRESENTATION

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**N**ow, in 2022, after celebrating our 120<sup>th</sup> anniversary in 2021, we at Gerdau remain focused on building the Company's future. Our ambition is to be one of the world's safest, and most profitable and admired companies in the steel chain within 10 years, as well as one of the most important in the industrial sector in the Americas.

We have teams that are dedicated to three fundamental and strategic pillars, which will allow us to achieve this new organizational level. Our daily operations are focused on increasing our competitive standing and growing in long steel, special steel and flat steel; investing in new steel-adjacent businesses based upon the four strategic clusters (sustainability, construtech, mobility and technology) of Gerdau Next, our new business branch; and improve our ESG practices, which mold our stakeholder relationships.

To achieve this, we have continued to invest our capital efficiently, taking a disciplined approach to the execution of projects and improving our business model, whilst creating even more value for our clients through the delivery of products and solutions that are increasingly more digital, technological and innovative. Our attention is also focused on the development of people, who, with their talent and high-level of performance, will help us to create a new Gerdau for the future.

Furthermore, we are evolving in our ESG practices, focusing on the reduction of greenhouse

gas emissions, through the use of a sustainable manufacturing matrix based upon the recycling of scrap metals and the use of a bio-reducer. Our ESG practices are further evolving in relation to the social impact we have on our neighboring communities and the diversity and inclusion initiatives we have developed in the form of internal programs and actions, whilst also engaging the ecosystem of which we form a part to move forward on these fronts.

I should also draw attention to the fact that the modernization of Gerdau's governance has continued to develop, and this can be seen practically in the transparency, responsibility and ongoing dialog we have with our investors, shareholders, employees, customers, suppliers and other stakeholders.

To be able to plan the next 122 years, we always need to remember the path we have taken, our principles and our objective of empowering those who build the future and who provide us with a more customer-centered focus, based upon teams that act with ethics and integrity, always respectful of difference and putting safety first. We aim to continue molding the future, developing new products, solutions and businesses for the new challenges and needs being faced by society as a whole.

Thank you and I hope you enjoy the report!

**Guilherme Chagas Gerdau Johannpeter,**  
Chairman of the Board of Directors



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## MESSAGE GRI 2-22

Over the course of 2022, we put Gerdau's resilience to the test in the face of a challenging macroeconomic scenario. Today, Gerdau is an agile, modern and flexible company, the result of an extensive cultural and digital transformation experienced over the past few years, which has allowed us, even within a complex scenario, to be able to report an historic year with exceptional results. We have closely monitored all that has unfolded in relation to the logistical and geo-political challenges resulting from the ongoing Covid-19 pandemic and the conflict between Russia and the Ukraine, which have brought uncertainty to global economic and inflationary scenarios.

We ended the 2022 fiscal year with a net revenue of R\$ 82.4 billion - the best ever in Gerdau's history. Last year we also recorded the Company's second best ever adjusted EBITDA, at R\$ 211.5 billion, and an Ebitda margin of 26.1%. When we look closely at our history, we see a Gerdau that is now positioned on a new plateau of financial and operational results.

This performance demonstrates Gerdau's ability to transform itself and continue sharing value with its customers and the other groups with which we relate, offering the market even more innovative and sustainable products and services. Today, the company stands out in its delivery not only of the solid financial results we provide for our stakeholders, but of a transparent business strategy, that is guided by disciplined cost management and continued improvement in the competitiveness of its assets. A good example of this is the level of our

sales, general and administrative expenses (SG&A), which we have kept at levels well below those of our peers.

I would like to thank our employees in the countries where we operate and recognize the efforts they have made in contributing to the creation of another extraordinary year in Gerdau's history. It is the people who have brought us this far and who will lead us to mold an even better future.

Going beyond the financial and operational results, the ESG agenda continues to be a strategic pillar for our business, prioritizing the construction of a future that is even more sustainable and people-focused. I should also highlight that we ended 2022 with an accident frequency rate of 0.76, the lowest ever recorded in the Company's history. This performance reinforces our commitment to the health and safety of our personnel. Here at Gerdau, safety always comes first, since no result is more important than a person's life. Because of this, as part of our digital transformation process, we have invested extensively in artificial intelligence and industry 4.0 initiatives to improve the monitoring of critical tasks and prevent accidents.

Also in 2022, we committed ourselves to reducing Scope 1 and 2 greenhouse gas emissions to a level below 50% of the global average for the steel industry. To achieve this, Gerdau will be increasing its use of ferrous scrap metals as a raw-material for the manufacture of steel, expanding its forest areas, which are responsible for the production of the charcoal that works as a bio-reducer in the manufacture of pig iron, and increasing the use of renewable energy in the form of the solar parks that have already been announced in Brazil and the United States. The company will also be inves-

ting in initiatives designed to ensure greater energy and operational efficiency at its units, as well as in new technologies and open innovation.

I would also like to stress that we have obtained 'B Corporation' certification for two of our operations; Sideperu, the steel manufacturing arm of the Company in Peru, and Gerdau Summit, our joint venture with the Japanese companies Sumitomo Corporation and Japan Steel Works, focused on the supply of laminated cylinders and parts for use in wind power generation, respectively, became the first two steel manufacturers in the world to be awarded B Corporation status. As part of our sustainability agenda, the certification recognizes that Gerdau operates with good sustainability practices, and effectively connects the business to our objective of empowering people who build the future, thus leaving a legacy for society.

I truly believe that the steel industry should be evolving in its diversity and inclusion initiatives, reflecting the diversity of our society in the workplace. Within this context, we are advancing in our ambition to hit our target of having 30% of our management positions occupied by women and people of color by 2025. Currently, 26% of these positions are occupied by women and people of color.

In the pages that follow, we explain in more detail some of the points that I have touched upon in this introductory letter. I would like to invite you to find out more about the challenges faced by Gerdau, and also about all we have achieved in this our 121<sup>st</sup> year in business. We hope you enjoy the report!

**Gustavo Werneck,**  
CEO

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# ABOUT THE REPORT

In line with our policy and practice of transparency, Gerdau's 2022 Annual Report focuses on our performance based upon the standards outlined in the 2021 version of the Global Reporting Initiative (GRI), the globally adopted standard for the creation of this type of publication. In producing the content, we have also taken into consideration the standards developed by the Sustainability Accounting Standards Board (Sasb) relating to Iron & Steel Producers and the Metal & Mining industries.

The material topics and the United Nations' Sustainable Development Goals (SDGs) are presented in relation to the relevant chapters (read more in our [Business Model](#)), in accordance with the four main chapters we have established: Human and Intellectual Capital, Financial and Manufactured Capital, Social and Relationship Capital, and Natural Capital.

Here we have presented and reinforced the Company's values, targets and achievements in relation to the sustainable development that is capable of generating a positive impact for our stakeholders and society as a whole. The information on governance, risks, the environment, challenges and opportunities covers the period from January 1<sup>st</sup> to December 31<sup>st</sup>, 2022, **GRI 2-3** based upon Gerdau's material topics, revised in 2022. All the content has been analyzed by the Executive Board and approved by the Board of Directors. **GRI 2-14**



Should you have any questions about the report or its content, please contact us by e-mail at: [cpg-comunicacaoemarca@gerdau.com.br](mailto:cpg-comunicacaoemarca@gerdau.com.br)

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## REVISION OF THE MATRIX PRIORITIZES OUR RELATIONSHIP WITH OUR STAKEHOLDERS AND ALIGNMENT WITH THE GRI 2021 CRITERIA

In 2022, Gerdau revised its material topics, aiming to improve its relationship strategy and align its methodology with the GRI 2021 criteria. Eight material topics were defined as being of most relevance to the company's relationship with its stakeholders, from the perspective of the ESG agenda and the guidance of its sustainability strategy. During the process, we also defined five topics that will form part of the company's ESG strategy by 2025, and which will assume the same level of priority and transparency as the central material topics.

The revision and inclusion of the new topics underwent a rigorous process of consultation with the stakeholders, including the stages of planning, internal and external document analysis, media research, sector benchmarking, interviews with the internal leaders, online interviews and surveys with interested parties, and of validation from the organization's governing bodies.

**The process resulted in eight material topics and five strategic topics, as outlined below.**

**300** questionnaires were sent out to Gerdau's priority publics

300 questionnaires were sent out to Gerdau's priority publics. Amongst these are sector associations, customers, local communities, suppliers and environmental agencies, with versions in Portuguese (68%), English (29%) and Spanish (3%). The questionnaire received 59 valid responses, that were used as inputs for our analysis of the materiality, expanding the reach of the process developed for the collection of stakeholders' perceptions of the impacts the company has.

The GRI Standards function as one of the leading global benchmarks for reporting on an organization's policies and commitments, providing a means of transparently informing our stakeholders (employees, customers, shareholders, suppliers, the government and communities) and society of how our activities have developed in 2022.



## Management of water and effluents

Focused on reducing consumption and the proper disposal of water and effluents.



## Energy management

Adoption of actions designed to increase the efficiency of processes and prioritization of alternative energy sources.



## Diversity, equality and inclusion

Promotion of diversity and inclusion, providing equal access to participation, rights and opportunities for everyone at all levels of the company.



## Climate change management

Engagement of the company in global coalitions within the steel and mining sectors focused on decarbonization of the entire value chain, as well as the aim of achieving net zero carbon emissions by 2050 and institutional positioning in facing the risks, challenges and opportunities related to the issue.



## Waste management and the circular economy

This topic covers the management of hazardous waste and materials, as well as the matter of circularity, through scrap metals and Gerdau's ability to keep materials in use for as long as possible.



## Health and safety at work

Focused on establishing a culture of safety, investments, and raising awareness concerning risk-related activities and behavior.



## Community relations

Development of actions designed to promote a positive impact and reduce the negative impacts on the neighboring communities, including traffic, noise and dust.



## Innovation in processes and products

Understanding the digital transformation, use of alternative materials, innovative products and solutions, and diversification of the business model. Grouped under "diversification of the business model".



## CHANGES TO THE LIST OF MATERIAL TOPICS COMPARED TO THE PREVIOUSLY REPORTED PERIOD

- The recycling of scrap metal and management of coproducts has been established as a single topic: Waste management and the circular economy;
- Change of the name of the topic "mitigation and adaptation to climate change" to "climate change management";
- Exclusion of the "relationships with all the interested parties" topic.

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# MATERIAL TOPICS: CONCEPT AND DEFINITION

An organization's material topics, according to the criteria of the GRI Standards, are relevant topics from the perspective of the impacts they generate as perceived by the stakeholders. They are issues that are central in determining the stakeholders' decisions and evaluations of the organization, as well as directing its strategy, management and communication with society.

The topics considered material reflect significant environmental, social or economic impacts on the organization's activities, products, services and business relations.

In order to define the material topics, the company undertook a rigorous process of consultation with the stakeholders, including the stages of planning, internal and external document analysis, media research, sector benchmarking, interviews with the internal leaders, and online interviews and surveys with interested parties. In accordance with the GRI Standards, the process is then submitted to the organization's governing body for validation.

Gerdau has mapped the categories of stakeholders impacted and capable of impacting its operations, identifying the following as being of most importance: customers, direct and indirect employees, shareholders, suppliers, the government and communities. The company's stakeholders also include unions, civil society, investors, the capitals market, sector associations and institutions, and the press.



Should you have any questions about the report or its content, please contact us by e-mail at: [cpg-comunicacaoemarca@gerdau.com.br](mailto:cpg-comunicacaoemarca@gerdau.com.br)



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# STRATEGIC TOPICS



## Management of the supply chain

Screening, selection, monitoring and engagement of those suppliers related to the external situations caused by the socio-environmental impacts of the activities involved in the production chain.



## Information security

Implementation and/or improvement of the internal information security controls to mitigate the risk of cyber-attacks.



## Training of human capital

This topic covers the need for development and/or improvement of Gerdau's human capital training strategy, to be able to mitigate the potential risk and the impacts of a scarcity of skilled labor, both in Brazil and the US.



## Ethics and Corporate Governance

Adoption of governance practices that aim to firmly establish the company, ensuring it is in full compliance with the law and aligned with values such as ethics, transparency and integrity in all its interactions with its stakeholders.



## Biodiversity

Gerdau has 90,000 hectares of forestland set aside for conservation of biodiversity. This land is extremely important for the maintenance of environmental stability, contributing to the conservation of water resources, for example, and the mitigation of climate change.



## ABOUT THE STRATEGIC TOPICS

The topics outlined on this page were mentioned in the surveys, but were not considered to be as critically important as the material topics. Even so, in line with its strategy, the Company decided to confer on them the same visibility and transparency in its management and communication, since they were seen to be directly tied to the impacts of the business and capable of influencing Gerdau's results and perspectives.



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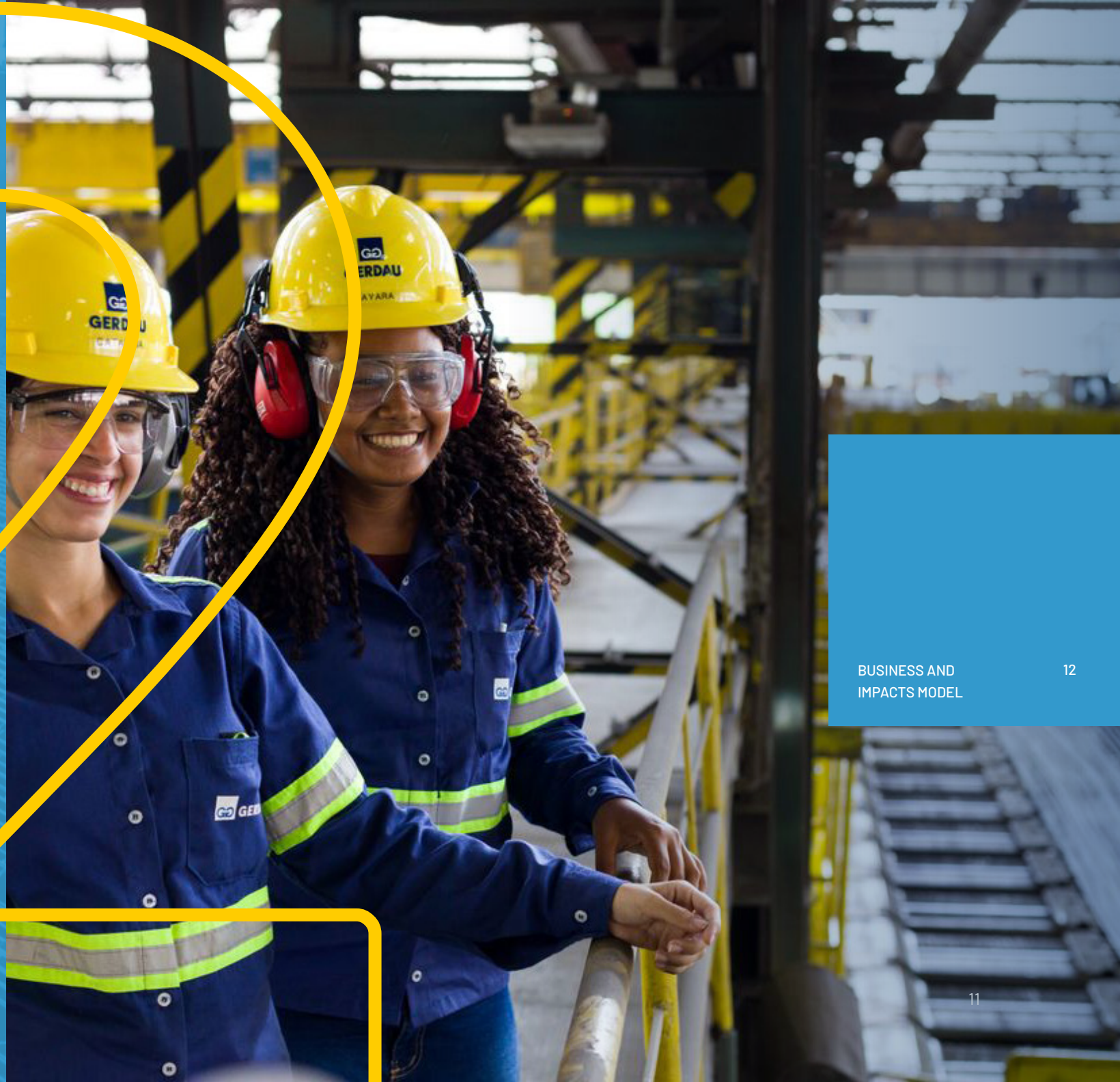
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# VALUE CREATION MODEL





# VALUE CREATION MODEL

**G**erdau declares the value creation of its operations in accordance with the framework established by the International Integrated Reporting Council (IIRC). In following the guidelines of this institute, we are presenting the resources (inputs) used and the impacts (outputs) caused by the company in society. Within this structure, the capitals (value factors that increase, reduce or are transformed as a result of the organization's activities and products) are classified as: financial, manufactured, intellectual, human, social and relationship, and natural.

**Statements follow the guidelines of the framework established by the International Integrated Reporting Council (IIRC).**



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# Transformed capitals, impacts and results delivered to society in 2022



INPUTS
<ul style="list-style-type: none"> <li>• Maintenance of the mining activities</li> <li>• Expansion and maintenance of the production units, purchase of raw materials, services and other inputs</li> <li>• Investment in modernization and maintenance of the operations and logistics</li> <li>• Investment in research and innovation</li> </ul>

OUTPUTS
<ul style="list-style-type: none"> <li>• Net revenue: R\$ 82.4 billion (a rise of 5% against 2021).</li> <li>• Adjusted EBITDA: R\$ 21.5 billion in 2022, the second best result in the company's history</li> <li>• Adjusted net income: R\$ 11.65 billion</li> </ul>



<ul style="list-style-type: none"> <li>• 32 steel manufacturing units</li> <li>• Two iron ore mines</li> <li>• 74 Gerdau commercial stores</li> <li>• 250,000 hectares of forest (planted and native vegetation)</li> <li>• Central office in São Paulo (SP)</li> <li>• Offices in the United States, Mexico and Peru</li> </ul>
--

<ul style="list-style-type: none"> <li>• Production of 12.7 million tons of crude steel</li> <li>• Recycling of 11 million tons of scrap steel per year</li> </ul>
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<ul style="list-style-type: none"> <li>• Development of studies and new technologies</li> <li>• Partnerships with universities and research centers aimed at promoting innovation</li> <li>• Development of new products</li> </ul>
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<ul style="list-style-type: none"> <li>• 30% of sales through digital channels</li> <li>• 100% of customers use at least one of the digital channels offered</li> <li>• Participation in external initiatives to promote themes related to social and environmental practices, such as B Movement Builders; Mover - Corporate Movement for Racial Equality; and Conscientious Capitalism, amongst others</li> </ul>
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<ul style="list-style-type: none"> <li>• Direct and third party employees at offices, production units, forest plantations and mines</li> <li>• Other employees present throughout the value chain</li> </ul>
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<ul style="list-style-type: none"> <li>• 36,000 direct and indirect employees around the world</li> <li>• Trainee Program: attracting 200 new talents</li> <li>• Siga Program: preparation of 5,000 employees to work at a high level of performance in an increasingly more technological and inclusive environment.</li> </ul>
--



<ul style="list-style-type: none"> <li>• Relationship with the communities neighboring the operations through structured planning and voluntary actions</li> <li>• Relationship with NGOs, sector organizations, customers, press, the government and other social players</li> <li>• Relationship with investors and customers</li> <li>• Relationship with cooperatives and professionals involved in the collection of metal products for recycling</li> </ul>
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<ul style="list-style-type: none"> <li>• Investment of R\$ 71.6 million, including support for more than 300 projects in the areas of housing, recycling and entrepreneur education, involving around 5,000 volunteer employees, and tax incentive and sponsorship programs.</li> <li>• 3,485 businesses supported in the form of entrepreneur projects</li> <li>• Refurbishment of 480 vulnerable housing units in the states in which Gerdau operates in Brazil.</li> </ul>
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<ul style="list-style-type: none"> <li>• Recycling of scrap metal</li> <li>• Use of iron ore</li> <li>• Use of water in the operations</li> <li>• Use of energy in the operations</li> <li>• Use of soil in the operations</li> </ul>
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<ul style="list-style-type: none"> <li>• Investment of R\$ 639.31 million in the improvement of eco-efficiency practices</li> <li>• More than 11 million tons of scrap metal as raw-material</li> <li>• Announcement of the construction of a solar energy park in the town of Midlothian, Texas (US)</li> <li>• 250,000 hectares of forest, with 91,000 dedicated to the conservation of biodiversity, stocking 11 million tons of tCO<sub>2</sub></li> <li>• Half of the intensity of greenhouse gas (GHG) emissions of the sector - 0.86 tCO<sub>2</sub>e/t of steel.</li> </ul>
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# ABOUT US



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**A**fter celebrating 122 years of activity in the global market, with operations in nine countries, Gerdau is today Brazil's biggest steel producer, and is amongst the biggest manufacturers of long steel in the Americas and of special steel in the world. As well as producing flat steel and iron ore, Gerdau is one of the global leaders in the production of charcoal for its own consumption and the biggest recycler of scrap metal in Latin America.

Our growth was accompanied by a years-long geographical expansion strategy. The first international move was made in Uruguay, with the purchase of Siderúrgica Laísa, in 1980. Nine years later, we acquired the Canadian company Courtice Steel. Following this, we opened plants in Canada, Colombia, the United States, Mexico, Peru, and the Dominican Republic, meaning that the company, which was founded as 'Fábrica de Pregos Ponta de Paris', in Porto Alegre (RS), gradually established itself as a global publicly-held company, with its head office in São Paulo and stocks traded on the stock exchanges of São Paulo, New York and Madrid.

Today, the company has 32 units which, over the course of 2022, produced 12.7 million tons of crude steel, with 71% of this total being manufactured from the recycling of ferrous scrap metals. As leaders in Latin America in the production of steel from recycled materials, Gerdau emits fewer greenhouse gases than half of the

global average emitted by the steel industry. In order to increase its effective participation in the reduction of emissions, Gerdau is also seeking to increase its production of charcoal. To do so, the company owns an area of 250,000 hectares in Minas Gerais state, upon which there is conserved native forest and eucalyptus planted for the production of charcoal.

In relation to the drive for development of new businesses, Gerdau Next, a division of the company focused on the expansion of new products, solutions and services in segments adjacent to steel, celebrated two years of activities operating in the clusters of construction, mobility and sustainability, which are all interconnected and have enormous synergy with our core business.

This focus on ongoing innovation can be added to a commitment to sustainable development that goes beyond the Company's walls. Acutely aware of our responsibilities, in 2022, we invested R\$ 639.31 million in environmental projects, and contributed R\$ 71.6 million in the form of social investments, including support for more than 3,485 projects in the areas of housing, entrepreneur education and recycling, with the mobilization of more than 5,000 volunteers from amongst the company's employees.



**R\$ 639.31 million**  
in environmental projects

**R\$ 71.6 million**  
in social investments



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Gerdau aims to implement its way of doing business and operate through the observance of a set of principles and objectives that filter throughout the organizational culture.



### OUR OBJECTIVE

To empower people who build the future



### OUR OBJECTIVES:

Over the course of 10 years, we have aspired to become one of the world's safest, and most profitable and admired companies in the steel chain, and one of the most important in the Americas.



### OUR PRINCIPLES

**Safety first:** No result is as important as the life of a person.

**Do the right thing:** Ethics and respect are essential in all we do.

**Each customer is unique:** We act to make our customer's business prosper, as we jointly drive success.

**We engage each other with honesty and respect:** We believe that saying what we think, without leaving ourselves out, shows respect for our colleagues. We do not know everything, which is why we believe that in-depth and respectful discussions aimed at truly contributing to everyone's growth is so important.

**A diverse and inclusive environment:** We value and respect diversity, creating an environment where there is space for everyone to be heard and respected, and have opportunities to do everything they want to do.

**A leader's attitude:** We are responsible for making the best decisions for the business, with our objective and principles acting as the guides for our choices.

**We are all leaders:** We are engaged and committed to our own development and that of those around us.

**Creating value for all:** We achieve our objective by sustainably creating value for all.

**Simplicity:** We focus on what adds value, which is why we are more agile and make gains in efficiency and productivity.

**We outperform every day:** We are constantly looking for ways to do better and to be the best we can be. We dream big and adapt ourselves to new scenarios, looking for the best ways of working.



# GERDAU IN FIGURES



## WORLD PRESENCE



Industrial operations in

**9 countries**

**75**

Gerdau commercial stores in Brazil

**32**

steel manufacturing units

**11 million**

t/year of scrap metals transformed in Brazil and around the world

**250,000**

hectares of forestland (eucalyptus plantation and preservation area)

**12.7 million**

tons of crude steel produced

**2**

iron ore mines

**6.4 million**

tons of iron ore produced

**3.8 million**

tons of coking coal produced

**36,000**

direct and indirect employees around the world

**R\$ 82.4 billion**

in net revenue, a rise of 5% in relation to 2021

Shares traded on the stock exchanges of São Paulo (B3), New York (NYSE) and Madrid (Latibex).



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# ESG SCORECARD



Dimension	Indicators	2020	2021	2022	Related material topics	Related SDGs
Environment	Greenhouse Gases by volume of steel (tCO2e/t of steel)	0.93	0.89	0.86*	Climate change and energy management	7 13
	Water consumption (m³/t of steel)	3.91	3.68	3.54*	Management of water and effluents and community relations	6 14
	% of coproducts recycled	78	89.6	88.9*	Waste management and the circular economy, energy management and innovation in processes and products	12
Social	% of active volunteers	5.7	6.3	14.6	Community relations	
	Number of people benefited	665,866	4,221,811	2,700,000	Community relations	1 4 11
	% of social investment made in relation to gross income	0.56	0.61	1.23	Community relations	
People	% of women in leadership positions	22	23.6	25.0	Diversity, equality and inclusion	
	% of women at the company (BO Brazil)	13	17.1	25.7	Diversity, equality and inclusion	
	% of Black people in leadership positions (BO Brazil)	25	26.3	26.6	Diversity, equality and inclusion	5 10
	% of disabled persons at the company (BO Brazil)	2.90	3.20	4.0	Diversity, equality and inclusion	
	Health and safety index (rate of severity)	244	243	93	Health and safety at work	3
Governance	ICVM 586 – Brazilian Code of Corporate Governance	67%	67%	67%		
	ISS Score Note	10	10	10		
	EVA – Economic value added (managerial information)	0%	22.6%	22.6%		16
	Personnel (R\$ millions)	5,216,144	6,455,468	6,533,048		
	Taxes, charges and contributions (R\$ millions)	3,720,556	10,046,474	8,873,020		
	Debt capital remuneration (R\$ millions)	1,917,421	1,821,095	8,338,121		
	Debt capital remuneration (R\$ millions)	2,388,054	16,018,412	5,668,650		

\* Variable connected to the long-term remuneration program (ILP)

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# CORPORATE GOVERNANCE

GRI 2-23, 2-24

**A**s well as following international standards, guided by ethical principles, we monitor the market's corporate governance trends to incorporate best practices into the processes, policies and norms that regulate the way we are administered. To achieve this, we periodically revise our Policies, Corporate Directives (CDs) and Operational Directives (ODs) to keep them constantly up to date.

We believe that corporate governance is a means of creating value for society and, as a result, for ensuring the longevity of the company. As such, we are based upon ethical and transparent relations with all our stakeholders, which are formalized in internal documents that stipulate the ethical principles that should guide the operations of our employees and commercial partners, especially our Code of Ethics and Conduct. The policies are distributed to our employees, business partners and other stakeholders by means of obligatory training sessions and public documents.



Find out about Gerdau's indicators:  
[centraldeindicadores.gerdau.digital/governanca](https://centraldeindicadores.gerdau.digital/governanca)



## Our governance structure creates value for society and ensures the longevity of the business



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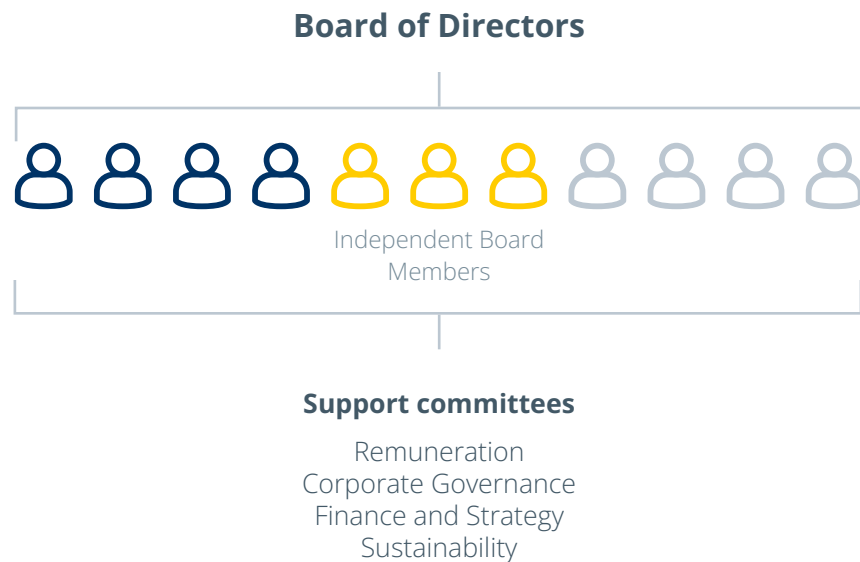
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The Board of Directors is responsible for the overall guidance of Gerdau's business. The Board may have up to 11 members, there currently being seven, with three of them independent. The Board has four advisory committees: Remuneration, Corporate Governance, Finance, and Strategy and Sustainability.



The members of the Advisory Committees are nominated by the members of the Board of Directors, and include at least one board member, whilst the other members may be employees or external advisors.



## REMUNERATION COMMITTEE

This committee is responsible for evaluating and supporting the CEO's recommendations in relation to the remuneration and performance of the senior executives, and presenting them to the Board of Directors; evaluating the individual remuneration of the CEO, the directors and those responsible for compliance, and presenting them to the Board of Directors; evaluating the CEO and those responsible for compliance, establishing targets and strategies for professional development, and presenting them to the Board of Directors; evaluating the strategy, policy and budget for fixed remuneration, short and long-term incentives, rescissions, retentions, commissions, benefits, retirement pensions and other programs relating to the overall remuneration of the employees, and presenting them to the Board of Directors; presenting opinions on the Company's organizational structure, and presenting appropriate measures to the Board of Directors; and approving the promotion of statutory and non-statutory director positions.

### Structure

- Chairman*  
Guilherme Chagas Gerdau Johannpeter
- Vice-chairman*  
André Bier Gerdau Johannpeter
- Members*  
Claudia Sender Ramirez  
Gustavo Werneck da Cunha

## CORPORATE GOVERNANCE COMMITTEE

Amongst other duties, this committee is responsible for keeping itself up-to-date on Corporate Governance trends and benchmarks; evaluating the recommendations of agents from the capitals and financial markets and specialist organs; recommending corporate governance principles and directives to the Board of Directors; revising and providing opinions on the information concerning Corporate Governance contained in the Company's official documents to be disclosed to the market, and evaluating the performance of the Board of Directors as a whole.

### Structure

- Chairman*  
Guilherme Chagas Gerdau Johannpeter
- Vice-chairmen*  
André Bier Gerdau Johannpeter  
Claudio Johannpeter
- Members*  
Alberto Fernandes  
Augusto Braúna Pinheiro  
Claudia Sender Ramirez  
Gustavo Werneck da Cunha

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## FINANCE COMMITTEE

This committee is responsible for advising the Board of Directors on financial-related matters, including the monitoring of the Company's financial results, levels and targets of indebtedness and leveraging, the liquidity position, cash flow, capital structure, allocation of capital, share prices, and trends in the financial market;

### Structure

#### Chairman

Guilherme Chagas Gerdau Johannpeter

#### Members

Alberto Fernandes

Gustavo Werneck da Cunha

Rafael Dorneles Japur

Fábio Eduardo de Pieri Spina

Raul Fernando Schneider

Richard Chagas Gerdau Johannpeter

**The stakeholder map establishes the role of each area responsible for the relationships with analysts, investors, communities, customers, suppliers, the press and society as a whole.**

## STRATEGY AND SUSTAINABILITY COMMITTEE

This committee is responsible for advising the Board of Directors on formulating the general directives that are to be followed; recommending the Board of Directors on directives concerning the production line and sales; providing opinions on the annual investment programs, including the investments necessary for managing corporate risks; providing opinions on proposed mergers and acquisitions (M&A); monitoring the trends in the steel industry and evaluating the impacts of the developments on the Company's business, as well as environmental, social and governance trends, including, but not limited to, climate change.

### Structure

#### Chairman

Guilherme Chagas Gerdau Johannpeter

#### Vice-chairmen

André Bier Gerdau Johannpeter

Claudio Johannpeter

#### Members

Rafael Dorneles Japur

Gustavo Werneck da Cunha

# IMPACT MANAGEMENT GRI 2:12

Gerdau has a Sustainability Policy which establishes guidelines for the sustainable performance of the company's activities, considering economic, social, environmental and governance elements, as well as evaluation of the associated risks and opportunities, whilst reinforcing the organization's commitment to creating value for both itself and society. The directives outlined in this policy guide all Gerdau's activities and are in line with the priorities established in an institutional governance agenda, which include aspects of integrity, management of the supply chain, efficiency in the use of natural resources, social responsibility, and quality and safety in the manufacturing process.

In order for the highest governing body to be able to engage with stakeholders to identify and manage its impacts on the economy, environment and people, Gerdau has a map of its relationships with stakeholders, which establishes the role of each area responsible for relations with analysts, investors, communities, customers, suppliers, the press and society.

The results of this process are monitored and the efficiency of the projects are analyzed by C-level executives and members of the Board of Directors during quarterly meetings of the Strategy and Sustainability Committee.



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# THE ESG JOURNEY

Our ESG journey, connected to the business' strategy issues, is included in the agenda for the Board of Directors' meetings, demonstrating how environmental, social and governance issues are important in the company's decision-making.

One of the differentials of our governance is that the Board of Directors is supported by four Advisory Committees:

- Remuneration and Succession Committee
- Strategy and Sustainability Committee
- Corporate Governance Committee
- Finance Committee

The role of the Advisory Committees is to make recommendations on matters related to their area of expertise. Their members are nominated by the administrative board members, and include at least one board member, whilst the other members may be employees or external advisors.

The activities of the Board of Directors are evaluated, each year, by the Corporate Governance Committee, which is connected to this body. **GRI 2-18** In order to develop the collective awareness, skills and experience of the highest governing body in relation to sustainable development, Gerdau has a Strategy and Sustainability Committee, which is responsible for supporting the Board of Directors in formulating the general directives; recommending directives on the production line and sales; providing opinions on the annually presented investment programs, including the investments necessary for managing corporate risks; providing opinions on mergers and acquisition (M&A) proposals; monitoring the trends in the steel industry and evaluating the impacts of the developments on the Company's business, as well as environmental, social and governance trends, including, but not limited to, climate change. **GRI 2-17**

**The engagement of the Board of Directors reflects the importance of ESG matters to Gerdau's strategy and operations.**

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## OVERSIGHT BOARD

Gerdau's Oversight Board, in accordance with the Joint-Stock Companies Law, is an auditing board made up of members elected by the shareholders, and is independent from the Board of Directors, Executive Board and Independent Auditors. Its main responsibility, at meetings held regularly every two months, is to monitor the activities of the management, review financial statements, and report its impressions to the shareholders. By complying with the regulations of the SEC (Securities and Exchange Commission), the company's Oversight Board adheres to the following standards: it is separate from the Board of Directors, its members may not be elected by the Management, no executive officer may be a member of the Oversight Board, and standards of independence are established for its members.

The body operates in accordance with rules of procedure that include a series of activities up to the limit permitted by Brazilian law and are in accordance with the requirements set forth in the Sarbanes-Oxley Act and those established by the New York Stock Exchange (NYSE).

The permanent Oversight Board is composed of three members (up to a maximum of five) and three substitute members (up to a maximum of five), who are elected at the Ordinary General Meeting of Shareholders, with a mandate stretching until the next annual meeting, with reelection permitted. The holders of preferred shares have the right to elect a member to represent their interests. Groups of minority shareholders holding shares with voting rights also have the right to elect a member of the Oversight Board through a separate vote. The shareholders with ordinary shares (shares with voting rights) have the right to elect the majority of the members of the Oversight Board. [GRI 207-1, 207-2](#)



### OUR BOARD



**Guilherme Chagas Gerdau Johannpeter**  
(Chairman of the Board)

**Claudio Johannpeter**  
(Vice-chairman)

**André Bier Gerdau Johannpeter**  
(Vice-chairman)

**Gustavo Werneck**  
(member of the Board)

**Claudia Sender**  
(independent member)

**Augusto Brauna Pinheiro**  
(independent member)



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# OUR LEADERSHIP<sup>1</sup>

The leaders of the business operations are responsible for the executive management of the organization.

**Gustavo Werneck**  
(CEO)

**Aldo Tapia**  
(Brazil Operations, Special Steels)

**Carlos Baginski**  
(Internal Audit)

**Flavia Nardon**  
(Personnel and Social Responsibility)

**Chia Wang**  
(North America Operations, Long Steels)

**Thales Baleeiro**  
(Legal)

**Flávia Souza**  
(Procurement)

**Luis Guereca**  
(Mexico Operations)

**Gustavo França**  
(Digital and IT)

**Jefferson Marko**  
(Colombia and Dominican Republic Operations)

**Marcos Faraco**  
(Gerdau Next and Strategy)

**Marcos Mattiello**  
(Peru Operations)

**Mauricio Metz**  
(Industrial and Engineering)

**Pedro Torres**  
(Communication and Institutional Relations)

**Rafael Japur**  
(CFO and Investor Relations)

**Rodrigo Belloc**  
(North America Operations, Special Steels)

**Rubens Pereira**  
(Brazil, Argentina and Uruguay Operations)



**We were highlighted in the 12<sup>th</sup> edition of the Brazil Leaders Award, organized by 'Lide' - Group of Business Leaders.**

<sup>1</sup>Rubens Pereira, Aldo Tapia, Thales Baleeiro, Pedro Torres and Marcos Mattiello assumed their positions in 2023. The members of the Board of Directors are elected by shareholders at the General Assembly and the members of the Executive Board at a meeting of the Board of Directors. **GRI 2-10**

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# REMUNERATION GRI 2-19, GRI 2-20

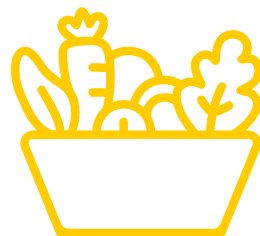
The system for remuneration of the employees is based upon two models: a fixed salary and a variable portion tied to specific targets. The fixed portion is constantly monitored and compared to the market benchmark, in order to keep us in line with the good practices adopted by other companies. The variable portion of the remuneration is connected to the fulfillment of short-term (Short-term Incentives - ICP) and long-term (Long-term Incentives - ILP), targets, although only members of the senior management are eligible for benefits from the long-term targets (ILP). These targets are gauged by clearly defined standards, which help in the achievement of individual and team results. The Company uses various evaluation methods, amongst which are the 'Performance Evaluation' and 'Evaluation of Potential and Readiness for Succession'.

Furthermore, in Brazil and North America, Gerdau subsidizes complementary retirement plans, under which approximately 5% of the participants have a defined benefit and the other 95% operate with defined contribution plans.

The Remuneration and Succession Committee guides the Board of Directors on its remuneration policies, performance and remuneration incentive programs, succession to key positions, the hiring of employees and executives to strategic positions, and related matters.

There is a specific mapping that analyzes the influence of the stakeholders on the process of formulating and influencing the remuneration strategy, including the contracting of consultancies to evaluate the market medians for each position established, and thus identify the need for a review of the structure of jobs, salaries and bonuses.

In 2022, as part of the efforts made to globally align its remuneration programs with the needs of the business, the Personnel department, with support from the Korn Ferry remuneration consultancy, revised its long-term remuneration program, linking a large part of this remuneration to long-term financial metrics, in this case, Return On Capital Employed (ROCE). This revision of the long-term remuneration program included ESG targets in the performance indicators, reinforcing the commitment of Gerdau and its leaders to the sustainability of the business.



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## REMUNERATION OF THE MANAGEMENT

Drafting of the proposal for the Gerdau Management's annual remuneration takes into consideration the premises defined in the remuneration policy and market practices. We also rely upon support from specialist global remuneration consultancies, both in defining the amounts depending upon the different positions and finding benchmark amounts in the market. The reference market is made up of Brazilian or global companies of a similar size to Gerdau, operating in the steel manufacturing or related industries, or may even be potential competitors for the same executives.

In 2022, management remuneration (Gerdau S.A. and subsidiaries), including salaries, variable remuneration, benefits and rescission pay, totaled R\$ 63.8 million. The costs involving social contributions related to the management totaled R\$ 20.5 million. The total remuneration paid to the managers and directors was R\$ 84.3 million. Determination of the managers' variable remuneration is based upon Gerdau's financial results and evaluation of the individual's performance. Members of the Oversight Board are not eligible for this benefit.

The contributions relating to directors as part of the defined contribution plan made by Gerdau in 2022 totaled R\$ 1.9 million. This sum includes only the contributions made to executives who are not involved in complementary retirement benefits. Such benefits do not differ from those involving the other participants in the plan in any way.

## Gerdau's remuneration objectives in relation to the Management are:



To encourage a culture of accomplishment and achievement of challenging targets



To attract and engage performance focused executives through competitive remuneration practices



Consistently and sustainably boost short and long-term results



## SUSTAINABILITY POLICY

The Sustainability Policy aims to establish directives for conducting the activities of the company and its domestic and international subsidiaries in a sustainable manner, considering economic, social, environmental and governance elements, according to the priorities established in an institutional governance agenda, as well as the evaluation of related risks and opportunities. It also reinforces the commitment to the creation of value for the company and society. Applied in all the company's operations, the policy is considered in the relationships with both internal and external stakeholders.

Amongst Gerdau's core principles are "creating value for all", "doing the right thing", and "a diverse and inclusive environment", considering: (a) respect for human rights, cultural diversity and the interests of all the stakeholders; (b) optimum use of natural resources and minimization of the company's impact on the environment, preserving the integrity of the planet for future generations, without neglecting the economic-financial profitability of the business; and (c) corporate governance practices, ensuring they are implemented as an active agent in the development of society.

## One of the pillars of our sustainable operations is the protection of the environment through:

- a)** Optimization of the use of renewable and non-renewable natural resources, including tackling waste and ensuring energy efficiency
- b)** Prevention of pollution through the minimization of the environmental impacts of the operations, whilst seeking to influence the value chain of which it forms a part in relation to this issue
- c)** Management of the company's environmental risks by the leaders and business operations, providing the resources necessary to ensure they are controlled and evaluated as part of the decision-making
- d)** Use of coproducts and their inclusion in proprietary manufacturing processes and others, including those performed by external partners, avoiding the use of landfills whenever possible
- e)** Conscientious use of water in the company's processes with maximum reuse and minimal discharge of effluents, in line with legal requirements
- f)** Maintenance of processes involving controlled air emissions, whilst minimizing the impacts on the community of which it forms a part



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Gerdau has established the environment as a topic that is strategic and important in the construction of the objectives and future of the company, which is responsible for ensuring the legal compliance of its operations and taking a preventive approach to any possible environmental impacts. To ensure transparency, the company develops an internal and external report on its most important environmental indicators as defined by the materiality matrix, all of which should be gauged, monitored and controlled by the business operations. The operations should aim to continually improve their environmental performance, with these indicators having well-defined and deployed targets.

We contribute to the sustainable development of society by including in our strategic planning and the management of our corporate practices the directives represented by the following commitment, agreements and partnerships:



**Well-defined targets guide our operations in our quest for continually improving environmental performance.**

Universal Declaration of Human Rights

The UN Global Compact

Sustainable Development Goals – SDGs

Conscientious Capitalism Brazil

International Labour Organization (ILO) Conventions

Child and Adolescent Statute

National Register of Companies Committed to Ethics and Integrity (Pro-Ethics Company Register)

Children’s Friend Company

System B

Ethos Institute

Gender and Race Pro-Equality Program

Declaration of Corporate Commitment to Tackling Sexual Violence against Children and Adolescents, together with the Department of Human Rights of the Presidency of the Republic.

*‘Childhood Brasil’* for the Protection of Childhood and Adolescence

*Na Mão Certa* (In the Right Direction) program

These commitments reinforce the stance we have taken in relation to the eradication of child labor and forced or compulsory labor in all its forms, to combating the practice of discrimination, the appreciation of diversity, the prevention of moral and sexual harassment, and the management of matters related to safety at work, for our own employees and contractors, as well as respect for free union association and the right to collective bargaining.



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## STRATEGY AND SUSTAINABILITY COMMITTEE

Our Strategy and Sustainability Committee brings production and financial aspects together with ESG factors in the company's decision-making. The Committee advises the Board of Directors on matters relating to environmental, social and governance factors, identifying industry trends that could impact the business in the short, medium and long-term.

In 2021, Gerdau's new Long-Term Incentive Plan (ILP) entered into effect, stipulating that 20% of the sum of the long-term bonus, included in the executives' variable remunerations, should be conditional upon achieving the ESG targets. The gauging of this percentage is calculated using two indicators: the percentage of women in leadership positions and CO<sub>2</sub>e emissions. In addition to this, 40% of the economic value added (EVA) and another 40% are restricted actions not conditional upon the results.

The ESG scorecard published in the annual report provides greater visibility to the ESG indicators prioritized by the senior management. The adoption of these indicators in the composition of the long-term remuneration of our executives forms part of a process designed to disclose social, environmental and governance information to the market, and to the general public, in the name of the commitments that Gerdau has assumed in relation to sustainability and transparency.

## TRANSPARENCY WITH INVESTORS

For more than seven decades, we have taken part in the capitals market and our shares are listed on the stock exchanges of São Paulo (Brasil, Bolsa, Balcão – B3), New York (NYSE) and Madrid (Latibex).

In the Brazilian market, we are included in the B3's Corporate Governance Level 1. We have also adopted practices that go beyond the legal requirements, such as the 100% 'tag along' concession for all our shares and payment of a dividend of a minimum of 30% of the adjusted net income.

We have more than 180,000 investors and we always aim to maintain a transparent relationship with them all. Online interaction has been very important for communicating with the investors. We have aimed to diversify the communication channels and dissemination of the results through the use of podcasts, videos, digital media and a newsletter, to be able to reach all investor profiles.

**20%**  
of the sum of the bonus is conditional upon achieving ESG targets

**180,000+**  
investors

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# ETHICS AND COMPLIANCE: DOING THE RIGHT THING GRI 2-15, 205-2, 415-1



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As well as the commitment to the community, Gerdau's signing of the UN's Global Compact (which includes fighting corruption in all its forms) guarantees socioeconomic compliance as part of the company's principles (Doing the Right Thing). Ethical behavior and compliance with legislation are basic tenets and form a fundamental part of Gerdau's corporate culture. They are formally established in the Code of Ethics and Conduct, the Corruption Policy, the Risk Management Policy, the Sustainability Policy, and the Anti-corruption Policy.

All of Gerdau's policies and directives, as well as the Code of Ethics and Conduct, emphasize the requirement that all the employees must abide by the law and act in an ethical manner, establishing internal controls and pursuing a solid form of governance, whilst respecting all levels of jurisdiction. Amongst the documents involved in the area of Compliance, special mention should be made of the compliance and anti-corruption policies, and the guidelines on relations with public officials, donations and endorsements, contracts that place compliance at risk, courtesies, conflict of interests, competition practices and disciplinary sanctions.

The company does not tolerate any anti-ethical practices, corruption and/or disrespect for the legislation of the companies where it operates, with an infringement being considered as ethical

divergence of any nature, which can result in the application of disciplinary penalties, including rescission of the employment agreement and accountability of employees and contractors.

All operations and processes impacting finances are permanent and revolving, and assessed by the internal audit. The Compliance Department conducts risk assessment on those processes posing the greatest compliance risks.

## Policies and directives available on the intranet ensure that the team have access to updated information

All our employees, including all the executives and directors in every one of the regions where Gerdau has operations, undergo training in Ethics and Conduct, which amongst other topics, includes anti-corruption. The policies are available to all employees on the intranet and all are notified whenever there are any updates. Every semester all employees receive the list of policies that are in effect. Business partners are notified by means of the contractual clauses in

their terms of commitment. In 2022 all materially important suppliers and customers received a notification reinforcing Gerdau's commitment to fighting corruption, along with a link to our Code of Ethics and Conduct for Contractors and the Ethics Hotline.







For the prevention of corruption and bribery internally, Gerdau has established a control environment that is continually being revised, focused on the mitigation of these risks, accountability in the form of committees, and governance structure. All of Gerdau's operations are assessed in terms of the risks relating to corruption. The Company's operations expose it to risks and challenges associated to the conducting of business in compliance with the applicable anti-bribery, anti-corruption and antitrust laws and regulations. **GRI 205-1** During 2022, there were no recorded cases of corruption. **GRI 205-3**

To contribute to the effective abolition of child labor, Gerdau has implemented a Human Rights Policy, which establishes guidelines that promote respect for human rights in all of its commercial activities, and support for the Universal Declaration of Human Rights, the Declaration on Fundamental Principles and Rights at Work published by the International Labour Organization, and the United Nations' Guiding Principles on Business and Human Rights.

In 2022, Gerdau received significant fines totaling R\$ 552.51 million, in which appeals may or may not be possible. No non-monetary penalties were applied, nor were there any fines for cases of non-compliance with laws and regulations that occurred during the reported period or during previous periods. We identified no incidents of non-compliance involving significant fines associated with water quality permits, standards, or regulations. The Company believes that the concept of significant fines/penalties can be broken down into two criteria: (a) materiality: monetary sum of significant fines, considered as being those involving sums equal to or greater

than US\$ 8 million and/or; (b) relevance: penalties applied as a result of non-compliance with environmental laws and regulations, with the potential to prevent or limit the performance of the activities exercised or impact upon the Company's image. **GRI 2-27**

## CODE OF ETHICS AND CONDUCT FOR CONTRACTORS

Worthy of special mention in relation to contractors are the Code of Ethics and Conduct for Contractors, contracts and purchase orders containing anti-corruption and ethical principles clauses, ratification of business partners with reputational evaluations, and due diligence procedures, assessing any possible risks to compliance. The review and auditing of these risks fall within the scope of the control areas (Internal Auditor, Internal Controls and Compliance) and SOX certifications, with complimentary support from the compliance hotline that is available to all internal and external stakeholders.

The Code of Ethics and Conduct for Contractors establishes guidelines for the situations anticipated in Gerdau's relationship with its contractors, defined in this Code as being its suppliers, service providers and customers; it sets out Gerdau's main commitments to all matters connected to ethics and compliance with the law; it guides contractors on how they should take part in ensuring the fulfillment of these commitments; and stresses unacceptable situations, which may make the contracts liable to review or even termination.

**EM-MM-510A.1**

## GLOBAL ENVIRONMENT

Gerda operates globally and its activities extend across numerous legal jurisdictions and complex regulatory frameworks, which have seen an increase in the efforts made to apply the norms throughout the world. Our governance and compliance processes, which include a revision of internal controls concerning financial disclosures, may not be capable of preventing future infringements of legal, accounting or governance regulations.

The Company may be subject to violations of its Code of Ethics and Conduct, anti-corruption policies, or corporate conduct protocols, as well as cases of fraudulent behavior, corruption practices and dishonest behavior on the part of its employees, suppliers and other agents. Non-compliance with any laws or other applicable norms may subject the Company to payment of fines, the loss of operating licenses or damages to its reputation.

**GRI 205-1**

## INTEGRITY PROGRAM

Gerda's Integrity Program reinforces the obligatory requirement to comply with all applicable legislation and follow the best practices of ethics and compliance, acting in a preventive and detective manner, through the dissemination of the Company's ethical culture, compliance hotline, policies and directives, monitoring the compliance risks, performing risk assessment, guaranteeing the 'tone at the top' for the ethical culture, and reputational assessment of the business partners. Through its preventive and consultative approach, the Compliance Department works to guide the employees in relation to the routines and controls established for risks to compliance.

As a means of reinforcing the communication of these principles and requirements, themes involving the Integrity Program are circulated each month. These issues include accountability and encouragement to use the compliance hotline, reinforcement of the Policy and Directives, and in-person training sessions provided by the Compliance team. Twice each year the Company performs Code of Ethics and Conduct refresher training campaigns for all the employees, whilst for certain positions anti-corruption and anti-trust practices training is also required.

## REPARATIONS OF NEGATIVE IMPACTS

To provide reparation for negative impacts, the organization identifies what has caused and what has contributed to causing the impacts in question. Gerda prides itself on the transparency of the data sent out to its stakeholders concerning the operational risks, and holds periodic meetings with the communities in which it is present.

In order to identify and address complaints, Gerda has made certain channels available to all of its stakeholders, allowing them to highlight facts that involve the company or its employees (read more in [Compliance Hotline](#)).

The stakeholders, who are the target users of the complaint mechanisms, are involved in the creation, revision, operation and improvement of the mechanisms through accountability, based upon the report presented to the company by means of the contact channels. To monitor the effectiveness of the complaint mechanisms and other reparation processes, Gerda calculates the rate of response and the time it takes to send a reply to the stakeholder. **GRI 2-25**

**The management of ethics and compliance prioritizes prevention and guidance on routines and controls**

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## COMPLIANCE HOTLINE GRI 2-26

Gerdau's Compliance Hotline is available to all the internal and external stakeholders, allowing them to report ethics-related concerns or doubts that could involve the company or its employees. Anonymity and non-retaliation are guaranteed, as is the full confidentiality of the accusation. The Compliance Department makes periodic reports on the status of the grievances to the Oversight Board, the Risk Committee, the Board of Directors and the Statutory Executive Board, detailing the number of reports received, answered and addressed and the reasons behind them. The functioning of the compliance hotline is reviewed annually by the independent auditor and Internal Controls, ensuring adherence to best practices, fulfillment of the SOX requirements, and proper handling of the grievances.



### Telephone

Brazil and Latin America  
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### E-mail

[canal.etica@gerdau.com.br](mailto:canal.etica@gerdau.com.br)



### Website

Incidents can be reported directly through the portal, available on all of Gerdau's websites, always on the Ethics and Compliance page.

## RISK MANAGEMENT

The identification, monitoring and handling of operational and business risks that could impact the Company's operations and processes are controlled by the Business Operations Committee and the Corporate Processes Committee, and monitored by the Risk Committee. We work with many different types of business risk, including compliance, operational, safety, labor, environmental, financial, tax, image and regulatory. The risks are also assessed by the Remuneration Committee, the Strategy and Sustainability Committee, the Corporate Governance Committee, and the Finance Committee, and presented to the company's Board of Directors and Executive Committee. **GRI 2-16**

Monitoring of the operational and business risks that could impact our activities is performed by the control structure and by the Business Operations Committee, with monitoring provided by the Risk Committee. We work with many different types of business risk, including compliance, operational, safety, labor, environmental, financial, tax, image and regulatory.

Operation of the risk management structure at Gerdau is decentralized, to take advantage and optimize the management of the technical knowledge and profile of the professionals operating in each area. The results of the critical risks are consolidated and a periodic report is submitted to the senior management. **GRI 2-13**

The Three Lines Model should be established for operational risks, taking into account cost analysis versus risk exposure:

### LINE 1

System of controls with routine and control activities, procedures, approval limits, systemic blocks, access restrictions, reconciliations, and management of the business and operational risks.

### LINE 2

Management activities, monitoring, process analysis, accountability, compliance and management of internal control.

### LINE 3

Performance of internal and/or external audits on all processes.

**The risk management directives and processes are based upon analysis of the business, regarding issues relating to climate change and the ESG scorecard indicators.**



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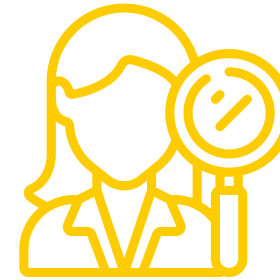
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The risk factors concerning climate change relate to unexpected interruptions in the manufacturing capacity of the principal units and installations, which could increase production costs, whilst reducing sales and gains in the affected periods.

**Our reporting is performed via the Climate Change module of CDP, with the premises requested by the Task Force on Climate-Related Financial Disclosures (TCFD) initiative, considering the climate change-related pillars, detailed as:**

- Regulatory Risk: the proposed carbon market scenarios are assessed, including the different types of instruments: regulation of carbon pricing, via taxes on emissions; the regulations of carbon quantities, via an emissions trading system; or some combination of the two.
- Physical Risk: operational risks stemming, for example, from droughts, resulting in production stoppage as a result of the limited availability of resources in our operations, or production stoppages as a result of unexpected flooding.
- Legal Risk: risks related to policy and legal issues, such as requirements to monitor and report on the impacts caused by GHG emissions; new taxes and markets linked to the impacting activities; and the inability to operate if environmental regulations are violated.
- Reputational Risk: risk of reduced demand for our products, should they fail to meet customers' expectations in relation to carbon intensity.
- Market Risk: risks related to the taxation or pricing of carbon and to the high cost of GHG-intensive raw materials.
- Technology Risk: analysis of the uncertainties surrounding processes using new technologies, including disruptive technologies.



**DIGITAL AUDITING**

The role of the internal auditor is to ensure that risks are covered adequately, whilst working independently and monitoring risks periodically. Many of those on the team of auditors are capable of manipulating databases using programming language.

Activities that could take months to cover certain risks can be undertaken in minutes. By using algorithms, artificial intelligence and big-data processing architecture, risk coverage has been expanded meaning it is now possible to connect digital structures to traditional and industrial procedures to process and interpret data in run time, creating digital alerts and actions to prevent losses.

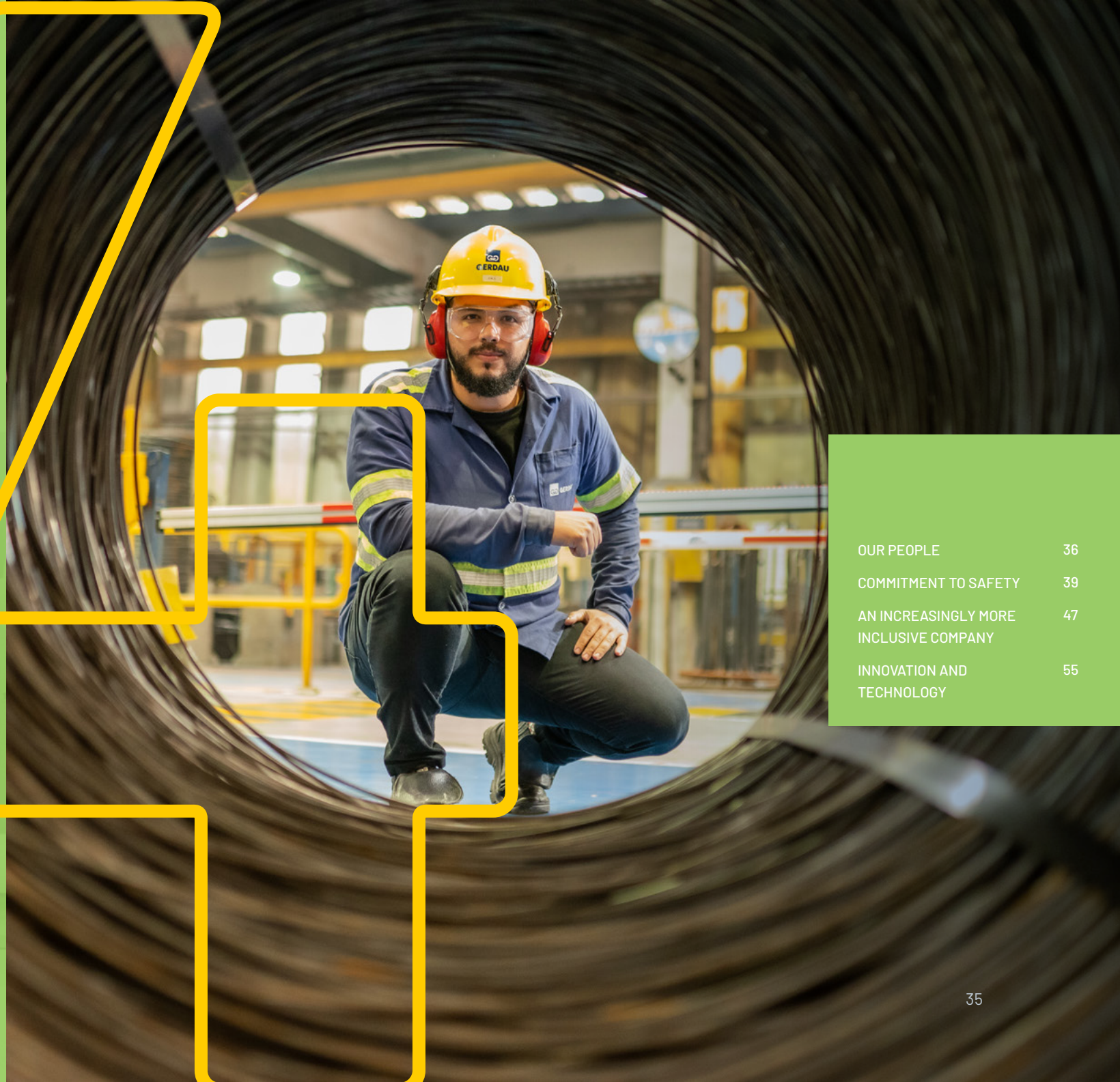
Risk management applications support the processes and monitor the routines. In addition to this, the fact that the department is independent means that the handling of the complaints remains that much more equal. The reports developed by the internal auditor are presented to the Board of Directors and monitored by the Oversight Board.



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# HUMAN AND INTELLECTUAL CAPITAL



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# OUR PEOPLE



**O**ur personnel management policy is based upon respect for people, upon encouraging collaboration, flexibility, transparency and less hierarchy, with the aim of empowering people, through an appreciation for autonomy, dialog and trusting relationships. One of the initiatives developed with this as a base is the cultural transformation journey, which began in 2014.

Promoting the continued development of this journey amongst our employees was one of the most important challenges of 2022. For Gerdau, the organizational culture provides a boost for our strategic value, and should become increasingly stronger in the different business units and areas. Three approaches are considered to be fundamental in supporting our actions:



Engaging each other with honesty and respect



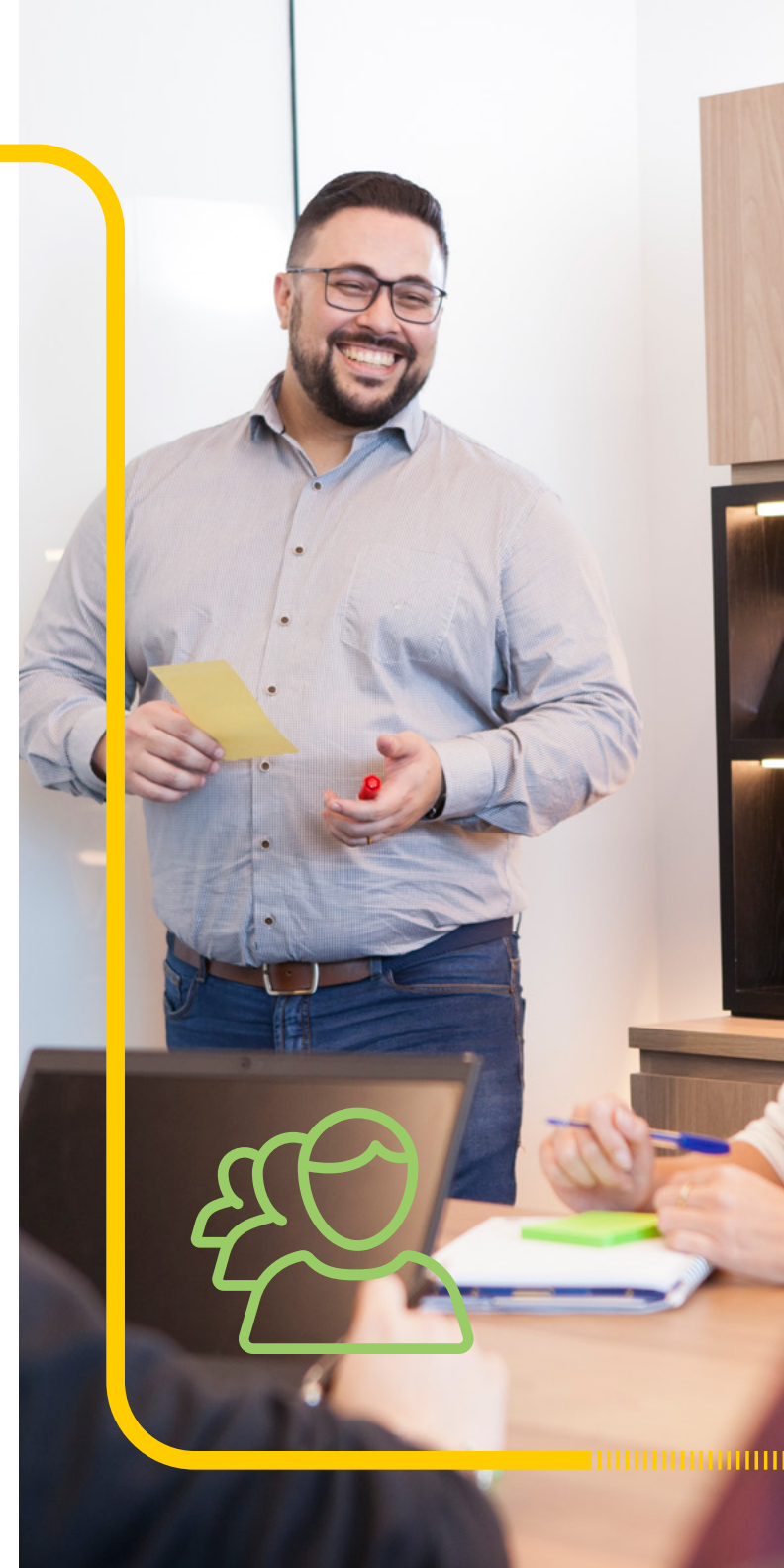
Adopting a leadership approach to making things happen independently and responsibly, and



Outperforming every day

As a means of spreading an understanding of these precepts and reinforcing the need to operate in line with them, we have established 12 Culture Teams, which operate in each operational area, with the autonomy to apply our cultural strategy, find answers, and reinforce the Company's values and principles.

The impact of the work performed by the Cultural Teams was increased through a series of actions including the 2022 Global Leaders Meeting, which welcomed more than 1,000 leaders. At the event, the participants developed skills focused on people, customers and implementation, factors that we consider to be decisive for the evolution of our corporate culture. Monthly meetings were also held with the 'Culture Champions', individuals who are widely-recognized benchmarks in spreading the Gerdau culture. The meeting provided a chance to exchange experiences and good practices between the operations located in Brazil, South America and North America. Of special note amongst the initiatives were: a notable advance in the development of C-level leaders, with the aim of forming role models within the desired culture; quarterly meetings during which the CEO and the business leaders presented the financial results and the progress made on topics of importance for all the leaders, with sessions dedicated especially to open questions and answers; workshops focused on "Honest and Respectful Dialogs"; and the development of content designed to support the leaders.



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Reflecting the organizational efforts made, we have regularly been included in rankings related to the work environment, such as the Great Place To Work (GPTW) certification, which we received once again in 2023. The company also received recognition in the 'Época Negócios 360º' annual publication and the 'Exame' magazine. Also in 2022, we obtained the 'RH Inovador' seal, in the Leadership category, in the form of the Think Work Flash Innovations award (read more below).

We work with an emphasis on empowering those who build the future; to do so, focusing on the promotion of a working environment that is plural, inclusive, safe and healthy, whilst providing for development and qualification, is a priority. We remain committed to attracting talents, offering conditions that are competitive within the context of the Brazilian market. In 2022, one highlight was the 'G.Start Program', aimed at trainees, and combining education and training in different environments and departments to develop, qualify and prepare future talents. The program offers competitive benefits and, in 2022, welcomed 845 new trainees into the company, compared to 650 in 2021.

With regard to the benefits package, we are a pioneering company for our size and segment in believing in tailoring and adapting the routines of our employees to their realities. Our employees have access to a wide range of benefits. For each one to be able to enjoy that which best meets their specific needs, the company offers the 'Gerdau BeneFlex'. This is a points-based benefits system. Under the system, if a certain benefit is of no interest to the employee, they can use the points on other benefits offered.

There are also benefits that can have an enormous impact on the employees' health, and which are available for all the employees and their families in Brazil, at no charge to the beneficiaries. Two examples of this are 'Einstein Conecta', a virtual platform providing doctors appointments and medical first aid through the Albert Einstein Hospital (read more in [Commitment to Safety](#)) and the Pregnancy Program, providing tips and specialist monitoring that prioritize the health of the mother and baby.

## COMMUNICATION

Aware that internal transformations rely directly upon the quality of the communication with the employees, in 2022, we continued to make improvements to the different tools we have available for discussions with all the areas of activity.

In our 'Open Conversations', for example, the employees have the chance to interact with the leaders based upon the practice of Honest and Respectful Dialogs. Nine of these meetings were held in 2022, involving 1,500 people. Another highlight is the Global Leaders Meeting, which, in 2022, brought together 1,000 leaders to share their experiences, undertake learning actions and work on their alignment with the strategic priorities. Conducted in hybrid form, the event allowed for the in-person participation of around 130 leaders.



## THINK WORK INNOVATIONS CERTIFICATION

The commitment to development and the implementation of best personnel management practices was recognized, in 2022, by the Think Work Flash Innovations award. Gerdau received the certification, awarded to the most innovative projects in different categories, for its 'Leadership Developer' initiative.

The project consists of a survey conducted amongst the employees. The participants choose up to three leaders who have contributed to their career and explain the reasons for the choices. The employees can choose not only current or immediate superiors, but also anyone who has possibly influenced their professional development.

The leaders named receive due internal and external recognition in the form of posts on the company's social network and on the LinkedIn platform. More than 700 leaders were recognized in Gerdau's operations in Brazil, Argentina, Uruguay, Peru and Mexico.

Following this initiative, the 'Leadership Developer eNPS' indicator was created. Once a year, all the employees are invited to outline how much their leaders have directly contributed to their development. Each leader has access to the eNPS score and, if necessary, with support from the Personnel Department, they can develop an action plan to improve their performance in this area.



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# SIGA - LEADERSHIP ACADEMY

Created in 2021, our leadership development academy, SIGA, began a new training culture, with the aim of preparing its more than 2,000 employees to deliver high performance in an increasingly technology-enabled and inclusive environment.

The program offers a wide range of tools and opportunities for each individual to be able to design their own learning journey. The initiative involves practical and hybrid academic classes, webinars, podcasts, practice communities, experience sharing, and projects that encourage connections, dialog and creativity.

In 2022, SIGA welcomed 1,571 leaders who engaged in 135 classes and registered 8,914 self-training sessions as having been completed on the learning portal. This means a 76% rate of conclusion under the obligatory Safety course by November. Also forming part of the SIGA program were two online events for leaders based in Brazil, Argentina and Uruguay. The theme of the first event was 'Self-directed Learning' and involved 1,600 leaders. The second addressed the theme of 'Future Leaders' for a group of 1,000 participants.

## 1,571

leaders participated and there were 8,914 self-training sessions completed via the learning portal

# G FUTURE

Another new initiative created in 2021 which continued into 2022 was 'G Future', the most extensive trainee program in the history of Gerdau, involving 42,000 applications for 200 positions offered. Lasting 18 months, G Future invests in new new talents, by training them with the intention of creating future leaders. The path towards

development involves training sessions focused on business, digital transformation, ESG, operational excellence, steel manufacturing processes, leadership, culture, and specific skills and knowhow for the company's different areas of operation. The trainees also work on multi-disciplinary projects and enjoy personal monitoring.

## 42,000

applications for the trainee program for

## 200

positions offered in 2022



# COMMITMENT TO SAFETY

GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC

'Safety First' is our most important principle, since no result is more important than the life of a person. We have a structured plan relating to this issue, with a list of priorities, systems and preventive actions that are monitored in terms of progress, with the aim of promoting a safe working environment.

Our management of health and safety at work, in addition to meeting all the legal requirements in effect at each of the operating locations, is based upon the HSEQ Integrity Policy and on the company's values and principles. Originally based upon the DNV consultancy's management system (ISRS) and on the OSHAS 18.001 and ISO 45.001 systems, Gerdau's model has since incorporated management practices developed by specialist consultancies (DuPont, Wwin, etc). The system adopted covers all the company's direct employees (including those working externally), contractors and those who have access to our units (truck drivers, sales personnel, visitors, etc.).

## GRI 403-1

Twice every year, Gerdau brings together the Global Safety Committee. This is a moment during which all of the organization's safety leaders, from all the operations and countries, meet to discuss common problems. Based upon the important points that have been identified locally, the year's safety priorities are defined, as well as the actions that are to be established, consider-

ing three challenges that may come into play: physical, systemic and behavioral.

To communicate information and engage the employees in the company's practices and requirements, we host the 'Gerdau World Safety Week', involving actions taking place at all the units and departments. There are also events held over the course of the year that focus on issues specifically related to the world of OHS, such as 'Hand Protection Week'. The Daily Safety Dialogs are another tool designed to encourage safe behavior and analyze risks.

The Company has a Health and Safety Management directive designed to outline the practices and minimum obligatory requirements that must be complied with at all of Gerdau's units both in Brazil and abroad. This is the document that guides the company's audits. There is also another corporate directive which, in the form of more than a dozen annexes, addresses the main risks involved in the company's operations.

We also have a structured process, established in the corporate directive, to be able to identify hazards and evaluate risks. The minimum requirements for a proper system capable of identifying, evaluating and controlling all the risks associated with the manufacturing activities and processes are defined and shared with everyone involved in the company (see the box below).



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# RISK ANALYSIS REQUIREMENTS

- The risks involved in the routine tasks performed as part of the processes are assessed according to the matrix developed for determining the risk of each individual task.
- The critical tasks should be separated out into activities/ steps.
- The critical tasks that cannot be eliminated or in which the risks cannot be reduced should follow written procedures.
- All the processes are analyzed, with the intention of identifying the associated risks that can have consequences for the personnel.
- The process employed for risk analyses uses tools designed to identify the risks applicable to the specific process.
- The risks are assessed and analyzed in accordance with the Gerdau risk matrix, prioritizing them by means of a criteria of criticality.
- Employees and contractors should perform a preliminary risk assessment for all tasks that are not routine and which have a potential 'A' or 'B' severity rating (medium/high), splitting them into activities (steps), and identifying the risks and preventive measures necessary for each one. These assessments should be validated, signed and approved at the work location. This same practice involves two specific requirements relating to the application of the hierarchy of control: consideration of the hierarchy of controls (eliminate, substitute, engineering, management, personal protective equipment - PPE) in the definition of actions for the reduction of the risks involved in the critical tasks and processes; handling of the highly-critical risks should adopt the hierarchy of control with a view to reducing them as much as possible.



The process of Identification of Hazards and Evaluation of Risks is performed by the managers of the operational areas, with supervision and support of professionals from the area of Health and Safety. Based upon the results, opportunities are identified in the system that can complement the management of the gaps identified.

The health and safety management system involves practices and tools designed to receive and handle complaints, including the Sub-standard Acts and Conditions Report, and the practice of Refusing a Risk-related Task. Every worker (direct or outsourced) has the right to refuse to perform a task which they believe to involve uncontrolled

risks. The refusal is registered by filling out a form that is analyzed by the manager of the operation and by occupational health and safety professionals. In the event of the risk being confirmed, the work is suspended until the risk is eliminated or brought under control. The entire process is audited to avoid any form of misuse or reprisals.

As well as the specific practices involved in the health and safety process, we have other channels open to receive complaints, including meetings with the teams and, most importantly, the Ethics Hotline, a confidential channel designed to handle matters in which the employee wishes to maintain their anonymity.



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## The minimum requirements for identifying, communicating and investigating the occurrence of incidents, to ensure that they do not occur again, as well as communicating what has been learned, are:

- The employees need to file reports on irregularities (accidents, near-accidents, CDM, actions, conditions and procedures) at the unit and classify them according to the potential for severity (A-B-C)
- It is necessary for the effectiveness to be checked in all events designated with a severity rating of 'A'
- The management of the unit should be immediately informed upon occurrence of an accident or near-accident with a potential severity rating of 'A', and file a corporate report within a maximum of one business day of the occurrence
- All accidents involving personnel (lost-time and no-lost-time) should be investigated, as should CDM accidents with a potential severity rating of 'A' and all near-accidents with a potential severity rating of 'A'
- The unit should have an indicator that monitors the occurrence and arrangements for the engagement of emergency systems
- All engagements of emergency systems should be recorded as events with a potential severity rating of 'A' and their causes should be investigated
- The unit should use the Causal Factor Tree Analysis methodology or similar for events with a potential severity rating of 'A'
- The leaders should be trained in accident investigation and should start the investigations immediately after the occurrence of the event (within 12 business or non-business hours)
- The employees or their representatives should be involved in the process of investigation into accidents or near-accidents
- The investigations should be consistent, taking into account all possible failures in the three protection barriers and arriving at the root causes, establishing effective actions based upon the hierarchy of controls
- All accidents and near-accidents should be recorded in Gerdau's official system (HSE-D).

GRI 403-2



## The workers participate in the development, implementation and evaluation of the health and safety management system as follows:

- Reporting of safety-related incidents
- Execution of the safety practices for which they are responsible (safety inspections, risk analyses, risk mapping, process mapping, standardization of critical tasks, auditing of standards, etc.)
- Periodic meetings of the teams with their leaders (passing on of information from dialogs through all levels of leadership until operational level)

The information is communicated by means of the company's information channels, e-mail, fully-visible management boards and safety meetings with the teams. All the units have formal health and safety committees made up of employees and managers. In those countries where this matter has legal provisions, the employees elect individuals to represent them on the committee. The meetings are held monthly, at which the relevant issues are discussed and decisions reached. The participation of the company's leaders ensures that the committee's decisions are implemented. The employees of third party companies also participate in the meetings of these committees in the form of their own representatives. **GRI 403-4**

**All** the units have a medical outpatients clinic with professionals qualified in each required specialist area

## ATTENTION TO HEALTH **GRI 403-3**

Care for health and wellbeing also forms a part of our efforts to promote a pleasant working environment for the employees. To identify the hazards and minimize the risks, our healthcare and occupational hygiene services include the following programs:

- Occupational Hygiene Program
- Occupational Health Surveillance Program
- Ergonomics Program
- Alcohol and Substance Abuse Control Program
- Respiratory Protection Program
- Hearing Protection Program

All the units have an on-site outpatients clinic with trained medical staff (physicians, nurses and nursing assistants), with the number of staff and their level qualification being determined by the size of the unit and the number of direct and outsourced employees. All incidents are treated directly by the healthcare professionals with the information being stored in physical or electronic files, which can only be accessed by the authorized healthcare professionals, as stipulated by the law.

## To train the company's direct employees and outsourced workers, we adopt the following minimum requirements in the management and promotion of knowledge, attitudes and skills:

- Appropriate training and qualifications for health and safety-critical roles are a prerequisite for hiring, and workers' training certificates are inspected before they are assigned to perform critical activities.
- General health and safety induction training is provided to all direct employees and contractors before they begin their activities. Following the induction training, employees take written tests for which there is a minimum passing score.
- Workstation-specific training is also provided and buddies are assigned to all employees who have been newly hired, transferred or are returning from more than 45 days of leave.
- Role-specific Occupational Health & Safety and Process Safety matrices outline the processes for all jobs, including procedures for critical tasks, risk identification and analysis, legal demands, and other company requirements.





All contractors receive induction training and training on Risk Analysis and the Permission to Work system. All other training sessions required of contractors must be performed and proven prior to entering our business units. An external contracted company (Bancodoc) maintains control over the documents/certificates presented by contractors. [GRI 403-5](#)

One of the most important benefits for the employees is the health plan. The employees have access to the health plans which are extended to their dependents, depending upon their level/position. Outsourced employees are not covered by this benefit. The plans may differ between the countries in which Gerdau operates.

Also in support of improving the health of the employees, the company holds campaigns designed to promote healthcare in different areas, including:

- Prevention of smoking
- Prevention of alcohol and substance abuse
- Mental health
- Quality of life
- Prevention of cardiac risks, high blood pressure, diabetes, etc.

All the programs can be freely accessed by all the employees and a number are also available to the employees of contractor companies. [GRI 403-6](#)

## ZERO FATALITIES

The elimination of serious accidents and fatalities is the company's main target. To achieve this, in 2022, Gerdau started its Zero Fatalities project. To monitor the fulfillment of its objectives, the company has adopted two indicators: rate of seriousness = 100, and rate of frequency = 0.9. Over the year, the rate of frequency of work-related injuries was 0.03, a drop of around 46% in relation to 2021. The Company recorded two fatalities in 2022, in the state of Minas Gerais and in Mexico.

In 2022, the accidents with the most serious consequences were associated with working at heights, and with suspended loads, mobile equipment and power sources. These form part of the 14 critical risks of accidents covered by our Corporate Safety Directives. These directives are reviewed and updated whenever an accident occurs or depending upon the need, with the requirements being divided into three groups: Personnel, Equipment and Procedures. The requirements relating to Equipment involve high-ranking physical protection.

Gerdau considers accidents that have serious consequences to be all those that lead to amputations or the permanent loss of functions amongst direct or outsourced employees. Accidents requiring obligatory communication are all fatalities, accidents involving time of work and accidents without time off work.

We consider high-potential incidents to be events that are internally classified as Accidents With Material Damages, with a potential severity rating of 'A', and Near-Accidents with a potential severity rating of 'A'. In 2022, there were 6,206 work-related incidents identified as having high-potential for occurrence and 20,111 near-accidents. [GRI 403-9 | EM-IS-320A.1](#)

**46%**  
reduction in  
the accident  
frequency rate

**14**  
critical risks make  
up the Corporate  
Safety Directive



**WORK-RELATED INJURIES** <sup>1,2,3</sup> GRI 403-9 | EM-IS-320A.1

	2020		2021		2022	
	Employees	Workers <sup>2,3</sup>	Employees	Workers <sup>2,3</sup>	Employees	Workers <sup>2,3</sup>
Number of fatalities resulting from work-related injuries	1	1.00	1	2.00	0	1
Rate of fatalities as a result of work-related injuries	0.02	0.04	0.02	0.05	0	0.02
Number of work-related injuries with serious consequences (except fatalities)	9	1.00	5	2.00	2	2
Rate of work-related injuries with serious consequences (except fatalities)	0.17	0.04	0.08	0.05	0.03	0.04
Number of work-related injuries requiring communication	334	101.00	365	161.00	339	161
Rate of work-related injuries requiring communication (TRRR)	6.22	3.59	5.93	3.88	5.3	3.22
Number of hours worked	53,683,160.00	28,104,750.00	61,600,052.00	41,520,647.00	64,009,189	50,041,962
Rate of Severity of Accidents <sup>1</sup>	242.70	247.10	178.60	338.40	0	0
Work-related injuries involving lost time	55	14.00	55	27.00	0	0
Rate of frequency of accidents – lost time accident + fatalities	1.04	0.53	0.91	0.70	0	0
Recordable incident frequency rate (TRIR)	-	-	5.13	-	5.30	3.20
Near miss frequency rate <sup>4</sup>	-	-	264.37	107.99	265.04	62.87

<sup>1</sup> The severity rate calculation used in all countries where we operate is days lost as a result of work-related injuries plus days deducted as a result of fatalities (6,000 days) and amputations (NBR 14280 Table). This calculation is based on Brazilian regulations (which are similar to those in other countries).

<sup>2</sup> Workers who are not employees, but whose work and/or location of work is controlled by the organization.

<sup>3</sup> All the workers, be they direct employees or contractors, are considered in the health and safety management.


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# MENTAL HEALTH AND WELLBEING

In 2022, the matter of the employees' mental health received special attention, with a far-reaching diagnosis of the issue being conducted. Based upon the results, we began implementing action plans. Around one thousand leaders discussed the issue at the Global Leaders Meeting and the Company implemented a working methodology specifically to address the matter. Around 70 leaders from the Personnel departments in Brazil, Latin America and North America have been trained in this methodology.

The '+Cuidado' program was an important ally for the employees' wellbeing and mental health in 2022. The initiative offers psychological, social, legal and financial assistance to the workers and their dependents, 24 hours a day. The initiative assisted 4,365 employees over the course of the year. The majority of the consultations were related to psychological issues (65%), followed by legal (15%), financial (10%) and social welfare (10%) matters.

In the range of initiatives focused on wellbeing and mental health, the 'Reconnections' program, for example, sought to mitigate possible psychological resistance to returning to the office (following the Covid-19 pandemic), by providing 914 employees with support and making people feel welcome. The 'Chat Circles' provided spaces for conversations that allowed the managers and their teams to face challenging day-to-day issues, helping 250 employees in the process during 2022. Another initiative that benefited a similar number of people was called 'Care: support and listen', focused on psychosocial support and monitoring employees and their families suffering serious illnesses, difficult moments in their lives, accidents and deaths. At least another seven programs developed by Gerdau played similar roles in 2022, impacting almost 800 employees.

**4,365**  
people impacted  
by the '+Cuidado'  
program in 2022

**All direct employees and contractor workers are covered by the health management system.**

## SUPPLIERS

As well as the actions focused on preventing or mitigating risk at our units, we also undertake accident prevention actions with our suppliers through the definition of Gerdau's basic requirements. We also have scrap metal supply chain development programs, involving actions designed to provide all the stakeholders, through to the communities involved, with information and guidance. In addition to this, actions connected to the transportation of raw materials and products aim to ensure the safety of all those involved in this stage of the operation. **GRI 403-7**

All the direct and outsourced workers are covered by the health management system and all are audited internally. A total of 2,000 employees, or 7.69% of the absolute total, and 800, or 3.81%, were audited internally and certified by an external party. The information is included in the HSE-I corporate system, which the company uses to record each unit's monthly safety data. **GRI 403-8**





**EMPLOYEES BY TYPE OF EMPLOYMENT  
AGREEMENT AND REGION<sup>1</sup> GRI 2-7 | EM-MM-000.B**

Region	2020			2021			2022		
	Permanent work agreement	Fixed-term or temporary work agreement	Total	Permanent work agreement	Fixed-term or temporary work agreement	Total	Permanent work agreement	Fixed-term or temporary work agreement	Total
Brazil	16,193	929	17,122	20,328	1,367	21,695	21,051	5,732	26,783
North America (United States and Canada)	5,732	17	5,749	6,075	18	6,093	6,222	833	7,055
Dominican Republic/Colombia	1,662	445	2,107	1,992	60	2,052	2,080	204	2,284
Mexico	1,422	104	1,526	1,503	38	1,541	1,582	419	2,001
Peru	905	56	961	919	44	963	909	60	969
Argentina	625	0	625	700	40	740	754	183	937
Uruguay	180	0	180	214	5	219	182	52	234
<b>Total</b>	<b>26,719</b>	<b>1,551</b>	<b>28,27</b>	<b>31,731</b>	<b>1,572</b>	<b>33,303</b>	<b>32,780</b>	<b>7,483</b>	<b>40,263</b>

<sup>1</sup>The number of workers by type of function and gender was not monitored, nor were the number of workers without fixed-term contracts.



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# AN INCREASINGLY MORE INCLUSIVE COMPANY

GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC (DIVERSITY, EQUALITY AND INCLUSION), 405-1

**D**iversity and inclusion are fundamental agendas for a company with the size and complexity of Gerdau. We understand that innovation and plurality, essential for the future, are the result of the dedication of talents with different life histories and experiences, capable of expanding the vision and reach of the Company.

At Gerdau, the Diversity & Inclusion department has its own budget and team dedicated to actions and the definition of global strategies, which is responsible for planning, designing and executing the roadmap connected to our objectives and internal culture. The area also provides support (in the form of internal consultation) for matters related to Internal and External Communication, Investor Relations, Compliance, Legislation, and Procurement, as well as other sub-departments concerning Personnel. Another essential group of instruments involves the Diversity Committee and the local committees. It is by means of their work that all the business units become involved in the development and implementation of the actions relating to diversity.

The importance given to this issue means that diversity and inclusion are included in the company's different documents and policies, such as the Code of Ethics, Social Responsibility Policy, Human Rights Policy, Sustainability Policy, Travel Policy, Remote Working Regulations for Disabled Persons, and the Global Diversity Policy.

One of the ways in which we work for inclusion and diversity is by bringing together groups facing similar challenges. These cover five areas (Gender, Race and Ethnicity, LGBTI+, Disabled Persons and 50+) and are led by a sponsoring director and a coordinator for each area. The aim is that they help to organize actions together with the members of the other groups. Each working front operates with specific strategies and objectives, but always focused on inclusion and increasing the representativeness of each group. In 2022, more than 400 people formed part of the connected groups as members or ambassadors.

In 2020, we performed the first Brazilian Diversity Survey/Census, a demographic analysis of the race, gender, LGBTI+, age and disability pillars. The study was also aimed at understanding the employees' perceptions in relation to situations of prejudice and discrimination in the workplace. Based upon the results, the business operations and units were able to expand their action plans and direct their efforts towards the groups most in need.

The second edition of the survey was undertaken in 2022. As well as the social bookmarking and diversity pillars (race, gender, LGBTI+, age and disability), elements used in analyzing the employee's journey (eNPS) were included along with favorability indexes which, together, make up the perception of inclusion at Gerdau. In this

edition, the survey was extended to all the company's operations.

Also during 2022, we managed to obtain results that demonstrate the positive path the organization has been leading. 'G Start', Gerdau's trainee program, which intentionally boosts the company's hiring of persons from diversity groups, received 12,000 applications. Around 9,000 of them fell within the profiles sought by the company, which ultimately hired 151 people, 68 of whom were Black (45.03%) and 46 women (23.84%).

Over the course of the year, we worked with a diversity calendar to promote actions designed to promote the engagement of all the employees with the five pillars to which we are committed. In addition to this, we have been organizing the Diversity Week for five years now, during which we promote learning opportunities, at all our operations, in the form of a series of programs and activities.

2022 was also notable for the publication of the Global DE&I Policy. Relating to all the business' operations, it is available on the Intranet, for the internal public, and on the Investor Relations website, for everyone else.



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## Most important issues addressed:

- Directives enabling a diverse and inclusive environment and allowing us to do the right thing (two of Gerdau's core principles connected to DE&I)
- Leadership responsibility
- Definitions on promoting equality, and inclusive environment and unconscious bias
- Accessibility
- Governance of diversity
- What we do not tolerate

### MOBILIZATION OF THE VALUE CHAIN FOR THE PROMOTION OF DIVERSITY

Always alert to new possibilities related to the theme, in 2022, Gerdau launched the 'Inspire Gerdau' program. This is a procurement initiative, that includes legal services, by means of which we encourage partner companies to implement good diversity and inclusion practices. In counterpart, we offer a training course in diversity management as a means of providing support in the development and implementation of the actions.

In 2022, we implemented nine ESG clauses to be applied by the Procurement team in Brazil during the contracting process. Suppliers can now incorporate new approaches to social and environmental behavior to ensure their solid partnership with the Company. The aim is to mobilize and encourage Gerdau's chain of suppliers to firmly commit themselves to best practices in this area.

In the social pillar, the diversity and inclusion clause aims to include appreciation for a diverse and inclusive environment, promotion of an environment of respect for each other, and the curbing of all forms of prejudice and discrimination, whilst making a channel or means of complaint available. That relating to social investment allows suppliers to voluntarily develop actions which will leave a positive legacy for society, by investing a percentage of the amount contracted in social, environmental, cultural or scientific projects, preferably in actions that already exist in the area in which the service is to be executed. In the environmental sphere, the commitment includes an incentive to use renewable energies or biofuels, the drafting of greenhouse gas emissions inventories, and management of water consumption and waste.

### DIVERSITY INDICATORS FOR ALL OPERATIONS IN BRAZIL

**25%**

women in leadership positions in 2022

**2.2%**

Black people in leadership positions

**2.5%**

disabled persons

**30%**

women in leadership positions by 2025 (Global indicator tied to the variable remuneration (ILP) of executives)

**4.9%**

women in the operation



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IN 2022, DIFFERENT PROGRAMS WERE STRENGTHENED AND OTHERS WERE IMPLEMENTED TO INCREASE OUR PARTICIPATION IN THE BUILDING OF A MORE DIVERSE AND INCLUSIVE WORLD:



## HELDA GERDAU

This program aims to accelerate the process of preparing women for management positions. Women considered for the program are those who have been in leadership positions (as specialists or coordinators) for more than three years. Those approved spend a period of 12 months improving their skills in business development, project management and female leadership. The group that began in 2022 involved 63 leaders from the LatAm and North American teams. Combining the increase in job grades and promotions, 40% of the participants were able to advance their careers.

## GERDAU POTENTIALS

Gerdau has consistently made structured investments in the diversity, equality and inclusion agendas. In order to further refine the actions and contribute to the development of the company's Black professionals, the 'Gerdau Potentials Program has been developed. This is a mentoring program that connects Gerdau's senior management with Black people in the positions of coordinators and specialists (junior positions) and who wish to further boost their opportunities. This is an affirmative program, which aims to develop leadership skills and allow us to move forward in our racial equality. This mentoring initiative is conducted by professionals within the company who have recognized experience, and who share their knowledge and learning, along with relevant information, allowing their colleagues to develop their understanding and experience of the business and culture, with a focus on leadership.

## GERDAU TRANSFORMS

This is a training and mentoring program for entrepreneurship that has already benefited more than 1,900 entrepreneurs in 461 towns in Brazil and Latin America. In 2022, an online course was provided focused on Black liberal and autonomous professionals.

## CONNECTING FAMILIES

The Connecting Families program combines a series of initiatives focused on parents who are preparing to welcome a new member into the family. The initiatives include maternity leave of 180 days, paternity leave of 20 days, and pre-natal guidance, amongst other actions.

## 'PLURAL ELAS'

This is a group similar to 'Gerdau com Elas', which aims to take a responsible look at masculinity, advancing the understanding that men are jointly responsible with women for gender equity. The group's most recent initiative was the 'Responsible Masculinity' training session, which sought to encourage men to ally themselves with gender equity. The program has been developed so that we can discuss those matters surrounding masculinity that contribute to gender equity. In 2022, the program provided access to a platform containing videos and training sessions on the role men play in the construction of a society which provides equal opportunities: for men and women.



## TACKLING VIOLENCE AGAINST WOMEN

Female employees who are suffering situations of violence have a channel available to them where they are welcomed and accepted. The Tackling Violence Against Women program offers psychological and legal counseling and a network of support in the form of the 'More Care' service. This initiative also includes preventive actions, addresses cases of harassment, discrimination and communication, and trains leaders with respect to this issue.

## LAPIDAR PROJECT

This is an initiative developed by the Brazilian Mining Law Institute (IBDM) and the Gerdau Legal Department, aimed at training professionals identifying as Black who are either studying Law or who have already graduated in the area. In its first cycle, the project offered a 100% free course on Mining Law, aimed at increasing the participation of these professionals in the legal sphere.

## PATHS FOR THE DEVELOPMENT OF DIVERSITY

Amongst its initiatives focused on the training of people who are more conscientious and engaged with the promotion of diversity and inclusion, Gerdau has made a series of training sessions available on its Personnel Portal, addressing the following topics: Empathetic Leaders; Responsible Masculinity; LGBTI+ - how to be an ally; Conscientious Bias - Distance Learning, and Pamphlet on Parenting; Tackling Harassment; Inclusive Leadership; Inclusive Terms and Concepts.

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## AN INCLUSIVE ENVIRONMENT

Gerdau's Inclusive Communication Guide provides all the teams which organize events and produce communication materials with orientation on the needs of disabled persons. The Remote Working program allows disabled persons to work from home through a series of options that provide greater access to this alternative.

## ACTIONS THAT ENCOURAGE RACIAL EQUALITY

Gerdau supports and encourages actions that promote racial equality. In 2022, for the second time, we sponsored the 'Yes to Racial Equality Award', offered by the 'Identidades do Brasil Institute' (ID\_BR), that recognizes actions that encourage racial equality in the areas of employment, education and culture.

Since 2021, we have been working in partnership with the Movement for Racial Equality (Mover). The aim of the partnership is to promote leadership, awareness, jobs and training for Black people. Today, there are almost 50 companies employing more than 1.3 million people under the umbrella of this non-profit association focused on actions that include sharing good practices and accelerating the processes already under way at the companies, as well as investment in education, the creation of jobs and raising the awareness of society in relation to racism.

Find out more at <https://somosmover.org/>



## PUBLIC RECOGNITION 2022

- Great Place to Work / ethnic-racial category
- Great Place to Work / early childhood category
- São Paulo Diversity Seal (awarded by the State Government)
- 2022 Ethos Diversity Award - highlight in the Steel category
- Best Places for LGBTI+ People to Work in Brazil - Human Rights Campaign Foundation

### EMPLOYEES BY TYPE OF EMPLOYMENT AGREEMENT AND REGION GRI 2-7 | EM-MM-000.B

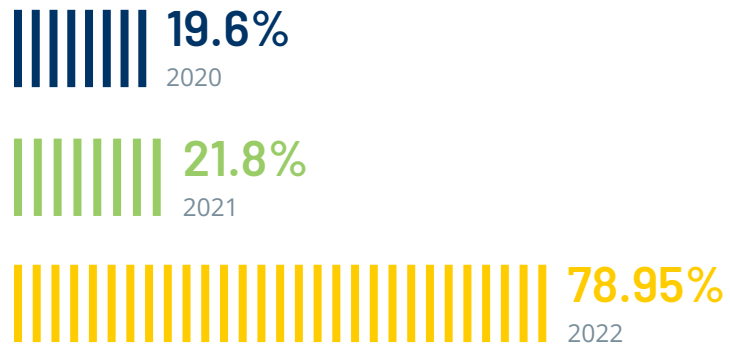
Type of agreement	2020			2021			2022 <sup>1</sup>		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent	14,308	14,308	1,885	17,445	2,283	20,328	N.D.	N.D.	N.D.
Temporary	409	520	929	540	827	1,367	N.D.	N.D.	N.D.
<b>Total</b>	<b>2,294</b>	<b>14,828</b>	<b>17,122</b>	<b>17,985</b>	<b>3,710</b>	<b>21,695</b>	<b>N.D.</b>	<b>N.D.</b>	<b>N.D.</b>

<sup>1</sup> The number of temporary and permanent workers was not monitored in relation to gender during this cycle.

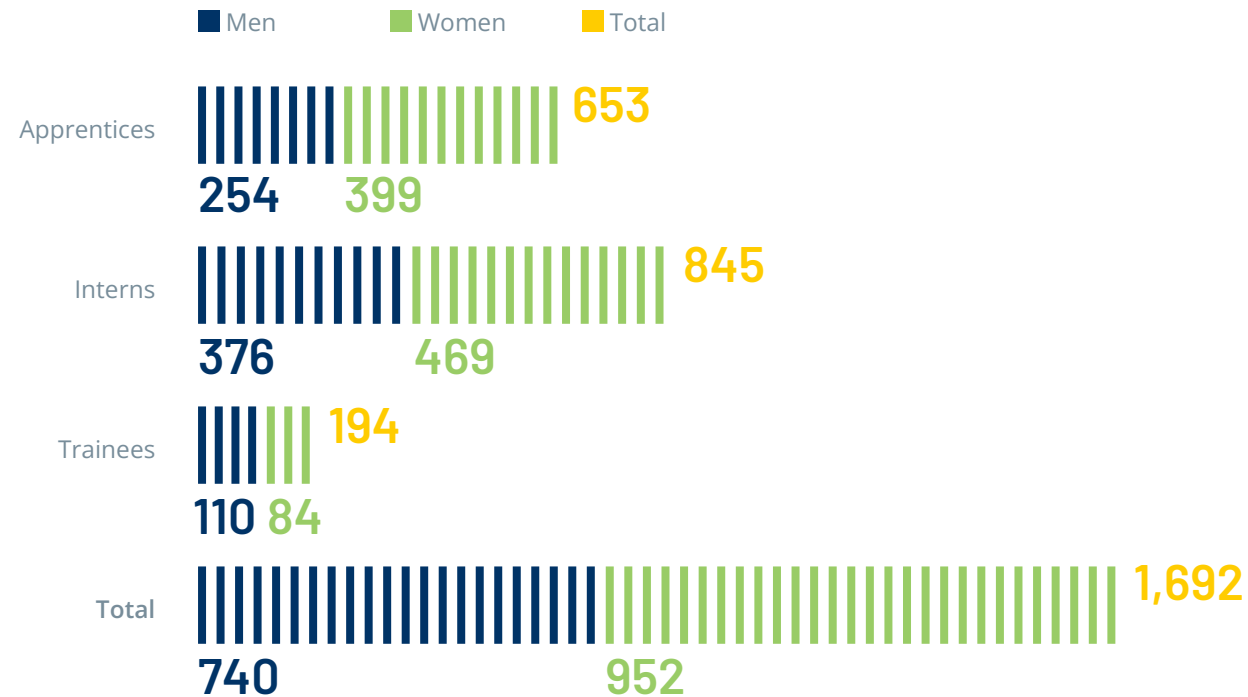
EMPLOYEES BY TYPE OF EMPLOYMENT AGREEMENT AND REGION GRI 2-7 | EM-MM-000.B

Region	2020			2021			2022		
	Fixed period	Non-fixed period	Total	Fixed period	Non-fixed period	Total	Fixed period	Non-fixed period	Total
Brazil	16,193	929	17,122	20,328	1,367	21,695	21,051	5,732	26,783
North America (United States and Canada)	5,732	17	5,749	6,075	18	6,093	6,222	833	7,055
Dominican Republic/Colombia	1,662	445	2,107	1,992	60	2,052	2,080	204	2,284
Mexico	1,422	104	1,526	1,503	38	1,541	1,582	419	2,001
Peru	905	56	961	919	44	963	909	60	969
Argentina	625	0	625	700	40	740	754	183	937
Uruguay	180	0	180	214	5	219	182	52	234
<b>Total</b>	<b>26,719</b>	<b>1,551</b>	<b>28.27</b>	<b>31,731</b>	<b>1,572</b>	<b>33,303</b>	<b>32,780</b>	<b>7,483</b>	<b>40,263</b>

PERCENTAGE OF HIRINGS EM-MM-000.B.



EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER GRI 2-8



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PERCENTAGE OF INDIVIDUALS PARTICIPATING IN THE GOVERNING BODIES BY AGE GROUP AND GENDER

	2020					2021					2022				
	Age group			Gender		Age group			Gender		Age group		Gender		
	<30	30-50	>50	Men	Women	<30	30-50	>50	Men	Women	<30	30-50	>50	Men	Women
Oversight Board	0%	0%	100%	100%	0%	0%	0%	100%	88%	12%	0%	0%	100%	100%	0%
Board of Directors	0%	27%	73%	91%	9%	0%	22%	78%	89%	11%	0%	71%	29%	86%	14%
Total in relation to the members of governance	0%	21%	79%	93%	7%	0%	12%	88%	88%	12%	0%	38%	62%	92%	8%

PERCENTAGE OF EMPLOYEES BY EMPLOYMENT CATEGORY, AGE GROUP AND GENDER

	2020					2021					2022				
	Age group			Gender		Age group			Gender		Age group		Gender		
	<30	30-50	>50	Men	Women	<30	30-50	>50	Men	Women	<30	30-50	>50	Men	Women
Executive Board	0%	61%	39%	86%	14%	0%	68%	32%	86%	14%	1%	42%	57%	89%	11%
Management	3%	76%	21%	81%	19%	0%	79%	21%	80%	20%	1%	74%	25%	79%	21%
Specialists/ Coordinators	10%	70%	21%	78%	22%	9%	20%	71%	75%	25%	8%	70%	22%	75%	25%
Administrative Staff	27%	60%	13%	63%	37%	26%	61%	13%	59%	41%	23%	64%	13%	61%	39%
Operational Staff	21%	61%	18%	97%	3%	22%	61%	17%	94%	6%	20%	61%	19%	93%	7%
Interns	95%	5%	0%	50%	50%	95%	5%	0%	46%	54%	90%	9%	1%	45%	55%
Apprentices	97%	3%	0%	58%	42%	99%	1%	0%	37%	63%	95%	5%	0%	39%	61%
Trainees	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	58%	37%	5%	57%	43%

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**PERCENTAGE OF BLACK AND DISABLED EMPLOYEES BY EMPLOYMENT CATEGORY**

	2020		2021		2022	
	Disabled persons	Black	Disabled persons	Black	Disabled persons	Black
Executive Board	0%	2%	0%	1%	0%	2%
Management	1%	12%	1%	13%	1%	23%
Specialists/Coordinators	1%	14%	1%	16%	2%	33%
Supervision	N.D.	N.D.	N.D.	N.D.	2%	26%
Administrative Staff	3%	27%	3%	27%	5%	38%
Operational Staff	2%	33%	2%	35%	4%	51%
Interns	0%	37%	0%	28%	0%	0%
Apprentices	11%	40%	2%	47%	0%	0%
Trainees	N.D.	N.D.	N.D.	N.D.	0%	1%
<b>Total (in relation to the total number of employees)</b>	<b>2%</b>	<b>30%</b>	<b>2%</b>	<b>31%</b>	<b>4%</b>	<b>42%</b>



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# INNOVATION AND TECHNOLOGY

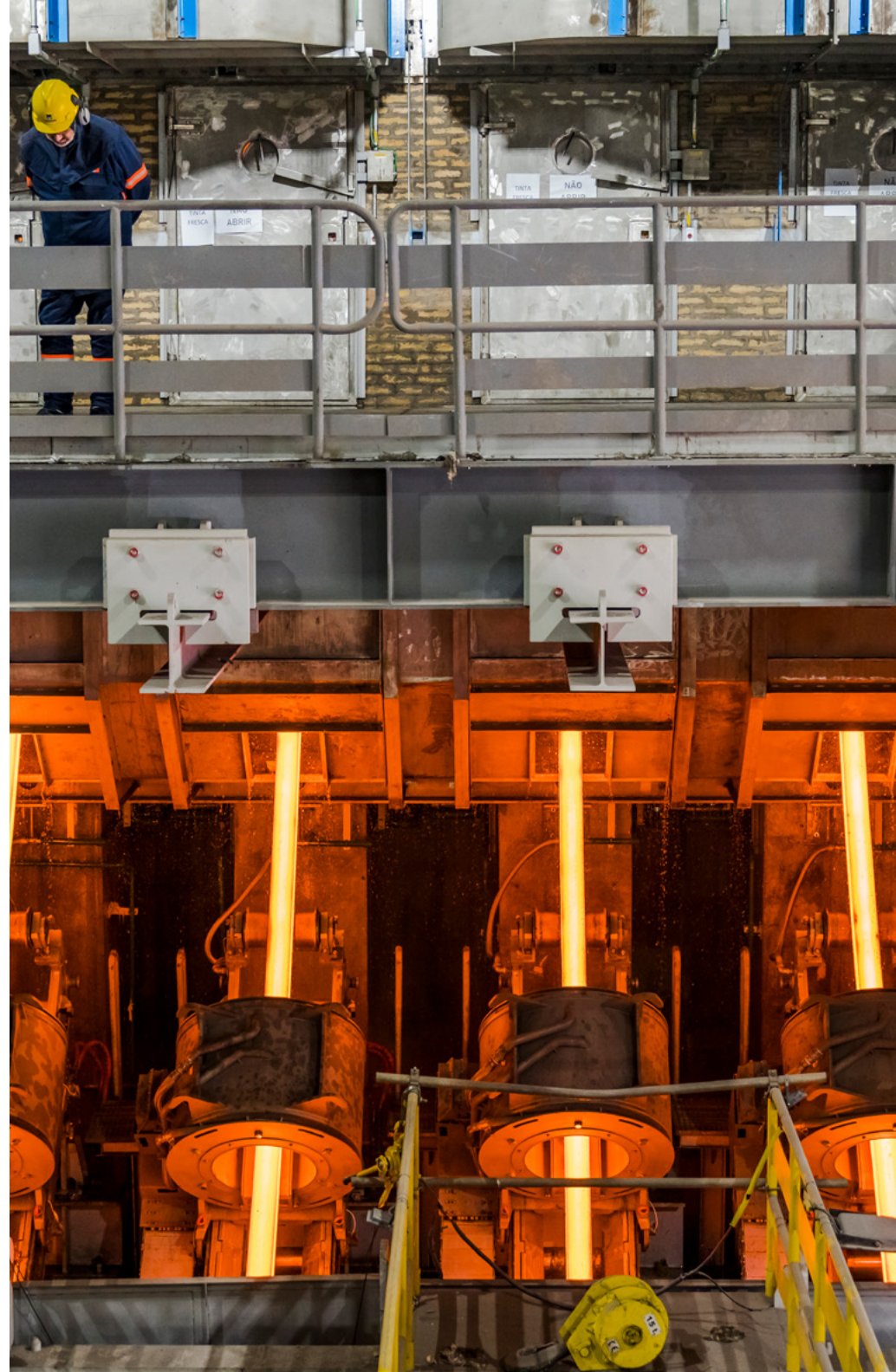
GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC

Investment in innovation has always been amongst our priorities, be it in the creation of new products, businesses or services, or be it in the improvement of processes and systems. We understand the central role that this issue plays in the achievement of our objectives. Since 2018, we have been making constant advances in our strategy to definitively integrate digital technology into the business instead of seeing it as something transitory or isolated. In other words, we have moved from the 'digital' phase to the 'go digital' phase. The pillars of the different projects under way are: People, Competitiveness, Data and Artificial Intelligence, Customer Satisfaction and Technology.

Our commitment to innovation is evident in initiatives such as the new corporate open innovation initiatives in 2022. Undertaken in partnership with Distrito, the biggest transformation and open innovation platform in the country, the year's stand out action sought to find technological solutions within the ecosystem of startups to accelerate digital transformation in the areas of Metals, Procurement and Supply Chain.

Gerdau's investments in innovation and digital initiatives in 2020 and 2021, accounted for around 2% of the Company's net revenue. In 2022, the sum rose to 5%. **GER -1 (IN-HOUSE INDICATOR)**

**5%**  
of the net revenue  
invested in innovation  
and digital initiatives



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# CONNECTED PEOPLE

The modernization of our internal communication tools facilitates the access to information for both the employees and the Personnel Department. In much the same way, the training programs are important tools in spreading the organizational culture amongst the employees.

The Personnel Portal, for example, was used in 2022 and now offers all the personnel management resources in a single space. The team leaders also benefit, since they can now begin team management flows more practically and can more easily visualize the information on the teams. This is also a standout feature of the integration between all the modules of the 'SAP SuccessFactors' system, which both provided benefits for all the users and meant that the flow of information was more automated.

The use of people analytics provided important insights for the Personnel Department and its leaders, by analyzing important data concerning the processes, such as retention following maternity leave; operations relating to irregular work days; analysis of development plans; training sessions; competitiveness, diversity, compliance with the disabled legal quota per unit (CNPJ) and analysis of the employees aged over 50, to develop inputs for actions designed to tackle ageism.



## ADVANCES IN 2022

### Implementation of the SAP Success Factor Employee Central module

Around 32,000 employees registrations have been migrated to the SAP cloud solution, meaning the payroll process is kept up to date with an efficiency rate of 99.99%.

### Implementation of automated programming of double vacations

94% reduction in the amounts paid and more than R\$ 100,000 in savings.

### Implementation of Digital Ratification

New process applied in 136 HR areas.

### Uncomplicated HR

78 distributed hours of online training, involving 900 participants and a 98% satisfaction rate, as well as two in-person sessions in Sapucaia do Sul.

### Inspections

18 inspections conducted.

### Implementation of Sales Commissions

287 employees impacted.

### New flow of rent-support

Reduction of 50 calls in the first three months

### Work attendance

Mapping of opportunities at 100% of the units.

### Tax management

Process involving the updating of technology for tax management, by means of a fully integrated platform aligned with government controls.

## Integration of the SAP SuccessFactors system modules improves the flow of automated information.



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**The launch makes Gerdau the only company in the country able to produce steel with distinct mechanical properties.**

## THE QUEST FOR NEW PRODUCTS AND PROCESSES

To keep expanding our portfolio of solutions, since 2021, we have maintained an ecosystem involving universities, open innovation hubs, technology vendors, startups and strategic partnerships. Amongst the initiatives is the development of an official open innovation hub in Minas Gerais, in partnership with FIEMGLab, part of the Minas Gerais State Federation of Industries.

In 2022, we launched the 1 and 2 core 8" steel profile, measuring 12m in length. This is a steel profile with dimensions and titled rims that provide rigidity and excellent mechanical properties for use in projects. Gerdau is the only company manufacturing it in Brazil.

## CUSTOMER FOCUS

In what is referred to as customer focus, 'Gerdau Mais' has been creating value in the form of a business platform that offers a new level of experience. Launched in 2022, Gerdau Mais is now in its second phase of implementation, which includes the creation of new self-service features, development of the products and services purchase journey, and strategic definition of the digital versus offline transaction.

The platform ended the year with 39,940 page views and 1,237 quotes provided. The figures show that we are on the right path towards achieving our objective of convincing more customers to migrate from the old portal to Gerdau Mais. At the end of 2022, around 30% of our customers had made the transition. Amongst the actions aimed at increasing adhesion to the platform, we reinforced the communication between the teams and the customers, and have been monitoring the level of return to the platform.

# 39,940

visits to the Gerdau Mais platform and

# 1,237

quotes provided

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## DISTRIBUTION PERSPECTIVE

**Loyalty:** points program to redeem products and services.

**Value chain insights:** continual supply of unique content and data for subscribing customers.

**One stop shop:** integrated platform for end customers to purchase from suppliers.

**E-commerce B2B2C:** a new purchasing segment on the e2e platform.

## EVOLUTION PERSPECTIVE

**Training and Development:** digital channel offering training and information for learning.

**E-commerce B2B:** platform that simplifies orders and payments.

**Simulators:** specialist solutions to guarantee support in the purchase decision making process.

**Virtualization of projects:** technological solutions for visualization of products.

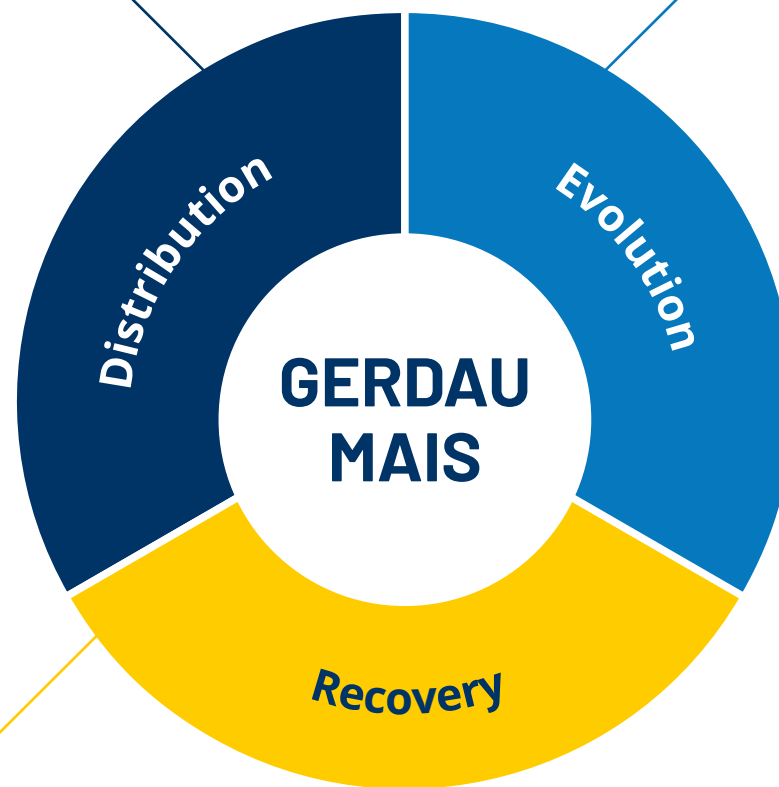
**Innovation hub:** partnership with a startup for the development of new solutions.

**Professionalization of the chain:** solutions that assist in management of the chain.

## RECOVERY PERSPECTIVE

**Delivery:** integrated solutions to ensure the flexibility and predictability of deliveries.

**Digital support:** active service channel providing support and monitoring of incidents.



**The structure of the Gerdau Mais platform offers the customer a new experience.**



## SMART PRICING

Another important tool for the customer focus is smart pricing, a monitoring and analysis model that aims to ensure pro-activity and efficiency in analytics-based decisions. It allows more precision in the creation or identification of commercial solutions.

## STELLA

A support tool for the sales team, Stella provides greater resolution and efficiency in decision-making and communication. The platform can be easily accessed by cell phone, meaning it is always in the salesperson's hand. In 2022, 91% of salespersons stated that they were satisfied with the tool, 86% said that it helped them in their day-to-day activities, and 83% noted an increase in the efficiency rates of their work as a result of using Stella.

## SMART ALLOCATION

This AI (artificial intelligence) solution has helped us to identify the best places to direct orders based upon pre-defined parameters, such as cost-to-serve, stock and production, aggregate demand, restrictions and regulations. The tool reduces delays and provides a more integrated experience for the customer, who can begin to work with less stock. In 2022, Smart Allocation allowed for a total accumulated gain of R\$ 6.6 million.

**91%**

of salespeople said they were satisfied with the Stella tool

**86%**

said that it helped them in their day-to-day activities

**83%**

noted an increase in the efficiency rates of their work as a result of using Stella.



## COMPETITIVENESS

In relation to the efforts made to make gains in competitiveness, we have been using industry 4.0 technologies. Amongst the main initiatives adopted in 2022 was a reduction in the use of blast furnaces, which reduced consumption and raw material costs by up to R\$ 60 million. The impact on logistics came in at around R\$ 15 million, whilst maintenance work resulted in a gain of up to R\$ 30 million. Other highlights included the downstream operations (an impact of up to R\$ 8 million), melt shops (R\$ 50 million) and rolling mills (R\$ 35 million).

## DATA AND ARTIFICIAL INTELLIGENCE

Gerdau leverages its business results by promoting the use of data by our corporate areas. We also work to spread the data culture in the decisions relating to personnel management, supporting the leaders in the visibility and resolution of their decisions. The use of data also forms an important part of the efficiency and prediction of the auditing processes.

The use of data by AI (artificial intelligence) technology has helped increase our competitive standing. The company has made improvements in numerous different industrial processes, such as the reduction of alloy consumption, maintenance costs, and fuel and gas consumption.

Another use of AI that has been beneficial has been in its application for Special Steels productivity in Brazil. We use intelligence models relating to data drawn from sensors located in the industrial assets of the Brazil Special Steels plants, to achieve steel optimization and earnings gains in the melt shops and rolling mills operations. In 2022, the company made total related gains of R\$ 500 million.





## DIGITAL TWINS AND SPECIALIST SYSTEMS / 4.0

As part of the portfolio of projects within the Industry 4.0 pillar, we have solutions involving the 'digital twin' / specialist systems for processes designed to support data-oriented operations using dynamic decisions and trade-offs, thus improving our performance and results.

The digital twins are a virtual copy of the processes that already exist at our industrial units, with technological resources that use real data to create simulations of different possible manufacturing and sequencing scenarios, assisting in the quick and safe identification of the best trade offs and interpreting real behavior in the digital world.

We have been working on digital twins and specialist systems focused on our three main lines of production (planning, control and programming):

- Integrated milling process (Gerdau Ouro Branco);
- Bioeducer milling process (Gerdau Divinópolis, Barão de Cocais and Sete Lagoas);
- Electrical circuit milling process (scrap metals).

These solutions are focused on sequencing production and the use of raw materials, maximizing the total performance of the chain as a whole. The solutions have contributed in the form of gains of R\$ 260 million between 2020 and 2022 and are on course to achieve gains of R\$ 175 million in 2023.

# 214

fixed gas detectors are currently monitored, with plans for expansion to 580 detectors

Large-scale reduction of leaks:

>58 ppm

# 70%

and >150 ppm

# 90%

## ONLINE MONITORING OF GASES

One important focus of industry 4.0 is the 'Segurança 4.0' solutions, focused on reducing critical risks and increasing the safety of people and processes. One highlight of these solutions is the system that makes use of the IOT, and connectivity to perform online monitoring and detect leaks and/or high concentration levels of gases (principally CO).

This system has been advancing at Gerdau since 2021 and is currently being ramped up to all the units in Brazil, principally that in in Ouro Branco and in bioeducers (presence of a reduction process and gases rich in CO). The solution was recognized in 2021 with a safety award from the World Steel Association, and the company is set to invest up to R\$ 41 million through until 2027.



## TECHNOLOGY ADVANCES IN 2022



### Gerdau Tech Platform

80% of technologies capable of reducing the creation time of new digital products by 25%.



### Cloud

52% of the solutions use cloud computing, involving technologies to enable automation, monitoring with predictions and automatic application of corrections.



### Connectivity

We work with enabling technologies for the integration and movement of information, with the aim of identifying business opportunities. In 2022, we increased our bandwidth by 110% and began implementing private 4G and 5G networks.



### Culture and Training

We are connected to the world's leading technology forums and have structured a program of technical training for our Technology team, focused on reskilling and upskilling. In 2022, we offered more than 5,000 hours of training to 90% of the team.

**Specialists implement proactive security solutions.**



## INFORMATION SECURITY

Information security is also deeply embedded in our digital transformation process. We recognize the fundamental importance of protecting the internal information and data as well as that of our customers. As such, we adopt and value good practices that safeguard the integrity and confidentiality of this information.

We have a digital security team, specialized in all areas of data security and privacy. Our highly-qualified specialists are constantly monitoring the growing threats and implementing proactive

security solutions. Furthermore, we perform regular audits to ensure compliance with the best practices and most recent security standards.

Finally, but of no less importance, Gerdau has a structured personal data protection and privacy program in compliance with the current legislation of all the countries where it is active, including the General Personal Data Protection Law (LGPD / Law 13.709/2018), for which it holds certification issued by an independent organ.



## DIGITAL FACTORY

Encouraging innovation is a strategic directive that is present at every level within Gerdau, as a vital component of its ecosystem. To strengthen this mentality, we also encourage the creation of centers focused on the theme, with the intention of developing and disseminating practices that continually reinforce it internally.

We have prioritized the structuring of a Digital IT support department, connected to the business areas, called the Digital Factory, the mission of which is to transform people's lives and boost business opportunities through technological innovation and agility as an organizational strategy. The department encourages us to review behavior, processes, methods, new digital careers and the evolution of our products, services and processes.

The Digital Factory staff push a collaborative approach to work, involving the specialist 'Agile Coach' and 'Scrum Master' programs, for the evolution of our methods of working; 'UX - Design', making the customer the focus of the decisions with the aim of providing fantastic experiences; 'Change Management', which aims to cast a human eye on the the impact of people and processes on the success of the projects; and 'Digital Products', aiming to create an evolutionary routine of experimentation, focused on our market and the future we want. One of our pillars involves development of the customer experience strategy, analyzing financial viability,

**28**  
multi-disciplinary  
teams and more than

**400**  
people involved in  
discussion forums



evolution and technological scale, enabling transformation and evaluating the human impact, organizational design, connection with technologies and agile methods.

In 2022, whilst focusing on the evolution of the mindset of the operation on the executives, we held discussion groups on issues that enabled our business transformation. The GTS (Gerdau Transformation Series), focused on people and their routines, impacted more than 200 people in the areas of Agility, Industry 4.0, and Customer Experience, amongst others.

For the executives, we offered the GTL (Gerdau Transformation Leadership), aimed at creating discussion groups on the same themes, but from a different perspective. As well as technology, we have scaled up our 'chapters' to speed up the sharing of knowledge and good practices between the Digital Factory subject areas. Groups going far beyond UX Designs and the agility team were constructed, impacting more than 400 people in

2022 in the form of discussion forums, day-to-day routines or facilitating strategic discussions.

By means of this approach, our transformation went far beyond technology projects, impacting people and their daily activities. This is the case of Industry 4.0, which has a team dedicated to planning agility, change through adoption of the use of tools and UX Design, considering the entire industry ecosystem, from "putting on the gloves" at the start of the working day, to "taking them off" at the end. As such, we work closely with projects focused on operational efficiency, putting people's safety and lives first.

Beginning with eight multi-disciplinary squads in 2021, with around 150 people, by 2022 this number had risen to 28 teams involving more than 400 people. All the squads operate on strategic fronts that range from the industrial process through to the product arriving in the customers' hands - an enormous advance in the organizational ambidexterity.



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## connectivity in industry

**Gerdau has implemented  
the first project for the use  
of fifth generation mobile  
internet in the steel sector in  
Latin America.**

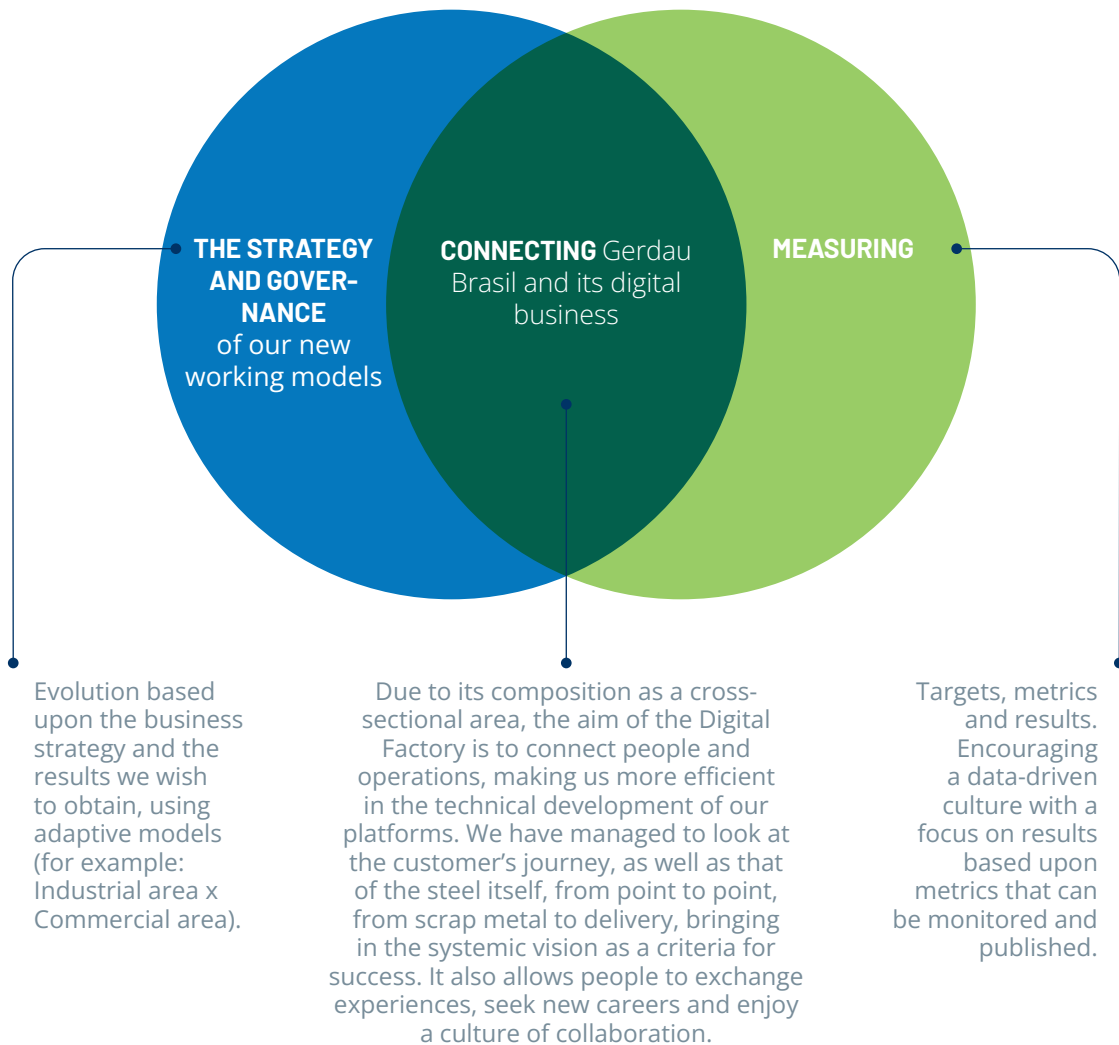
During the year, we announced an agreement with Embratel for implementation of a private dedicated 5G and LTE 4G network at the Ouro Branco industrial unit (MG), creating an IT backbone (transport network) for the business' ability to evolve digitally. This is the first project for the use of fifth generation mobile internet in the steel sector in Latin America. The aim is to move forward with the concepts of Industry 4.0 to boost automation, productivity, flexibility, viability, traceability, the use of data, and safety in the processes, including planning, production and logistics.

Divided into three phases, the project will begin with the installation of a private LTE 4G network with a total capacity of 256 Mbps. Claro 5G will then be added to the LTE 4G network at a frequency of 3.5 GHz. With the 5G and LTE 4G in place, the unit will have a capacity of 3.8 Gbps. In the third phase of the project, the LTE 4G and 5G private network will be strengthened to provide even more combined capacity, reaching 4.8 Gbps, and expanding the coverage to the entire operational area.

The structure, once implemented at our biggest plant in the world, will represent the consolidation of the processes implemented for incorporation of the digital culture and 4.0 into the industrial sector, reinforcing the security, stability and capacity of our operations.

# EVOLUTIONARY MODELS

At Gerdau, we believe that the innovation and transformation of companies are achieved through evolutionary models supported by people, and based upon a clear and declared strategy. We use the mandala depicted below that connects the entire ecosystem.



# HORIZONS THAT ENABLE TRANSFORMATION



## Agility

Promoting **collective work**, and encouraging self-organization and development of the squads to ensure effective results for the organization.



## Digital products

Creating experiences that **attract and maintain our clients**, facilitating the way of doing business, supporting both their growth and ours, as a brand, through use of the digital world.



## UX Design

Developing the customer experience strategy on our journey of transformation, integrating the customers' needs, technological possibilities and objectives of the businesses.



## Chance management

Enabling **transformation** supporting human impact and operating with organizational design in partnership with all those involved in our business.



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# GERDAU NEXT

Launched in July 2020, Gerdau Next is Gerdau's new businesses branch, an ecosystem of new solutions, products and services that complement steel and its adjacent businesses, with the aim of driving more sustainable and efficient growth, whilst developing together with partners and entrepreneurs.

## WHAT WE DO

We exist to develop and manage a portfolio of new businesses that complement steel, diversifying it globally by incorporating new companies in strategic segments: Construtech, Mobility, Technology and Sustainability.

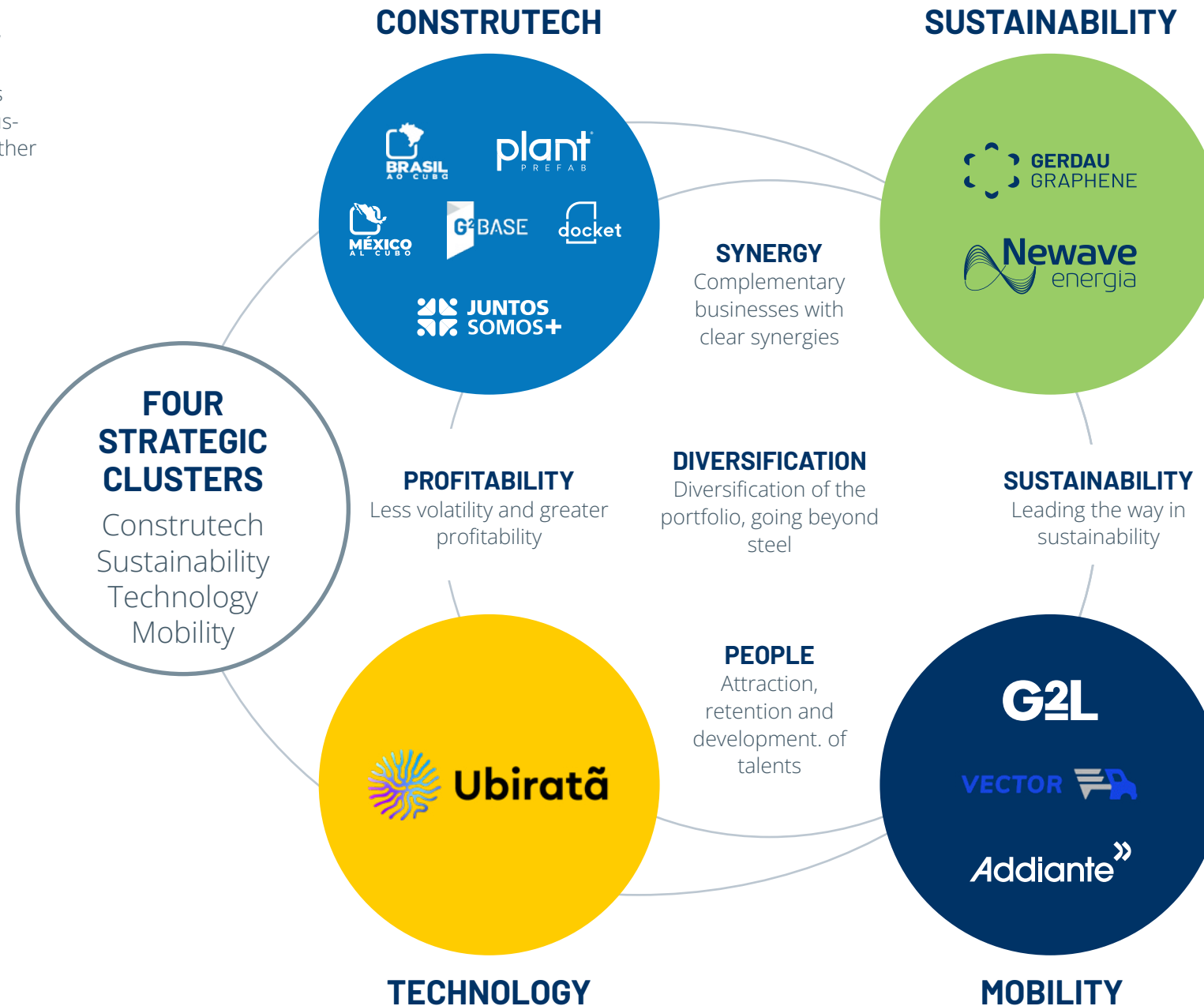
## WHAT DRIVES US

Our ability to reinvent ourselves and advance together with the changes under way in the world shows us that there are still many more chapters waiting to be written in Gerdau's history. Entrepreneurship is encouraged and is a means of ensuring the sustainability of our business.

## OUR BUSINESS

Strengthening our core abilities and compiling a portfolio with new products and services that complement steel and its adjacent businesses. By means of a strong ecosystem of innovation, we have created new paths in partnership with large companies involving innovative initiatives.

## How is the ecosystem driven?



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# CONSTRUTECH

## BRASIL AO CUBO

Brasil ao Cubo is a property developer operating throughout the country focusing on agility, delivering finished projects four times faster than a regular project, but always maintaining excellence at the heart of its business. It operates in four market segments: industrial, residential, hospitals and multi-floor buildings. All the segments have one crucial thing in common: agile construction solutions.

## MÉXICO AO CUBO

Leading the way in methodology in Mexico with off-site modular construction, México Al Cubo offers superior quality projects, within a shorter timeframe and at agreed prices, guaranteeing the customer absolute satisfaction. All the company's projects are developed on an industrial park, with incomparable control over the process.

## G2BASE

A construtech that aims to raise security and productivity throughout the project foundation chain, G2Base creates a new experience for its customers through innovative processes and advanced technology, reducing the delivery time and waste, whilst increasing efficiency.

## PLANT PREFAB

Based on the outskirts of Los Angeles, Plant Prefab is the first US company to work with the planning and pre-fabricated construction of high-quality, sustainable, personalized, single-family or multi-family homes.

## JUNTOS SOMOS +

The biggest marketplace for construction materials and loyalty program in Brazil, this is a joint venture between the Gerdau, Votorantim Cimentos and Tigre Group companies, with a total annual gross turnover of goods of R\$ 9 billion.

## DOCKET

Docket offers solutions to the market in the form of documentation for license and credit release processes. The company provides the market with all the infrastructure and technology necessary for processes that depend upon documentation, from point to point. A benchmark in the optimization of search operations, pre-analysis and management of more than 200 types of documents for large companies conducted with public notaries and public authorities.

## NEWAVE ENERGIA SUSTAINABILITY

Newave Energia works in the market from start to finish, from the generation of clean energy to the moment it is traded. Bureaucracy-free renewable energy, available whenever the customer needs it, with savings of up to 20%. The company aims to speed up the country's energy transition, providing the consumer with the power to choose their own form of competitive and renewable energy.

## GERDAU GRAPHENE

Graphene offers the perfect combination of resistance, levity and flexibility, as well as being an excellent conductor of heat and electricity. Gerdau Graphene transforms graphene into solutions that are revolutionizing the global industry. An additives company focused on the development, industrialization and commercialization of graphene-containing chemical additives, minerals and master batches. It allows for performance gains in the coatings, cement (concrete and mortar), plastics, rubber and lubricant industries.

## G2L MOBILITY

Connecting and valuing the people who move the world is the driver behind Brazil's fastest growing multi-modal logistics operator. G2L is Gerdau's logistics operator, which stands out in the market through its technology and innovation, with operations at 25 strategic points around the country. It currently serves more than 40 customers in all regions of Brazil.



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## VECTOR IND

Vector IND is a logistics startup that is automating transporter contracting by large companies, untangling a knot of inefficiency in the supply chain. Vector's big differential lies in its integration with companies' management systems, allowing it an overview of the entire product delivery flow.

## ADDIANTE

A partnership between the Gerdau and Randocorp companies, focused on driving business into the future of mobility, providing services in the area of heavy-goods vehicle and equipment rentals. By implementing intelligence into asset management, Addiante offers the market economical solutions adapted to the demands of different companies, providing leasing services for products related to transportation and the movement of cargo.

## UBIRATĂ TECHNOLOGY

Ubiratã is a joint venture between the Gerdau and Spacetime companies, focused on basic industries, using technology in the form of artificial intelligence and autonomous robotics systems. Ubiratã is an anchor in the technology cluster of Gerdau Next, operating cross-sectionally with the other clusters. Ubiratã speeds up the industry's transition to decarbonized, hyper-productive and resilient operations.

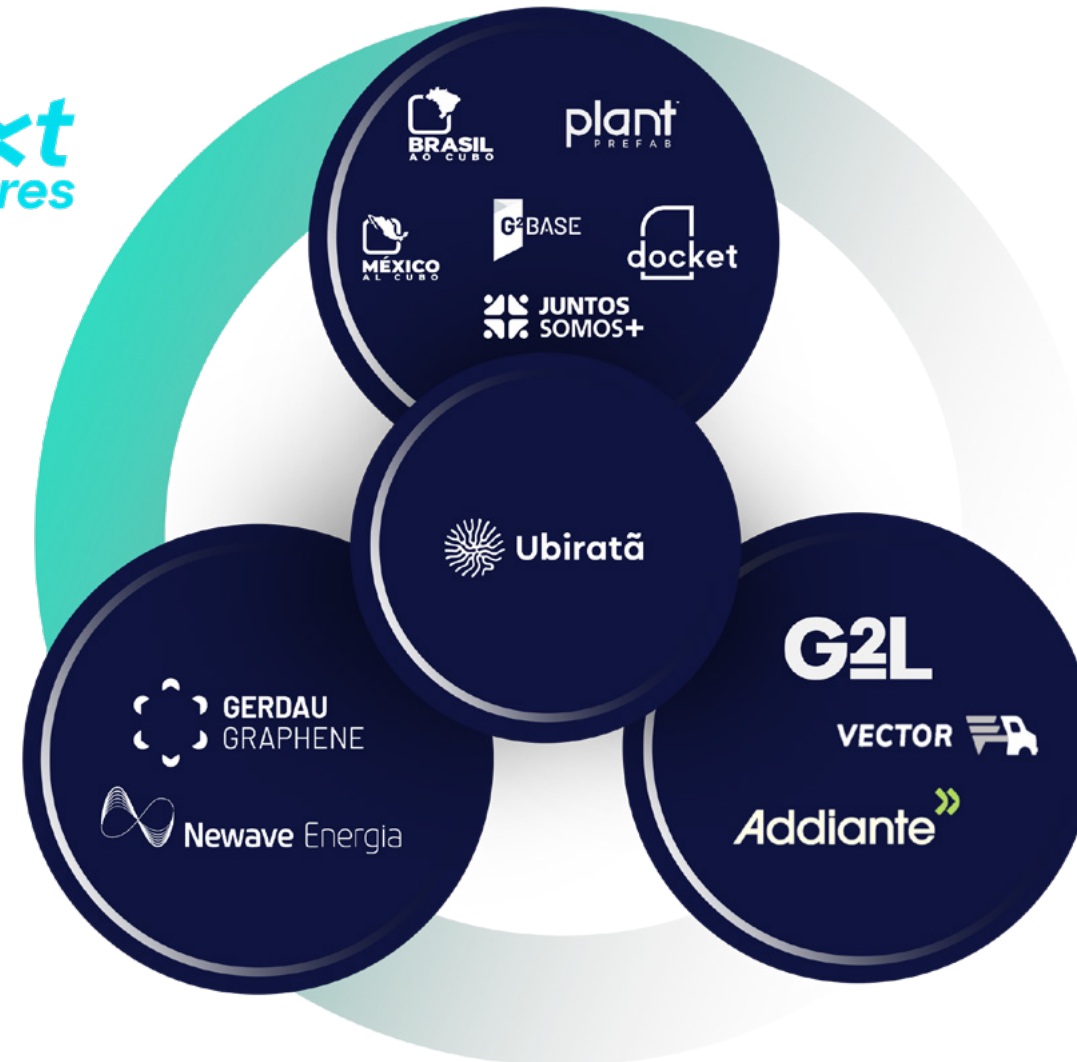
## GERDAU NEXT VENTURES

Gerdau Next Ventures is the Corporate Venture Capital fund and the means of accelerating startups pursued by Gerdau Next, Gerdau's new businesses division.

We accelerate and invest in startups with great potential for growth and strategic connection with our new business verticals: Construtech, Mobility, Sustainability and Technology.

**We connect with and invest in startups and entrepreneurs as a contribution to the development of new businesses.**

**GERDAU** next ventures



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# SOCIAL AND RELATIONSHIP CAPITAL



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# PRESENCE IN THE COMMUNITIES

GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC, 2-29, 413-1

**A**ware of our importance in building a better society, our work is based upon a strong social impact strategy. We are mindful of the opportunities to make our presence in the communities a driving force for transformation, with social investments, allocation of funds and support for initiatives in areas that cover the three priority axes of activity: housing, entrepreneurial education and recycling.

The commitment to social development is present in Gerdau's business model, which in 2022 formalized receipt of the certification as a B Corporation for the first two operations (see box). To achieve this, the company has invested in firmly establishing its objective and connecting direct benefits for society to its business. One example of this is found in the support provided for the development of thousands of businesses led by micro and small entrepreneurs working with the recycling of scrap metals.

**In 2022, we were once again able to make impressive investments, with R\$ 71.6 million being allocated for social actions.**

The relationship with communities follows the directives of the Sustainability Policy and the Company's Corporate Directive on Social Responsibility. We work with targets for the indicators focusing on people benefited, businesses developed, active volunteers and investments made.

To guarantee engagement and dialog with Brazilian society, we hold quarterly meetings with investors, analysts and the press to announce our results, and annual public meetings with the communities neighboring our operations. We also participate in associations and hold public meetings with authorities and other public bodies. In the dialog that we maintain with our internal and external stakeholders, we take a preventive approach in relation to all possible requirements associated with the relevant environmental issues, collaborating with sustainable development and maintaining the good image and reputation of the company.

Publication of the results of the environmental and social impact assessments is performed by means of the Annual Report and the minutes of the meetings of the Board of Directors and Assemblies. Periodic meetings are held with the communities as a means of supporting engagement. Gerdau takes part in a number of forums related to the social agenda in Brazil, Latin America, North America and elsewhere in the world. In order for the local communities to be able to pose their questions, we provide relationship and grievance channels in the form of telephone numbers, e-mails and a website, as well as a WhatsApp number.



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## OUR SOCIAL ACTIVITIES IN 2022

More than  
**2.7 million**  
people benefited

**R\$ 71.6 million**  
invested

**5,254**  
volunteers

**3,485**  
businesses supported



Sistema



Brasil

## OUR JOURNEY AS A B CORPORATION

In 2022, we were awarded our first certifications as a B Corporation. Gerdau Summit, a joint venture focused on supplying parts for the generation of wind energy, and Siderperu, a steel production operation in Peru, have together become the first two steel manufacturers in the world to be declared B Corporations. This new certification reflects our joint commitment to the B Movement Builders program and our ambition to certify all our operations by 2025.

As part of our sustainability agenda, the certification recognizes that Brazil's biggest steel manufacturing company operates with good sustainability practices, and effectively connects the business to our objective of empowering people who build the future, thus leaving a legacy for society.

## TRANSFORMATIVE REFURBISHMENTS

One of the most important programs, *Reforma que Transforma* ["Transformative refurbishments"], launched in 2021, has begun to deliver concrete results. The project supports housing refurbishments in 12 regions around Brazil where Gerdau has operations, with the target of refurbishing 13,000 houses in vulnerable conditions over the course of ten years. With an initial investment of R\$ 40 million of Gerdau's own funds, the program has been developed in response to a demand that the company identified - to improve the standard of existing housing.

The families themselves can participate in the form of access to credit at below-market interest rates or a complete donation of the refurbishment, as per the social vulnerability criteria. The impact of *Reforma Que Transforma* goes beyond the families. The project provides training for all those involved and the creation of a network of partner construction materials stores. This has an ongoing economic impact in each town where it is implemented.

**In 2022, Reforma Que Transforma delivered 480 projects that benefited more than 1,700 people. The program involved a turnover of R\$ 1.3 million in construction materials stores and R\$ 800,000 in revenue for the micro-entrepreneurs who provide their services under the program.**



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# OTHER PROGRAM AND ACTIONS

## GERDAU TRANSFORMS

The Gerdau Transforms program (read more in [Diversity and Inclusion](#)) offers transformation and mentoring for entrepreneurs. In 2022, the program received more than 2,000 enrollments, offering classes to 15 in-person groups and seven online groups, with more than 1,200 people receiving individual consultations and 840 people already operating.

## MM GERDAU

MM Gerdau – the Museum of Mines and Metal, a Brazilian museum located in Belo Horizonte (MG), provides important support for initiatives in the areas of art, culture and heritage. Open since 2010, the museum has been sponsored by Gerdau since 2013.

## IMPROVEMENT PROGRAM

This program fosters professional qualification in the industrial sector, training participants to perform jobs such as welders, lathe operators, and electricians. Training is performed in partnership with Senai, and is free and open to anyone who is interested and meets the course requirements. In 2022, the program's main differential was the involvement of suppliers who voluntarily included social involvement clauses in their contracts. In total, 790 places were offered in the towns of Ouro Branco, Congonhas and Conselheiro Lafaiete, in Minas Gerais. Around 260 professionals have already been qualified.

## GERDAU VOLUNTEER PROGRAM

The volunteer work performed by our employees is essential for our social activities. The participants are mobilized through the organization's volunteer program, donating their time and skills on behalf of citizenship and social development. In 2022, 5,254 volunteers were involved in 651 actions, dedicating more than 27,000 hours of voluntary work.

Another highlight of 2022 was the staging of the Gerdau Voluntary Games. This competition brought together employees to engage in and develop social actions in the communities where Gerdau has operations. 225 teams participated in the event, which resulted in 410 registered actions, benefiting around 338,000 people.

The Gerdau Volunteer Program works together with Junior Achievement (JA), one of the world's biggest youth education social organizations. Through this partnership, our employees work as voluntary instructors on programs such as JA Startup, dedicating their time to addressing different topics of importance in the development of high school students. In 2022, the highlight was the implementation of the JA Startup, Women Entrepreneurs and Connected to Tomorrow programs, all aimed at preparing young people in entrepreneurship, financial education and training for the labor market. In total, 196 volunteers were involved in 24 groups, benefiting 869 students.

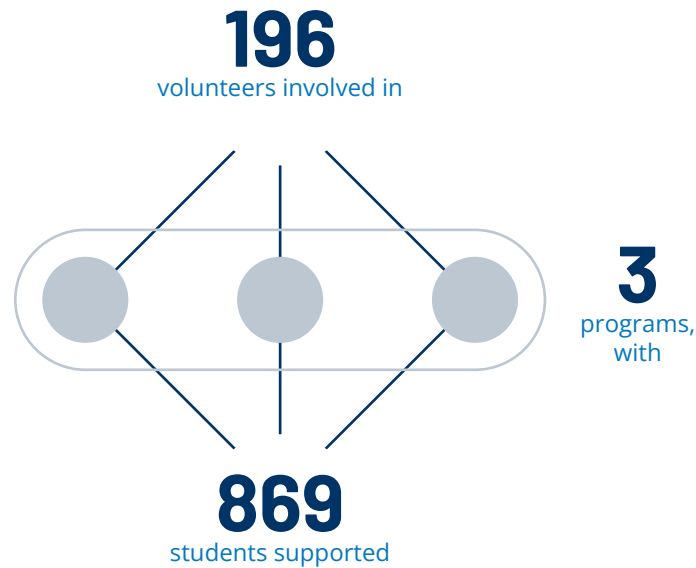
5,254  
volunteers involved in  
651 actions



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## VOLUNTEERING IN NUMBERS



### PRO-CHILDHOOD FUND

In 2022, we launched a new mobile donation platform, focused on the Pro-Childhood Fund, encouraging the donation of 6% of the employees' Income Tax to social projects working to benefit children and adolescents in Brazil. Over the campaign period, roughly R\$ 3.2 million was collected from employees and the company, involving a total of 390 donors and benefiting 44 social entities. Gerdau is continuing with its commitment to match the sums donated by the employees, or in other words, for each Real donated by the employees, the company donates another Real to the same social entity.

### ROCK IN RIO: GERDAU IS PRESENT

Gerdau was responsible for a number of crucial stages that allowed the Rock in Rio Brasil 2022 event to go ahead. With a series of actions designed to engage and interact with the public attending the event (there were more than 700,000 people, 300 shows and an economic impact estimated at R\$ 2 billion), the company built a 30 meter high structure for the iconic World Stage, involving 200 tons of steel, enough to produce 200 cars. Films providing details about the creation and development of the project were projected onto a screen.

Other important actions addressed the issue of recycling (one of the main topics on the Company's social agenda), such as the Company's

recycling machine that provides gifts, the use of simulation, 'out of home' media activations, the musical competition "Gerdau, take me to Rio", hosted by the singer Ivete Sangalo, and other content before, during and after the event.

### SPORTS SPONSORSHIP

Gerdau formally renewed its sponsorship of the Minas Gerais Soccer Championship for 2023. The partnership with the Minas Gerais Soccer Federation reinforces the Company's intention to be one of the companies encouraging and supporting Brazilian sport and the state of Minas Gerais, where its most important industrial operations are located.



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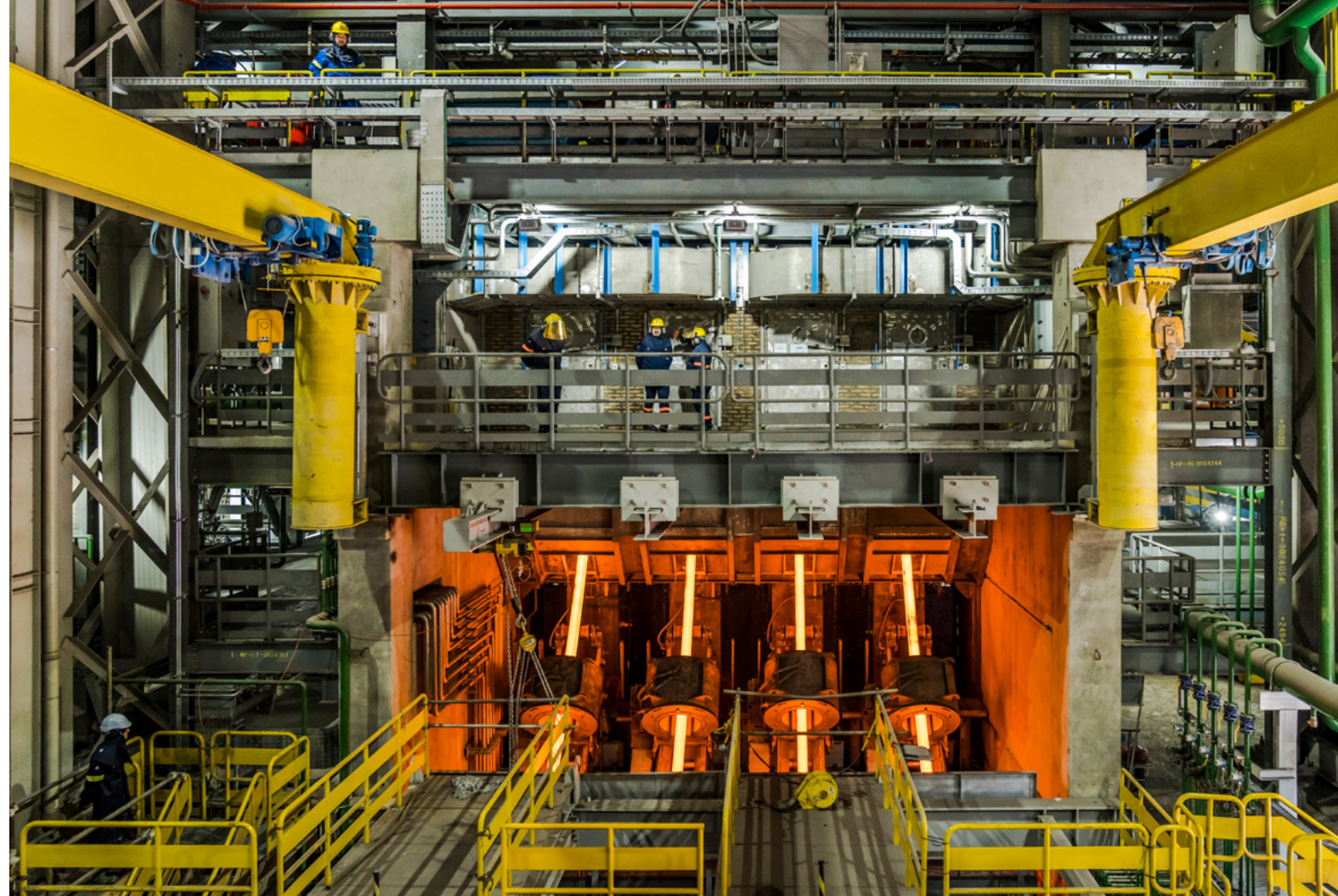


# OUR CUSTOMERS

At Gerdau, the customers are at the center of the Company's business decisions and relations. We work with a program that brings together all the actions focused on excellence: this is called 'Passion for the Customer', a program that involves the Commercial, Marketing and Supply Chain departments, with the aim of raising our standards in relation to the concepts of 'customercentricity' and customer experience. These concepts form part of the program's approach to the teams' behavioral issues, projects and the sharing of methodologies and concepts related to the matter, amongst other topics.

In 2022, a year notable for significant fluctuations in the global market, the company dealt with the process involved in overcoming the most difficult periods of the Covid-19 pandemic, considering the inclusion once again of its producers' prices, supply and demand. The quick recovery of the market and the response of strategic countries and regions were the focus of the company's specific area, with the aim of ensuring quality, punctuality and a prompt response to the industry's needs, taking a tailored view and offering stability to the production chain in the supply of steel.

**The 'Passion for the Customer' program aims to raise our standards in relation to the concepts of 'customercentricity' and customer experience.**



We assess our customers' satisfaction and loyalty by means of the Net Promoter Score (NPS) metric, a strategic indicator for decision-making. The organization has already trained more than one thousand employees in the Commercial, Marketing and Supply Chain areas in relation to 'customercentricity' and NPS. Since 2021, the Marketing Department has also operated with a structure that is entirely focused on markets and customers, with agile methodology teams developed to understand and meet their needs.

**18,000**  
suppliers assessed on their social criteria



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## SUPPLIERS

With 12,000 suppliers in Brazil and a total of 18,000 in different countries, we are committed to ensuring that all our products and services are sourced from reliable, quality, ethical and sustainable origins. Our relationship with suppliers is strategic for the company. It is these business partners who provide support for the production chain and allow our operations to function, enabling quality deliveries and the efficient use of our industrial assets.

From chemical components, natural gas and energy, to alloys and all types of materials, our suppliers are responsible for services and products that are indispensable to keeping our operations active. We have anti-corruption and compliance policies that also cover the chain of suppliers, as part of the range of documents that underpin the obligations and responsibilities of both parties.

With respect to the recycling chain, fundamental for us to be able to assert our ability to work in favor of recycling and the circular economy (more than 70% of our steel production is sourced from ferrous scrap metals), we also have actions specifically designed for the development of scrap metal dealers. Working for small businesses and cooperatives, these are professionals who are essential to Gerdau's partnership with its chain in support of sustainability, operating directly in the reverse logistics chain and recognized by actions such as Scrap Metal Dealers' Day. Gerdau is currently the biggest

recycler of ferrous scrap metals in Latin America, with 11 million tons recycled and transformed into steel per year.

As well as looking for suppliers who fit our business model, they support us through a series of development, entrepreneurship and awareness-raising actions focused on sustainability issues. Inspire Gerdau (read more in [Diversity and Inclusion](#)), for example, provides education for suppliers on matters of gender, race and LGBT-QIA+, amongst others.

In 2022, all the suppliers, including 100 new ones, were contracted and assessed based upon social criteria, whilst also being required to follow the Code of Ethics for Third Parties. [GRI 414-1, 414-2](#)

More than

# 70%

of our steel production is sourced from ferrous scrap metal and we have actions in place specifically for the development of scrap metal dealers.

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# INSTITUTIONAL RELATIONS GRI 2-28

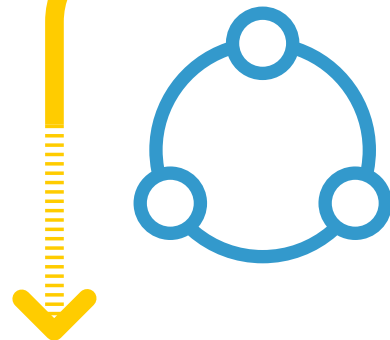
Gerdau has policies and regulations related to its interactions with organizations that represent the sector, public entities and other institutional counterparts relevant to its business.

Our corporate directive specifically focused on relations with public officials provides guidance on how the agreements should be drafted, be it directly or through representatives. Any business or productive activity performed by the organization should comply with a number of tax, environmental, legal and regulatory liabilities.

The Code of Ethics establishes that the employees are required to strictly comply with anti-corruption and money laundering laws. Directly or indirectly (via third parties) offering, promising, making, authorizing, or providing undue advantages, payments, gifts, or the transfer of anything of value to any person (whether a government agent or not), with the intention of illegally influencing or rewarding any official action or decision for the benefit of the company is strictly prohibited.

The current regulations and laws that govern our relationship with the government and which encourage ethics, honesty, and transparency in business are reviewed periodically.

Our active participation in the most representative Brazilian and international associations is another important point. By doing so, the Company ensures its connection with new experiences, discussions and strategic decisions within the business world.



**The integration with Brazilian and international entities ensures a connection with new experiences and business trends.**

## ASSOCIATIONS IN WHICH GERDAU PARTICIPATES:

- Asociación Latinoamericana del Acero (Alacero)
- Brazilian Association of Wholesale and Free-Market Power Consumers (ABRACE)
- Brazilian Association of Listed Companies (ABRASCA)
- Brazilian Association for Business Communications (ABERJE)
- Minas Gerais Forestry Industry Association (AMIF)
- American Chamber of Commerce in Brazil (AmCham)
- Minas Gerais State Federation for Industry (FIEMG)
- Rio de Janeiro State Federation for Industry (FIRJAN)
- São Paulo State Federation for Industry (FIESP)
- Rio Grande do Sul Federation for Industry (FIERGS)
- Brazil Steel Institute
- Brazilian Mining Institute (IBRAM)
- Brazilian Investor Relations Institute (IBRI)
- Brazilian Institute of Corporate Governance (IBGC)
- Business Research Institute (IEE)
- Industrial Development Research Institute (IEDI)
- Millenium Institute
- Brazilian Tree Industry (Ibá)
- Movimento Brasil Competitivo (MBC)
- World Steel Association



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# FINANCIAL AND MANUFACTURED CAPITAL



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## NEW BUSINESS GRI 201-1

The business model adopted by Gerdau is responsible for its position as the biggest Brazilian steel manufacturing company. Our products meet the demands of various segments, including construction, automobile manufacture, machinery, naval and energy. The industrial operations, in addition to Brazil, are located in Argentina, Canada, Colombia, the United States, Mexico, Peru, the Dominican Republic and Uruguay.

In 2022, we recorded the highest net revenue in our history, coming in at R\$ 82.4 billion, a growth of 5% compared to that of 2021. The Company's adjusted EBITDA totaled R\$ 21.5 billion, with an adjusted EBITDA margin of 26.1%, whilst the adjusted net income totaled R\$ 11.6 billion. The physical sales of steel, meanwhile, reached 11.9 million tons. The solid financial result achieved in 2022 contributed to the generation of a record R\$ 10.5 billion in free cash flow.

Over the course of the year, the company invested R\$ 4.3 billion in Capex, with R\$ 2.6 billion going on maintenance and R\$ 1.7 billion on expansion and technological updating projects. Of the total Capex investment in 2022, R\$ 639.31 million went towards the expansion of forest assets, the updating and improvement of environmental controls, and technological developments that have resulted in energy efficiency and a reduction in greenhouse gas emissions.

In 2022, we were amongst the 10 brands that increased their brand value in Brazil, according to the 'Brasil 100' ranking published by the Brand Finance consultancy. Our brand value rose 79.2% against 2021, pushing us up to 9<sup>th</sup> position in the ranking of Brazilian organizations with the most valuable brands.

### OPERATIONAL RESULTS

CONSOLIDATED	2021	2020	Δ
<b>Dam name</b>			
Crude steel production	13,294	12,194	9%
Steel sales	12,722	11,461	11%
<b>Results (R\$ millions)</b>			
Net revenue	78,345	43,815	79%
Cost of sales	(57,528)	(37,884)	52%
<b>Gross earnings</b>	<b>20,817</b>	<b>5,931</b>	<b>251%</b>
<b>Gross margin</b>	<b>26.6%</b>	<b>13.5%</b>	<b>13.0 p.p.</b>
General and administrative sales expenses	(2,106)	(1,530)	38%
Expenses with sales	(716)	(513)	40%
General and administrative expenses	(1,390)	(1,017)	37%
<b>% DVG/Net Revenue</b>	<b>2.7%</b>	<b>3.5%</b>	<b>-0.8 p.p.</b>
<b>Adjusted Ebitda<sup>1</sup></b>	<b>23,222</b>	<b>7,690</b>	<b>202%</b>
<b>Adjusted Ebitda margin</b>	<b>29.6%</b>	<b>17.6%</b>	<b>12.1 p.p.</b>

<sup>1</sup> Non-accounting calculation performed by the Company. Gerdau presents the adjusted EBITDA to provide additional information on the generation of cash during the period.

# R\$ 82.4 billion

in net revenue

# R\$ 21.5 billion

in adjusted EBITDA, with an adjusted margin of 26.1%

# R\$ 10.5 billion

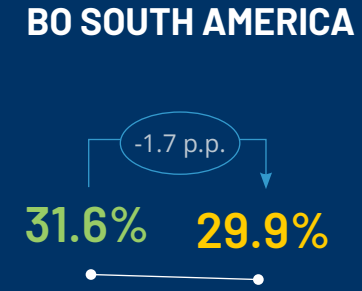
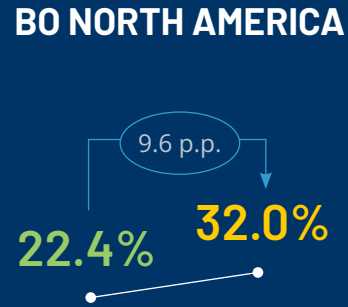
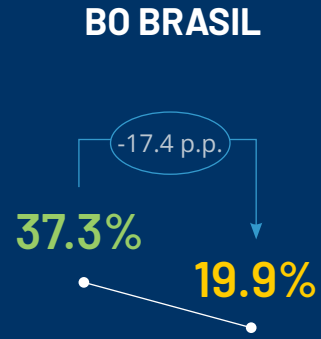
in free cash flow



**ADJUSTED EBITDA AND ADJUSTED EBITDA MARGIN  
(IN MILLIONS)**

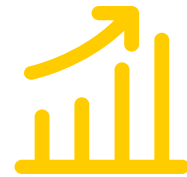


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# RESULTS BY OPERATION

## BUSINESS OPERATIONS - BRAZIL



### FORMING PART OF THE ON:

- Industrial units in Ceará, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, no Rio Grande do Sul and São Paulo
- Proprietary steel distribution stores
- Mining operations for own consumption in Minas Gerais
- Port terminal in Espírito Santo
- Eucalyptus forest base in Minas Gerais

In 2022, the Brazil BO production of crude steel dropped by 6.9%, in line with a dynamic of lower volumes sold compared to the previous year. The deliveries in the domestic market were low in comparative periods, principally due to the effects of the World Cup and the election period in Brazil, which led to a sharper drop, along with the expected seasonality in the quarter.

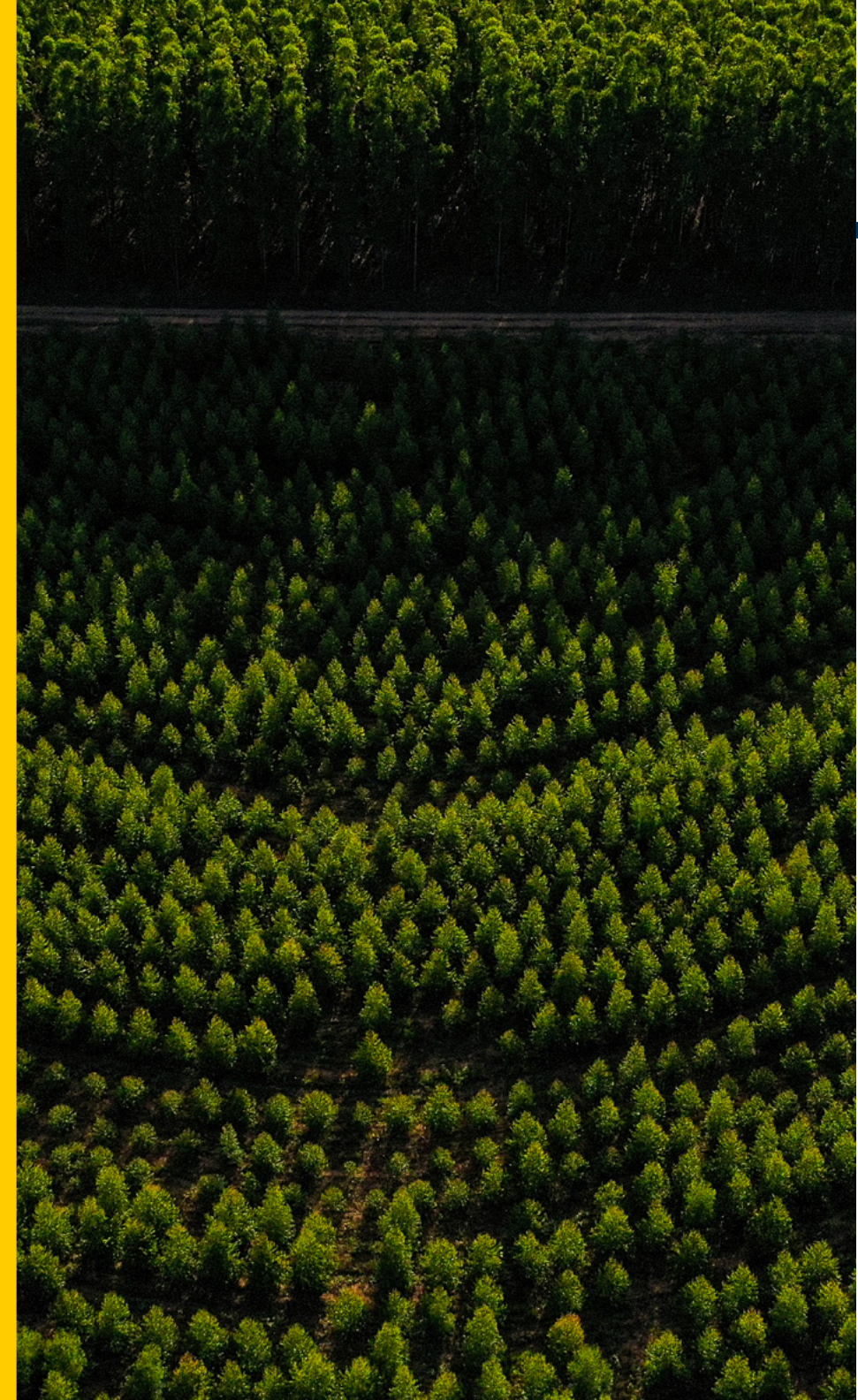
In 2022, sales totaled 5.4 million tons, 6.3% below the previous year. The civil construction and industrial sectors advanced, with higher levels compared to those previously recorded. The volume exported saw a rise of 40.4% compared to 2021, with favorable price levels.

The flat steel unit experienced sales 5.3% higher in 2022 compared to 2021, with the highlight being the demand for thick sheets, used in the wind energy and infrastructure markets.



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# FLORESTAL

GRI 3-3: MANAGEMENT OF A MATERIAL TOPIC

Gerdau Florestal, in the state of Minas Gerais, is present in the Cerrado and Atlantic Forest biomes, with 254,000 hectares of forests, 91,000 of which are set aside for biodiversity conservation. These conservation areas play an important role in supporting the environmental stability of the properties, and also help with the natural control of pests and diseases.

We are currently the biggest producer of charcoal in the world. Our forest base guarantees renewable raw-materials for our bio-reducer, an important competitive and environmental differential in the Company's production of pig iron, in relation to other producers that are dependent on coal as a raw-material. The practice also contributes to the reduction of the Company's greenhouse gas (GHG) emissions.

In relation to the impacts and practices of its management of biodiversity, Gerdau works to conserve natural resources using sustainable management techniques, aimed at maintaining the planted forests, as well as maintaining and conserving the native forests. Amongst these practices, special mention should be made of mosaic plantations, involving the maintenance of ecological corridors and different fauna and flora monitoring programs. This type of management provides protection and conservation for water resources (springs, waterways and flooded areas), as well as the connection between wild

animal populations and native plant species. We also use biological control techniques to keep pests at bay and we have our own program of genetic improvement, aimed at developing new clones and forests that are more productive and sustainable, whilst being resistant to pests and water shortages.

Gerdau Florestal is managed in line with the Sustainability Policy and internal guidelines such as the Environment Directive, and defines specific procedures for restricting the suppression of native vegetation that guide and reinforce the Company's compliance in working to tackle illegal deforestation.

We are members of associations such as the Brazilian Tree Institute (Ibá), which is responsible for the institutional representation of the production chain of trees planted on a national level, involving working groups such as that focused on climate change. The Institute meets every month to discuss topics of relevance to the sector, such as carbon removal accounting methodologies and opportunities in the area. We are also members of the Minas Gerais Forestry Industry Association (AMIF), the Forest Research and Studies Institute (IPEF) and the Forest Investigations Society (SIF), with the aim of encouraging research and development in the forest sector.



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# MINING

One of Gerdau's strategic directives is to produce iron ore to supply its plants, meaning an important competitive advantage in steel production. We have two operational mines in the state – Várzea do Lopes, in Itabirito, and Miguel Burnier, in Ouro Preto.

## MANAGEMENT OF DAMS [EM-MM-540A.2](#)

The Alemães Dam, located in the district of Miguel Burnier, in Ouro Preto (MG), underwent development, with its construction method being altered from upstream to downstream. The works were finalized in July 2023. Gerdau complies with Minas Gerais state legislation (Law 23.291/2019), which does not permit dams constructed using the upstream method. The restructuring guarantees greater stability, reinforcing the safety of the community and reducing any possible risks to the environment. The dam is safe, with a declaration of stability signed by an external auditor.

Gerdau's management of the dam is solid, ensuring its safety by always complying with the most up to date legislation and the regulations issued by the National Mining Agency (ANM). By means of a complex system of monitoring, operated 24/7 by the CMG (Geotechnical Monitoring Center) team, the following instruments are monitored.

**In 2022, of the total production, 1.5 million tons were sold to third parties, and 4.3 million tons were used at the Ouro Branco integrated plant in Minas Gerais.**

- A video monitoring system
- Piezometers (monitoring of pressure)
- Inclinometers (monitoring defects)
- A leak gauge
- Prisms (monitoring displacement)
- Water level indicators (monitoring the water level inside the dam)
- Automated siren activation system (warning system for evacuation)

In addition to these measures, routine inspections are performed on the Geotechnics team, ensuring the physical stability and hydraulic safety of the structures.



The Municipal Dam Safety Plan (PMSB) is under development and will form part of the Emergency Action Plans of each one of the dams and the local Civil Defense Contingency Plan, responsible for also providing a response to other events such as floods, mudslides, landslides and wildfires. A groundbreaking initiative in Brazil, the PMSB was created by the Congonhas municipal government, with support provided by Gerdau and other companies. This community-focused project is managed by the Economic and Social Development Agency of Inconfidentes and Alto Paraopeba (Adesiap), and is monitored by the Prosecutor's Department of the State of Minas Gerais (MPMG). [EM-MM-540A.3](#)

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**ORGANIZATION'S TAILINGS STORAGE FACILITY INVENTORY TABLE, REGULATED BY THE NATIONAL AND STATE DAM SAFETY POLICY EM-MM-540A.1**

	2021		2022			
<b>Facility name</b>	Barragem dos Alemães	Barragem Bocaina	Barragem dos Alemães	Barragem Bocaina	Barragem Dique Norte of PDE 1	Barragem Baias of UTM II
<b>Location</b>	Brazil, Minas Gerais, Ouro Preto	Brazil, Minas Gerais, Ouro Preto	Brazil, Minas Gerais, Ouro Preto	Brazil, Minas Gerais, Ouro Preto	Brazil, Minas Gerais, Ouro Preto	Brazil, Minas Gerais, Ouro Preto
<b>Ownership status</b>	Operated by Gerdau	Operated by Gerdau	Operated by Gerdau	Operated by Gerdau	Operated by Gerdau	Operated by Gerdau
<b>Operational status</b>	In operation	Decommissioned	In operation	Decommissioned	In operation	In operation
<b>Construction method</b>	Upstream	Upstream	Upstream	Upstream	Single stage	Single stage
<b>Maximum permitted storage capacity (t)</b>	3,760,000 m <sup>3</sup> (volume)	1,435,000 m <sup>3</sup>	3,760,000 m <sup>3</sup> (volume)	1,435,000 m <sup>3</sup>	25,200 m <sup>3</sup>	42,200 m <sup>3</sup>
<b>Current amount of tailings stored (t)</b>	3,260,000 m <sup>3</sup> (this information is not provided in the precise number of tons, just volume)	1,435,000 m <sup>3</sup>	3,260,000 m <sup>3</sup> (this information is not provided in the precise number of tons, just volume)	1,435,000 m <sup>3</sup>	N/A	N/A
<b>Consequence classification</b>	High	Significant	High	Significant	N/A	N/A
<b>Date of most recent independent technical review</b>	N/A <sup>1</sup>	N/A <sup>1</sup>	September 2022	N/A <sup>1</sup>	September 2022	September 2022
<b>Is there a specific Emergency Response Plan (ERP) in place?</b>	Yes	N/A	Yes	N/A	Yes	Yes

<sup>1</sup> Applicable for classification of "Very High" or "Extreme" consequences.



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# NORTH AMERICAN BUSINESS OPERATIONS

## FORMING PART OF THE BO:

- Units in Canada and the United States
- Companies under joint control in Mexico and Canada

In operational terms, the BO steel production totaled 4.5 million tons, 9.8% lower than 2021, the result of a lower demand. Steel sales, meanwhile, totaled 4.1 million tons, 8.1% lower than the previous year. Use of rolled product capacity is at 92%, a high level of production to meet the needs of the non-residential construction, industrial and distribution markets, which continue to be highly resilient.

In 2022, the Net Revenue was R\$ 31.1 billion, 11.7% higher than the previous year, influenced by the metal spread and the higher Net Revenue per ton. The Adjusted EBITDA was R\$ 10 billion, the best in the operation's history, reflecting a favorable moment in the market and the resilience of the segmentation strategy and cost control efforts.

# SPECIAL STEEL BUSINESS OPERATIONS

## FORMING PART OF THE BO:

- Units in Brazil and the United States
- Companies under joint control in Brazil

Looking at the year's consolidated figures, steel production totaled 1.8 million tons, a growth of 8.2% against 2021, whilst sales remained stable in relation to the previous year, with 1.7 million tons. This result reinforces the expectation of growth and the gradual recovery of the operation over the course of the year.

In relation to the economic-financial aspect, the Adjusted EBITDA was 40% higher, at R\$ 2.8 billion, with an Adjusted EBITDA margin that was 2.3 percentage points higher than that registered in 2021.

# SOUTH AMERICAN BUSINESS OPERATIONS

## FORMING PART OF THE BO:

- Units in Argentina, Peru and Uruguay
- Joint ventures in Colombia and the Dominican Republic

Crude steel production increased by more than 24% in the annual benchmarking, whilst sales of steel were 3.4% lower than the previous year, due to a slight drop in demand from all the countries in the region. With respect to the economic-financial aspect, the revenue of R\$ 7.2 billion (a 4.7% increase in the annual benchmarking) deserves special mention. The drop in the sales cost over the past few quarters reduced the year's consolidated increase of 3.7%, due to the increase of metals and energy used in production.

The Adjusted EBITDA, experiencing a slight drop of 0.8% compared to 2021, totaled R\$ 2.1 billion. The Adjusted EBITDA Margin for the year came in at 29.9%. Despite the recorded drops in relation to the compared periods, it should be taken into account that these variations make comparisons with very strong bases, when the operation recorded one of the best results in its history.

# NEW BUSINESS AND PRODUCTS

We have continued to make ongoing investments in the diversification of our business and products. Gerdau Next is our new business division, focused on expanding the portfolio based upon the synergy between steel, our flagship product, and the different ways it can be employed in other industrial and service segments. The division is involved in four specific clusters: construction, mobility, sustainability and technology. In line with our materiality matrix, any new product that is included in our portfolio aims to reduce the amount of gas emissions that affect the warming of the planet.

As well as noting new opportunities for revenue, the diversification of the business was structured as a way of maximizing resources between the clusters and minimizing the impact of any possible market fluctuations, meaning that a complicated period for one sector could be balanced by good performance in another.

2022 saw Gerdau Next achieve its best ever results. We grew substantially in the mobility cluster. The G2L digital logistics platform has invoiced R\$ 1.2 billion in just two years of existence. In November, we presented the market with two new businesses: Addiante, in association with Randon, focused on heavy-goods vehicle leasing, and Vector Industrial, which works with digital freight contracting.



**Gerdau Next presented the market with two new investments in the form of ADDIANTE and Vector Industrial.**

Read about the businesses and companies in more detail on page 65.

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# NATURAL CAPITAL



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# ENVIRONMENTAL MANAGEMENT

**G**erdau's commitment to the environment is in line with the best global practices. The guidance provided by the company spreads throughout the organization, detailing responsibilities and procedures that must be followed, in accordance with the Corporate Environmental Directive.

The monitoring of indicators, such as greenhouse gas (GHG) emissions, energy consumption, the consumption and recirculation of water, and the generation of effluents, waste and coproducts, is performed by a management system. The indicators are monitored periodically by the senior management and the GHG emissions reduction indicator is tied to their bonus, demonstrating our commitment to the theme. Our units have been awarded the ISO 14001 certification and undergo annual internal audits. 78% of the steel manufacturing units, as well as the mining operations, hold the certification. We also have a Sustainability Policy and all environmental issues are addressed during meetings of the Board of Directors and the Strategy and Sustainability Committee.

In 2022, we invested R\$ 639.31 million in the improvement of eco-efficiency practices, and in technologies and projects that resulted in improved performance of environmental matters in our operations.

**78%**  
of the steel manufacturing units  
and mining operations in Latin  
America hold the ISO 14001  
certification

**R\$ 639 million**  
invested in improving eco-efficiency  
practices



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# ENVIRONMENTAL COMPLIANCE

**E**nvironmental compliance needs to be efficient, reliable and transparent, and is a component of the corporate governance made up of the policies and actions that the Company use to relate with its internal and external publics. As well as the integrated Health, Safety and the Environment Policy, Gerdau also has a series of corporate procedures and directives, amongst which are the Corporate Environment Directive, which establishes minimum requirements and objectives related to environmental management and related matters.

The Company's target is to be 100% in compliance with all legal and voluntary environmental requirements, adapting itself to practices that meet the demands of the stakeholders, including society, favoring its insertion into the competitive market, with the minimization of risks and impacts, and the sustainable consumption of natural resources, whilst taking into consideration the opportunities associated with its operations. We manage all environmental aspects and impacts, licenses and authorizations with the aim of meeting the specific requirements of each operation and region in which we are active, whilst also aiming to cause the lowest impact possible on nature, avoiding risks and the occurrence of environmental accidents, whilst also increasing our credibility in the eyes of society. Annual audits are performed on legal requirements and the ISO 14001. The operations should recognize

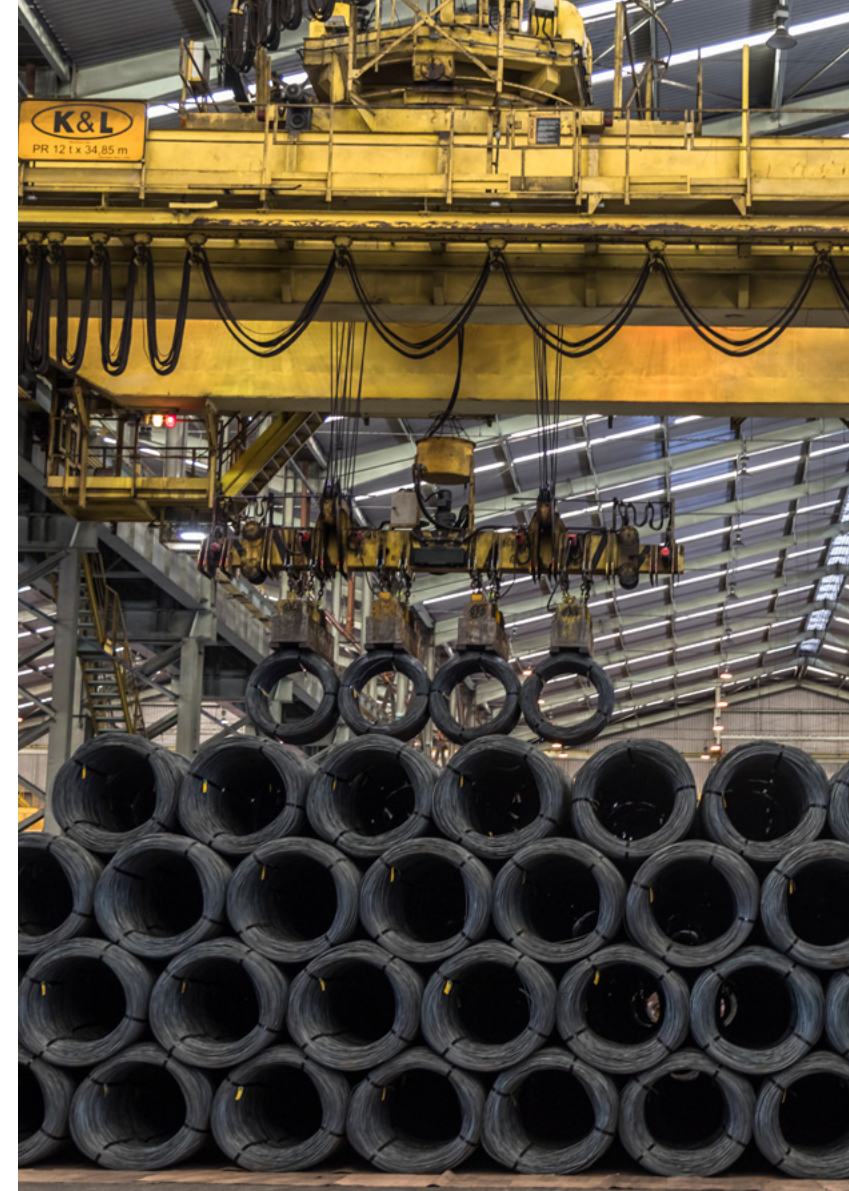
their potential risks and have plans under way for their elimination or minimization, involving the Operations Risks Committee in the decision and, whenever necessary, the Corporate Risks Committee, following guidance from the Risk Policy.

For the contracting of suppliers, environmental requirements are contained not only in our terms and agreements, but also in our Code of Ethics and Conduct and our Code of Ethics and Conduct for Contractors, as well as internal procurement procedures. In 2022, in Brazil, Gerdau established new ESG clauses for contracting, encouraging its supply chain to use renewable energies and biofuels, create GHG emissions inventories, and adopt water consumption and waste generation management policies.

In 2022, as in 2021, Gerdau did not receive any significant fines,<sup>1</sup> since penalties were isolated, with defenses and appeals being presented and/or Conduct Adjustment Agreements or commitments being signed.

**GRI 307-1.** In 2021, four occurrences were recorded, with the sum of R\$ 793,000 being paid. In 2022, we identified no incidents of non-compliance involving significant fines<sup>1</sup> associated with water quality permits, standards or regulations.

**SASB EM-MM-140A.2.**



<sup>1</sup> The Company believes that the concept of significant fines/penalties can be broken down into two criteria: (a) materiality: monetary sum of significant fines, considered as being those involving sums equal to or greater than US\$ 8 million and/or; (b) relevance: penalties applied as a result of non-compliance with environmental laws and regulations, with the potential to prevent or limit the performance of the activities exercised or have an impact upon the company's image.



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# ENVIRONMENTAL PRODUCT DECLARATION (EPD)

We aim to listen to all our stakeholders, including customers, investors and communities, to understand their needs in relation to environmental issues, such as the GHG emissions inventory, Life Cycle Assessment (LCA) and Environmental Product Declaration (EPD). The EPD provides important environmental information on the product. The LCA is an assessment and quantification of the environmental impacts associated with a product or process. The inventory, meanwhile, contains the GHG emissions of our direct (Scope 1) and indirect (Scopes 2 and 3) emissions. We hold alignment meetings to publish our results and outline our management, in accordance with our principle of transparency and ongoing improvement in this area.

The EPDs and LCAs relating to our operations in the United States, Canada and Mexico are verified by a third party, and are in compliance with the ISO 14025, ISO 14044 and ISO 14071, respectively.

**In 2022, the melt shop at the Ouro Branco unit (MG) recirculated some of the coproducts generated during its processes.**

The operations in Colombia and the Dominican Republic also possess EPDs and LCAs for rebars that were verified by a third party in 2022. In the Dominican Republic, we were the first company in the country and in the region covering Central America and the Caribbean to obtain this declaration. In Colombia, we were also pioneers in the sector in measurement of the product's environmental footprint.

In 2022, the Brazilian operations also worked on their EPDs and LCAs, with the former being verified by a third party and presented in 2023. The certified products are the CA-50 and CA-60 rebars, including cut and doubled rebars, mesh, lattices, hot rolled coils, thick sheets and structural shapes.

# MATERIALS

The Tuta unit, in Colombia, has been working with the reuse of steel aggregates generated in the cement industries to create aggregate products for use in civil construction, such as structural blocks used in masonry for the construction of buildings, housing and prefabricated houses, amongst others. The reuse of this material in its application as an aggregate product in construction and prefabricated products makes it an alternative that is highly beneficial to the environment, compared to the others on offer in the market, with respect to concerns over the origin of the materials, use of natural resources, energy and emissions, but also in relation to its contribution as an innovative initiative and as part of the circular economy.

In 2022, the melt shop at the Ouro Branco unit (MG) recirculated some of the coproducts generated during its processes, ensuring benefits such as a refrigerant charge and supporting the circular economy. The sintering process reused 240,000 tons of different coproducts, such as light iron oxide, blast furnace powder, pre-lime, mill scale and an industrial reduction coproduct, replacing non-renewable resources equivalent to 190,000 tons of iron ore, 40,000 tons of limestone and 15,000 tons of dolomite, as well as allowing the internal recirculation of coproducts created during the process itself. Work has been conducted with the aim of increasing this consumption even more.

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# GERDAU AGGREGATE PROGRAM

The Gerdau Aggregate Program, a socio-environmental cooperation between Gerdau and municipalities in Minas Gerais, aims to contribute to the quality of life of the residents by means of investments in urban and rural mobility. By using GG Mais, Gerdau's aggregate steel co-product, we are managing to improve country roads, and substitute the use of natural resources, allowing for sustainable development in the regions and improving access and movement in and between the communities.

Bring opportunities to the regions, offer training to take better advantage of the resources and, more than this, generate growth in the regions are paths being found for all to move in the same direction: molding the future, day by day. The socio-environmental gains can be observed in the ease of transit, the flow of primary production, the access people have to large urban centers and a reduction of the emission of particles generated by traffic. The gains in performance, meanwhile, compared to naturally achieved improvements, include greater load support and resistance to abrasion, luting capacity of fine particles arising from GG Mais Paving, providing better coating, compacting and durability, with a reduction in the frequency of maintenance work.



## The donation of 292,000 tons of GG Mais in 2022 benefited 31 municipalities in Minas Gerais.

In the operation in Mexico, 218,000 tons of steel aggregate products were used as raw-material for cement and paving projects, such as that implemented at our own coproducts patio at the Sahagun plant. In addition to this, Gerdau formed a partnership with the Mexican Transport Institute (IMT) for the development of studies related to the uses and application of this material.

## SUSTAINABLE PALLETS

In Brazil, in 2022, tests began with a partner company for the production of biosynthetic wooden pallets, using coproducts generated during the scrap metal processing phase. The technical results were positive: the pallets proved themselves to be resistant, durable and high-quality. The sustainable pallet, by presenting mechanical and physical properties similar to conventional pallets, came to provide an alternative for the storage and transportation of products, with another advantage being that the biosynthetic wood is more resistant to threats such as humidity, insects and pests.

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The steel sector is energy-use intensive, be it thermal or electrical. We are committed to performing studies and investing in alternatives that allow us to transfer our energy matrix over to renewable sources, such as wind, solar, self-declared electricity, biomass and biogas. Investment in renewable energy sources, with lower emissions of CO<sub>2</sub>e, is one of the fundamental pillars for the continued economic and sustainable growth of our business. As such, the initiatives are implemented in all our plants and 15% of the total energy in our manufacturing processes worldwide is drawn from renewable sources. In terms of electricity, 43% is drawn from renewable sources with low CO<sub>2</sub>e emissions, taking into account the local grids where we operate.

At the Ouro Branco Plant (MG), roughly 90% of the thermal demand for stationary equipment, such as furnaces, regenerators and boilers, is supplied by gases resulting from the steel manufacturing process itself. These gases are generated in the blast furnaces and coke furnaces, demonstrating our commitment to efficiently taking full advantage of the byproducts of the steel production process to meet our energy needs.

In Brazil, we hold a share in the concession for the Dona Francisca Energética S.A. hydroelectric power plant (DFESA), in Rio Grande do Sul, with a nominal capacity of 125 MW. Through our self-declaration of 100% renewable energy, we managed to discount some 8,000 tCO<sub>2</sub>e of our Scope 2 emissions arising from the industrial facilities in Pindamonhangaba and Mogi das Cruzes (SP).



**Investment in renewable energy sources, with lower emissions of CO<sub>2</sub>e, is one of the fundamental pillars for the continued economic and sustainable growth of our business.**



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# SOLAR POWER

In 2022, we committed ourselves to the solar energy source Shared Generation Consortium model for 11 of our Comercial Gerdau units. Furthermore, together with our suppliers, we have developed the purchase of energy associated with the provision of certificates or self-declarations of renewable energy.

For 2023, we purchased an average 28 MW of short-term energy with I-REC, corresponding to roughly 5% of our total estimated consumption for the operations in Brazil. We hold an average 80 MW and contract another average of 13.5 MW under long-term PPAs (Power Purchase Agreements), without GHG emissions and with clauses relating to social Investment targets, meaning around 19% of our total estimated consumption in Brazil between 2024 and 2028. In 2023, we are still set to transfer around 33 Gerdau units, including Comercial Gerdau and Corte & Dobra, to the free energy market under the shared retailer format. For these units, we have contracted certified renewable energy with a lowering of carbon and a social investment clause.

We also have a solar park in the town of Midlothian, Texas (US), the result of a partnership that we have established with 174 Global Power and Total Energies, both leading energy companies. The new station will have the capacity to produce 80 megawatts of energy, using 230,000 photovoltaic panels, that will supply the Gerdau unit installed alongside the solar farm. The energy generated will offset emissions equivalent to 13,000 houses in Texas.



Through the 'Pátios Verdes' project under way at the joint ventures in Mexico, four scrap metal collection and processing units will be receiving renewable energy by the end of 2023. 1.63 GWh of electricity will be generated using photovoltaic energy each year, meaning a reduction of 650 tCO<sub>2</sub>e per year. This involves investment of around US\$ 1.3 million.

# MANAGEMENT OF SUPPLIERS IN BRAZIL

We recognize the importance of our role in engaging and encouraging our entire chain of suppliers to manage their businesses responsibly. In 2022, for the first time, an energy supplier converted 0.09% of the revenue from short-term energy contracts signed with Gerdau into social projects. For the long-term contracts and self-production operations, the investments in social, environmental, cultural or scientific initiatives with a public interest total more than R\$ 3.8 million over the course of the next 15 years. We are also currently negotiating the first long-term agreement with diversity and inclusion and environmental commitment clauses.

# 11

Comercial Gerdau units have adopted the solar source shared generation consortium model



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# BIOMASS

As well as our commitments to new renewable sources of electricity, such as solar and wind power, we have also included charcoal in our energy mix. It is produced using the raw material drawn from our planted forests. Different to mineral coal, which is a non-renewable fossil fuel, charcoal is renewable, the result of the carbonization of the biomass arising from planted wood. At the three Gerdau units located in Minas Gerais - Barão de Cocais, Divinópolis and Sete Lagoas - we run blast furnaces that produce pig iron from charcoal. We are the world's biggest producers of charcoal and, as a renewable source of coal, the CO<sub>2</sub>e emissions in the production of steel are considered to be neutral, whilst helping to reduce our global emissions.

In 2022, our forest area stocked 13.96 millions of tons of tCO<sub>2</sub>e and our native forest area stocked a total of 11.54 million tons of tCO<sub>2</sub>e, an achievement made possible by the maintenance of our forests. This amount is not discounted from our greenhouse gas emissions, but reinforces the important role that our forest base and the conservation of areas in general plays in the environmental gains achieved through forest assets.

In the search for alternatives for reducing the consumption of mineral coal, we use eucalyptus biomass and sawdust bark at Gerdau's biggest plant, located in Ouro Branco (MG). The biomass we use in the coke furnace, a renewable source of energy, partially replaces the fossil fuels used in the blast furnaces. This experiment will be improved by means of studies using the residue from corn, coffee and sugarcane bagasse. We expect to increase our consumption of biomass fourfold. In 2022, Gerdau was one of the finalists in the Steelie Awards, the sector's leading awards, hosted by worldsteel. We competed for the award in the "Sustainability" category due to this project.

**13.96 million tons of tCO<sub>2</sub>e**  
stocked by our forest area

**11.54 million tons of tCO<sub>2</sub>e**  
stocked by our native forest area

**In 2022, we used 21,360 tons of biomass at the Ouro Branco unit and reduced our CO<sub>2</sub>e emissions by 64,350 tons.**



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## ENERGY CONSUMPTION WITHIN THE ORGANIZATION <sup>1,2</sup> (GJ) GRI 302-1

	2020	2021	2022
Fuels from renewable sources	13,905,307.00	18,429,702.21	15,847,694.00
Fuels from non-renewable sources	97,629,276.94	101,064,890.70	93,110,247.52
Electricity consumption	33,830,905.40	32,516,819.29	32,759,344.20
<b>Total energy consumption within the organization</b>	<b>145,365,489.34</b>	<b>152,011,412.21</b>	<b>141,717,285.72</b>

Energy intensity ratio for the organization <sup>1</sup> GRI 302-3	2020	2021	2022
Energy intensity in GJ/t of steel produced	11.06	11.18	11.19

<sup>1</sup> Gerdau uses accountable production (tons of steel produced) as a denominator to define the energy intensity. All types of energy used within the organization are considered (fuels, electricity and heating).

## ENERGY CONSUMED EM-IS-130A.1 EM-IS-130A.2

	2020	2021	2022
<b>Total energy consumed (in GJ)</b>	<b>145,365,489.34</b>	<b>152,011,412.21</b>	<b>141,717,285.72</b>
Percentage of energy consumed that was supplied from the electricity grid	23%	21%	23%
Percentage of energy consumed that was renewable energy	N.D.	1%	1%
Percentage of energy consumed that was coal	N.D.	32%	32%
Percentage of energy consumed that was natural gas	N.D.	17%	16%
Percentage of energy consumed that was renewable	10%	12%	11%

<sup>1</sup> Gerdau does not sell electricity.

<sup>2</sup> Fuels considered in the calculation:

Renewable: Biogas from landfills, biomass/other solid primary biomass, charcoal, hydrous ethanol and renewable source wood (BEN).

Non-renewable: acetylene, coal tar, anthracite, metallurgical coal, coking coal, petroleum coke, diesel, melt shop gas, blast furnace gas, coke furnace gas, liquefied petroleum gas (LPG), natural gas, gasoline, lubricants, fuel oil, propane and kerosene.



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# WATER MANAGEMENT

GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC | 303-1

Water management forms a core part of the strategy pursued by the Company, which continually invests in recirculation programs, contributing both to a lower level of water withdrawal, and to reducing the amount of effluents and the environmental impact of discharges in our operations. This topic is assessed in the studies of aspects and impacts, in the practices of the environmental management system, and as a relevant factor in the risk evaluation scenarios.

In our Environmental Directive, an extension of our Sustainability Policy, there is a chapter dedicated to water and effluent management. This chapter addresses issues such as compliance with legislation and all the regulations applicable to the withdrawal and discharge of water (environmental compliance); promotion of initiatives to expand the recirculation and treatment processes aimed at reducing water withdrawals; and compliance with the water management targets established for each business unit. All the aspects (water withdrawal, treatment and consumption) are monitored by the teams at each one of our units. To guarantee that the directive is complied with, internal audits are conducted periodically at each unit.

The water reuse and recirculation systems at our plants enable the recycling of 97.8% of the water used in production. This total comes from a total of 1.98 billion m<sup>3</sup> recirculated in 2022. The units monitor all the water withdrawal, distribution and

consumption points. These KPIs are also monitored by the senior management in the form of the industrial performance report. In addition to this, Aqueduct, a tool developed by the World Resources Institute (WRI), is used to map all our direct operations located in water stressed areas.

In 2022, for the first time, we responded to the CDP Water Security questionnaire, providing information on our Brazilian operations. The CDP is an international non-profit organization specializing in sustainability programs. We were awarded a score of B-, which reinforces our transparency and commitment to the theme.

The Brazilian operation has annual targets and a roadmap based upon the stability of the business' processes and its sustainability drivers. We also develop an inventory of all the demands necessary to mitigate the existing gaps (from both an internal and external perspective), gauged by the operational risk management and systematically added into the planning of the operation and investments, thereby ensuring that the improvements are ongoing and progressive.

We monitor the water withdrawal, reuse, consumption and treatment data at all our units. This information is monitored on a daily basis and presented as is in the management framework, an important tool for the control and governance of the operation. In the Brazilian operations, we also take part in numerous drainage basin committees, such as those managing the Rio Pi-



racicaba, Rio Paraopeba and Rio das Velhas, and sub-committees working on the Rio Itabirito and Águas de Moeda, in Minas Gerais. In Rio de Janeiro, we take part in the Guandu Committee, and in Pernambuco, in the Rio Ipojuca committee. Meetings are held monthly, quarterly or half-yearly, with discussions focused on water use.

Over the last year, we achieved our water withdrawal target for the Brazil units of 5.2 m<sup>3</sup>/t of steel produced. For 2023, we have established a target of specific water consumption of 4.6 m<sup>3</sup>/t of steel produced for these units.

In relation to water discharge, Gerdau is in compliance with the legal standards of volume and quality for each location. The priority substances are heavy metals, oil and grease, pH and chloride. A specific system is used to address errors, which avoids incidents and guarantees the quality of the water returned to nature. The legal standards vary depending upon the location of the unit. **GRI 303-2**

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Water withdrawal (ML) <sup>1 2</sup> GRI 303-3		2020		2021		2022	
		All areas	Water stressed areas	All areas	Water stressed areas	All areas	Water stressed areas
Surface water	Fresh Water (>1000 mg/l of total dissolved solids)	36,787.26	2,048.79	33,969.31	2,185.99	31,097.63	1,341.43
	Other waters (>1000 mg/l of total dissolved solids)	58.86	0	0	0	0	0
	Total	36,846.12	2,048.79	33,969.31	2,185.99	31,097.63	1,341.43
Groundwater	Fresh Water (≤1000 mg/l of total dissolved solids)	11,012.99	4,524.37	10,376.34	2,565.71	10,240.60	2,741.66
	Other waters (>1000 mg/l of total dissolved solids)	479.34	0	1,277.05	1,088.65	102.24	0
	Total	11,492.33	4,524.37	11,653.39	3,654.36	10,342.84	2,741.66
Third parties' water (supply companies)	Fresh water (≤1000 mg/l of total dissolved solids)	2,663.84	547.42	2,906.09	598.19	3,010.09	657.06
	Other waters (>1000 mg/l of total dissolved solids)	142.45	0.33	48.37	48.37	40.97	40.97
	Total	2,806.29	547.75	2,954.46	646.56	3,051.06	698.03
Rainwater (collected and stored directly by the organization)	Fresh water (≤1000 mg/l of total dissolved solids)	147.79	0	338.08	0	301.13	0
	Other waters (>1000 mg/l of total dissolved solids)	136.28	0	0	0	0	0
	Total	284.07	0	338.08	0	301.13	136.28
Total water collection	<b>Fresh water (≤1000 mg/l of total dissolved solids)</b>	<b>50,611.89</b>	<b>7,120.58</b>	<b>47,589.81</b>	<b>5,349.90</b>	<b>44,649.44</b>	<b>4,876.43</b>
	<b>Other waters (&gt;1000 mg/l of total dissolved solids)</b>	<b>816.93</b>	<b>0.33</b>	<b>1,325.42</b>	<b>1,137.02</b>	<b>143.21</b>	<b>40.97</b>
	<b>Total</b>	<b>51,428.82</b>	<b>7,120.91</b>	<b>48,915.23</b>	<b>6,486.92</b>	<b>44,792.65</b>	<b>4,017.40</b>

<sup>1</sup> Gerdau does not with draw water from the ocean and does not have a compilation of data on the waters generated through the production process.

<sup>2</sup> The data are provided by the units through the Sharepoint system, including measured and estimated data.

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Water disposal (ML) <sup>1 2 3</sup> GRI 303-4		2020		2021		2022	
		All areas	Water stressed areas	All areas	Water stressed areas	All areas	Water stressed areas
Surface water	Fresh water (>1000 mg/l of total dissolved solids)	29,950.48	2,149.12	28,704.32	2,800.51	29,409.37	1,240.33
	Other waters (>1000 mg/l of total dissolved solids)	71.68	0	24.46	0	2.6	0
	Total	30,022.16	2,149.12	28,728.78	2,800.51	29,411.97	1,240.33
Groundwater	Fresh water (≤1000 mg/l of total dissolved solids)	0.91	0	0	0	15.63	0
	Other waters (>1000 mg/l of total dissolved solids)	0	0	0	0	0	0
	Total	0.91	0	0	0	15.63	0
Seawater	Fresh water (≤1000 mg/l of total dissolved solids)	83.11	0	90.04	0	0	0
	Other waters (>1000 mg/l of total dissolved solids)	0	0	0	0	0	0
	Total	83.11	0	90.04	0	0.00	0.00
Third parties' water (supply companies)	Fresh water (≤1000 mg/l of total dissolved solids)	379.63	35.10	487.59	38.99	529.21	23.92
	Other waters (>1000 mg/l of total dissolved solids)	32.4	21.05	41.05	20.89	127.94	36.24
	Total	412.03	56.15	528.64	59.88	657.15	60.15
<b>Total water discharge</b>	<b>Fresh water (≤1000 mg/l of total dissolved solids)</b>	<b>30,414.13</b>	<b>2,184.22</b>	<b>29,281.95</b>	<b>2,839.50</b>	<b>29,954.21</b>	<b>1,264.25</b>
	<b>Other waters (&gt;1000 mg/l of total dissolved solids)</b>	<b>104.08</b>	<b>21.05</b>	<b>65.51</b>	<b>20.89</b>	<b>130.54</b>	<b>36.24</b>
	<b>Total</b>	<b>30,518.21</b>	<b>2,205.27</b>	<b>29,347.46</b>	<b>2,860.39</b>	<b>30,084.76</b>	<b>1,300.49</b>

<sup>1</sup> The priority substances for which the effluents are treated are heavy metals, oil and grease, pH and chloride. A specific system is used to address errors, avoiding incidents and guaranteeing the quality of the water returned to nature.

<sup>2</sup> Gerdau is in compliance with the legal standards of discharge volume and quality for each location.

<sup>3</sup> The data are provided by the units through the Sharepoint system, including measured and estimated data.

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Total freshwater withdrawn, (2) percentage recycled, (3) percentage in high or extremely high baseline water stress regions EM-IS-140A.1   GRI 303		2021	2022
Total freshwater withdrawn (in megaliters)		47,589.81	44,649.44
Percentage of water recycled	Water recycled (in megaliters)	1,977,780.00	1,980,108.57
	Percentage	97.6%	97.8%
Percentage of the freshwater withdrawn in water stressed regions (high or extremely high)	Freshwater withdrawn in water stressed regions (high or extremely high) (in megaliters)	5,349.90	4,876.43
	Percentage	11.0%	10.90%

Water withdrawal, discharge and consumption (ML) <sup>1</sup> GRI 303-5	2020		2021		2022	
	All areas	Water stressed areas	All areas	Water stressed areas	All areas	Water stressed areas
Water withdrawal	51,428.82	7,120.91	48,915.23	6,486.92	44,792.65	4,917.40
Water disposal	30,518.21	2,205.27	29,347.46	2,860.39	30,084.76	1,400.49
Water consumption	20,910.60	4,915.64	19,567.77	3,626.53	14,707.89	3616.91

<sup>1</sup> The data are provided by the units through the Sharepoint system, including measured and estimated data.

The volume of water entering and exiting a system during an interval of time serves to better understand and improve the water circuit of the operations. The information included in the balance allows us to improve the processes, by means of actions such as those related to the reduction of losses, for example. Following the study, our Ouro Branco (MG) plant experienced a drop in the intensity of water consumed over the last three years - a drop of 30% since 2020. The plant focused on the elimination of leaks in the water distribution lines, adjustments to the systems supply control logic, and the opportunity to reuse water in a cascade system. **GRI 303-3**

In Colombia, the Muña plant has recorded zero discharge since 2019. Investments totaling US\$ 800,000 are currently being made with the aim of ensuring that the Tuta unit also achieves zero discharge. The improvements at the unit include the collection of rainwater, which will entail a reduction in the pressure placed upon the Chicamochá river. With the treatment system now implemented, it is expected that just 10% of the volume of water used in the processes will be drawn from the river during rainy periods.

Our biggest plant in the United States, Midlothian, as well as those in Cartersville, Petersburg, Charlotte and Jackson, also emit zero effluents and have reservoirs for the collection of rainwater.

**For the first time, we responded to the CDP Water Security questionnaire, providing information on our Brazilian operations. We were awarded a score of B-, which reinforces our commitment to the theme.**



# SCRAP METAL RECYCLING GRI 301-2, 301-3

As the biggest scrap metal recycler in Latin America, Gerdau produces 71% of its steel from recycled scrap metal. This is a raw-material that originates from domestic disposal and industrial waste. The principal source is the scrap metal disposed of by society (stoves, refrigerators, old cars) and collected by scrap metal dealers, who are our partners in this process. The second most important source is industrial activities (waste from the metal-mechanical industry, and the infrastructure, automobile manufacture, parts, machinery and equipment sectors). All management of the operations related to scrap metals undergoes a process of internal auditing, ensuring the reliability of the raw-material used in our products.

Each year we use more than one million tons of scrap metal. Each ton used avoids the emission of 1.5 tons of CO<sub>2</sub>, along with the consumption of 1.4 tons of iron ore, 740 kg of coal, and 120 kg of limestone.

in Brazil, Prolata, a management company focused on sustainability and reverse logistics in the steel packaging sector, has developed actions together with recycling cooperatives. These actions are supported by the management and regulated by the public and environmental authorities, whilst they also provide training for the coop-workers, and develop initiatives that increase the wellbeing and safety of those working in the chain. Gerdau has established a partnership with Prolata which, in 2022, ensured the correct disposal for recycling of thousands of

tons of post-consumption steel packaging, with operations in 18 states and 163 municipalities.

In Colombia, the *'Gerir e Reciclar'* initiative strengthens and trains the recyclers, allowing conditions for the processes involved in the scrap metal chain to be improved. The workers receive certification from the Universidad Central in Bogotá. So far, 225 recyclers, who are members of 16 associations, have benefited from this initiative. This program has helped increase the incomes of these recyclers, who are able to improve the sustainability of their businesses in the short and medium terms, thus making themselves more competitive.



## Consumption of materials originating from recycling (in tons)<sup>1 2</sup> GRI-301-2

Material	2020	2021	2022
Pig iron (internal and external)	3,889,719.60	4,400,119.22	4,235,032.24
Alloys	211,926.81	211,128.08	240,866.4
Fuels	170,237.72	175,477.45	177,036.76
Scrap metals	11,482,790.78	11,733,571.20	11,240,380.2
<b>Total raw materials consumed during the period</b>	<b>15,754,674.91</b>	<b>16,520,295.95</b>	<b>15,893,315.59</b>
<b>Total raw materials originating from recycling (scrap metals)</b>	<b>11,482,790.78</b>	<b>11,733,571.20</b>	<b>11,240,380.2</b>

<sup>1</sup> The data do not include the GJD unit (Dominican Republic).

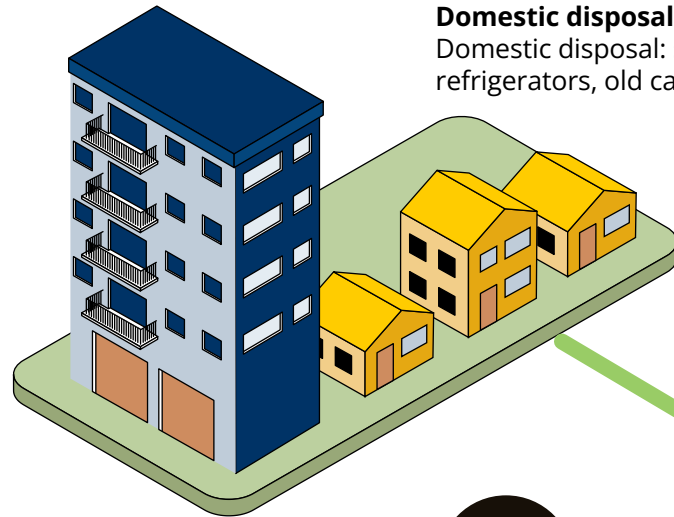
<sup>2</sup> The percentage of recycled materials used in 2020 was 73%. In 2021 and 2022, this proportion stood at 71%, since, from 2021 on, Gerdau started following the ISO 14064 norm in its calculations of the percentage of scrap metal in its steel, which does not consider the internal return scrap metal value, which dropped against 2020.

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# THE BIGGEST RECYCLER OF FERROUS SCRAP METAL IN LATIN AMERICA

+ **than 11 million** tons/year

## 1. THE ORIGIN OF THE RAW-MATERIAL



**Domestic disposal:**  
Domestic disposal: stoves, refrigerators, old cars, bicycles

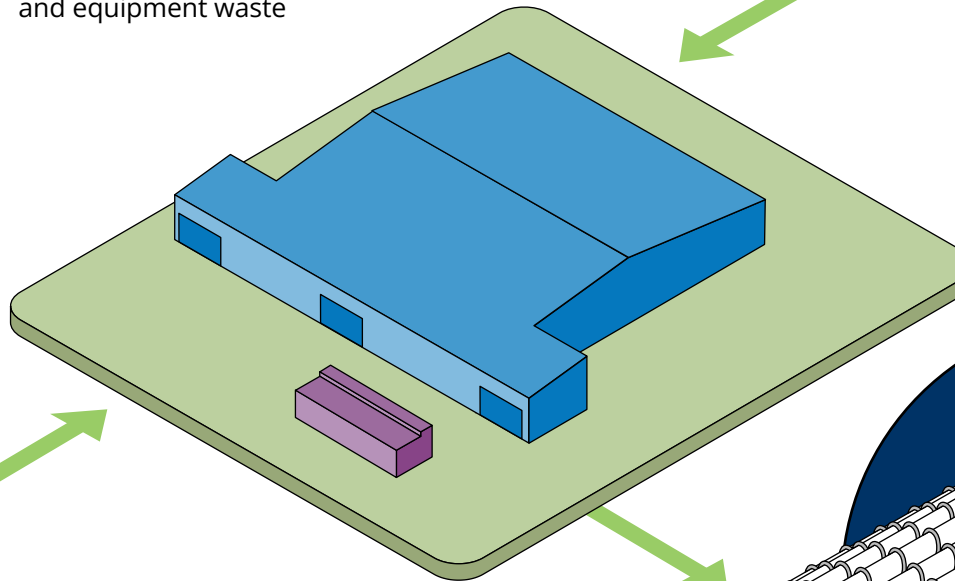
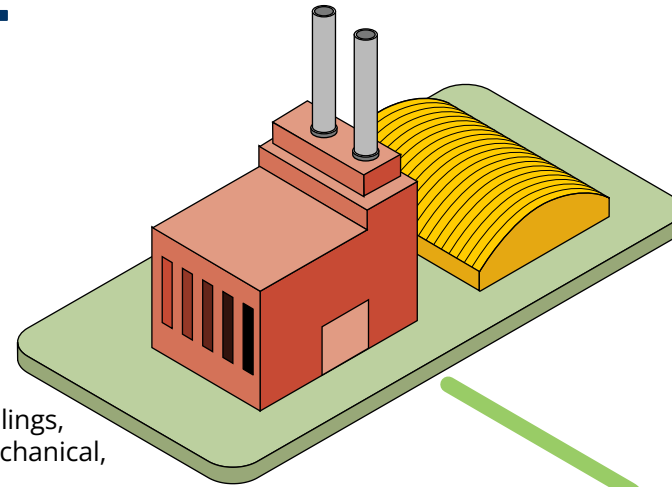


## 2. WITHDRAWAL

**1 million**

people involved in the process, including scrap-metal collectors and cooperatives

**Industrial waste:**  
production tailings, and metal-mechanical, automobile manufacturing, machine and equipment waste



## 3. MANAGEMENT OF THE OPERATION

An internal audit ensures reliability of the raw-material

## ENVIRONMENTAL BENEFITS



Each ton prevents the emission of

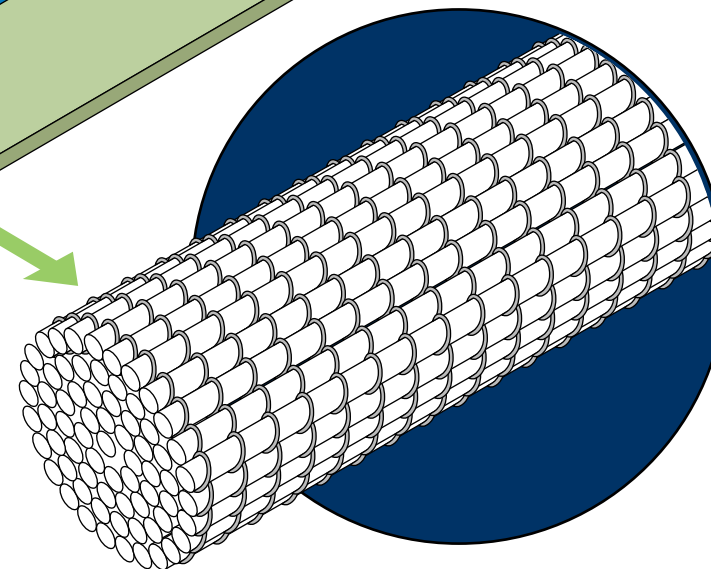
**1,5**

tons of CO2

## 4. FROM SCRAP METAL TO STEEL

**71%**

of the steel produced by Gerdau originates from scrap metal



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# WASTE MANAGEMENT AND THE CIRCULAR ECONOMY

GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC

The circular economy is a material topic for Gerdau. The company creates commercial and economic opportunities and delivers environmental and social benefits. From an environmental perspective, application of the circular economy preserves natural resources, since it is based upon three main pillars: eliminating waste and pollution; circular products and materials; and regenerating nature.

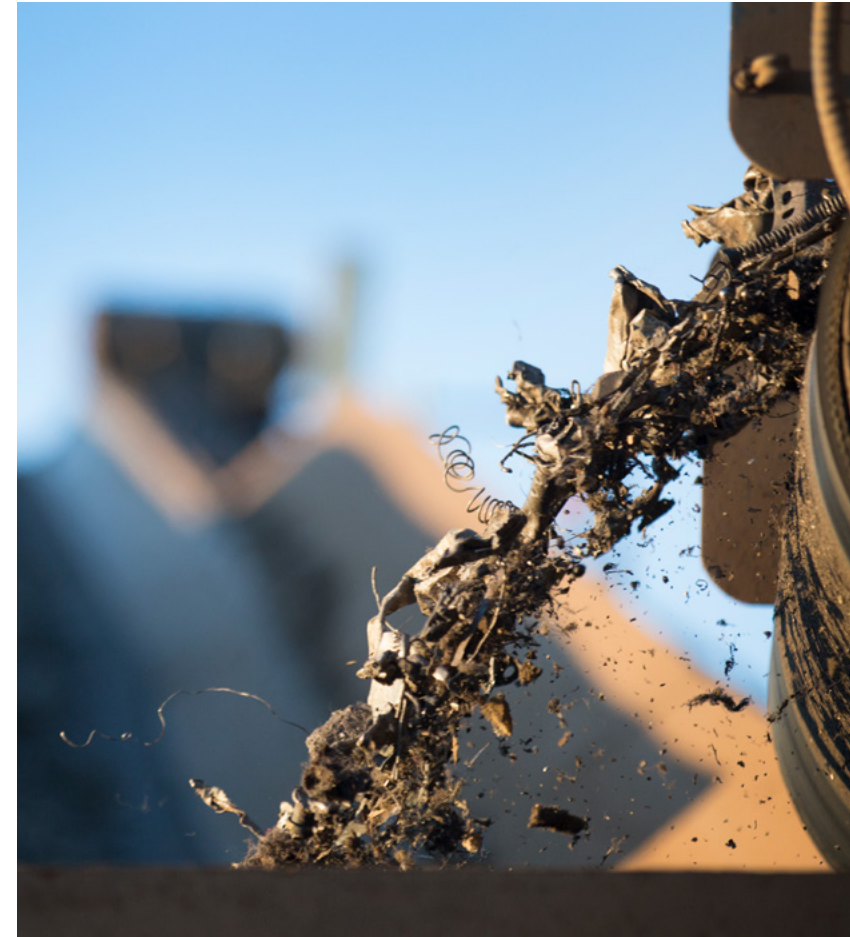
Steel is the world's most recyclable and recycled material, as well as being permanent. New steel is produced from old steel, which can be transformed into automobiles, home appliances, packaging, components for civil construction, and used to generate renewable energy.

The circular economy at Gerdau goes beyond recycling, since it forms part of the recirculation of water and reuse of gases and coproducts. The waste generated in our operations serves as an input for other industries. Through the Sustainability Policy and the Corporate Environment Directive, we encourage the use of coproducts and their insertion into other manufacturing processes, thereby avoiding their disposal in landfills.

The need for synergy between companies is one of the main challenges to the implementation of the circular economy, but it is also an opportunity for the creation of a more sustainable, resilient and efficient economic system. In 2022, as part of its search for the development and evolu-

tion of circular economy models, Gerdau took an active role as a member of the circular economy hub in Brazil. The direct involvement of business areas such as Metals and Coproducts and Social Responsibility, led to the creation of a common agenda on the development of projects in synergy with other companies. Another highlight of the year was the partnership between Gerdau and Senai, a professional education and qualification institution with units throughout the state of São Paulo. All the scrap metal generated as part of the institution's Metalwork course classes and workshops is sent to Gerdau for recycling, whilst Comercial Gerdau provides the products that are to be used again on the courses, thereby encouraging the circular economy and demonstrating that the company cares not only about this issue but also about people's education. The project has been implemented in 88 schools and 61 towns and cities, with 91,000 students expected to benefit every year.

This synergy is essential for the circular economy to be effective, since it allows for the creation of an integrated system of production and consumption, in which the waste is transformed into resources and the life cycles of the products are prolonged. Furthermore, the synergy between the companies can lead to new business opportunities and reduce production costs, thus contributing to the competitiveness and sustainability of companies.



**Under the circular economy at Gerdau, the waste generated in our operations becomes an input for other industries.**

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# WASTE AND COPRODUCTS

GRI 306-1, 306-2 | EM-MM-150A.6

**D**ue to the specific nature of the operations involved in the steel industry, a significant amount of waste is produced (with the potential to contaminate the soil, and surface and underground water), as well as a significant amount of coproducts (all that is not a raw-material or a product for use in another stage of the chain of the steel production industrial process). The coproducts ensure a high added value, through the recovery, reuse, re-manufacture and recycling of the materials.

Our management of waste and coproducts is conducted by teams from the Coproducts and Environment departments, which receive support from the Research & Development department as they search for technological advances and the development of new alternative uses for the coproducts, based upon the principles of the circular economy and sustainability.

Since 2021, the coproducts have been incorporated into our strategic planning, focused on the unfolding of the target of increasing the percentage of recycling and positive directing of waste. The targets established in relation to the issue of management of waste and coproducts involve reuse gauged against the amount generated.

The operations in Brazil in 2022 achieved the projected target of 100% of the coproducts being reused. For 2023, it is planned for the work done over the course of 2022 to be continued, with the aim of continually expanding the focus

on the environmentally friendly recycling of the materials generated during Gerdau's operations, in line with the company's internal principles and the current regulations and legislation.

Gerdau dedicates a great deal of effort to developing means that allow for the reuse of materials in its own plants or for other productive ends, thereby reducing the need for landfills and dumps. These developments provide not only environmental benefits, but financial ones as well, increasing the use of the generated coproducts, preserving natural resources, economizing energy, reducing or eliminating the need to dispose of materials in landfills, and raising the possibility of generating revenue in the form of certain allocations or applications.

The coproducts are collected, stored, processed whenever necessary, and controlled with the intention of monitoring the technical and environmental quality by means of periodic analyses, for their internal or external reuse. Some examples of the more important coproducts are the steel aggregate generated in the blast furnaces, which is mostly sent to cement manufacturing companies, mill scale, which has numerous uses in metallurgical processes, and steel aggregate produced in electric arc furnaces and LD melt shops, which forms the base, sub-base and surface paving of roads, highways and parking lots.

In relation to the processes used to collect and monitor the data related to this issue, the han-



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dling of waste and coproducts follows the following classification: reutilization, which includes reuse, recycling and recovery, and disposal, which includes incineration and landfills.

The environmental management system includes addressing errors in cases where the guidelines are not in compliance with legislation and/or internal regulations. Within this process, managed by the management team at the units, the root causes of the problems are analyzed and correction and improvement plans are defined. All of Gerdau's service providers contracted to participate in the management of waste meet the company's contractual norms and legal obligations.

All operations involving the removal of hazardous and non-hazardous waste from the company's premises follow the applicable regulations. The issuing and checking of documents are performed by qualified technical teams, located at the operational units, which follow the guidelines outlined in management procedures, specific to each operation. [EM-MM150A.10](#)

Gerdau performs both internal environmental management audits on its operations and external audits on the entities receiving its waste and coproducts, aimed at ensuring compliance with the current environmental regulations and legislation.

## TYPES OF WASTE

Our operations generate:

### HAZARDOUS WASTE (CLASS I):

Iron chloride, oil and grease, melt shop dust, lead containing ash and sludge, and combustion chamber dust.

### NON-HAZARDOUS WASTE (CLASS II):

Blast-furnace clay, blast-furnace slag, ladle-furnace aggregate, steel aggregate, coke fines, ore fines, melt shop ferrous oxide, bio-reducer millings and fines, non-ferrous scrap, scrapyard residue, off-gas dust, refractory scrap, mill scale, fine scale/mud from the shredder, zinc-containing sludge and ash. [GRI 306-3](#) | [EM-MM-150A.7](#)

### TOTAL WASTE GENERATED, BY COMPOSITION (T) [GRI 306-3](#) | [EM-MM-150A.4](#), [150A.7](#)

	2020	2021	2022
Hazardous waste (Class I)	352,674.23	288,896.37	213,293.83
Non-hazardous waste (Class II)	6,151,350.77	6,786,098.79	6,270,318.88
<b>Total</b>	<b>6,504,025.00</b>	<b>7,074,995.17</b>	<b>6,483,612.71</b>



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REUTILIZATION IN METRIC TONS (T)<sup>1,2</sup> GRI 306-4 | EM-MM-150A.8

	2020			2021			2022		
	Recovery within the organization	Recovery outside the organization	Total	Recovery within the organization	Recovery outside the organization	Total	Recovery within the organization	Recovery outside the organization	Total
<b>Hazardous waste (Class I) TOTAL</b>	<b>21,201.06</b>	<b>199,446.05</b>	<b>279,599.39</b>	<b>101,358.73</b>	<b>124,566.11</b>	<b>225,924.84</b>	<b>22,055.55</b>	<b>176,963.45</b>	<b>199,019.00</b>
Preparation for reuse	11,678.03	0.00	14,520,587.04	6,664.00	0.00	6,664.00	0.00	0.00	0.00
Recycling	9,523.03	93,473.34	102,996.37	94,694.73	96,401.54	191,096.27	22,055.55	164,627.29	186,682.84
Co-processing	0.00	96,673.42	96,673.42	0.00	9,611.11	9,611.11	0.00	8,814.53	8,814.53
Treatment	0.00	7,941.03	7,941.03	0.00	17,215.40	17,215.40	0.00	3,521.63	3,521.63
Other recovery operations (specify)	0.00	1,358.26	1,358.26	0.00	1,338.06	1,338.06	0.00	0.00	0.00
<b>Non-hazardous waste (Class II) TOTAL</b>	<b>4,323,627.61</b>	<b>2,826,342.35</b>	<b>5,514,310.80</b>	<b>1,386,595.08</b>	<b>4,728,598.29</b>	<b>6,115,193.38</b>	<b>1,193,140.49</b>	<b>4,371,771.06</b>	<b>5,564,911.56</b>
Preparation for reuse	2,188,543.60	0.00	2,188,543.60	1,333,187.42	0.00	1,333,187.42	1,193,140.49	0.00	1,193,140.49
Recycling	2,135,084.01	2,716,093.55	4,851,177.56	53,407.66	4,593,242.48	4,646,650.14	0.00	4,262,063.94	4,262,063.94
Co-processing	0.00	97,595.64	97,595.64	0.00	90,224.32	90,224.32	0.00	94,702.35	94,702.35
Treatment	0.00	12,653.16	12,653.16	0.00	45,120.03	45,120.03	0.00	15,004.78	15,004.78
Other recovery operations (specify)	0.00	12,653.16	12,653.16	0.00	11.47	11.47	0.00	0.00	0.00
<b>Total</b>	<b>4,344,828.67</b>	<b>3,025,788.41</b>	<b>5,793,910.19</b>	<b>1,487,953.82</b>	<b>4,853,164.41</b>	<b>6,341,118.22</b>	<b>1,215,196.04</b>	<b>4,548,734.52</b>	<b>5,763,930.57</b>

<sup>1</sup> The data are provided by the units by means of the Sharepoint system.

<sup>2</sup> There is no information on the total weight of the avoided waste.



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**DISPOSALS IN METRIC TONS (T)<sup>1,2</sup> GRI 306-5**

	2020			2021			2022		
	Disposals within the organization	Disposals outside the organization	Total	Disposals within the organization	Disposals outside the organization	Total	Disposals within the organization	Disposals outside the organization	Total
<b>Hazardous waste (Class I) TOTAL</b>	<b>178.65</b>	<b>10,893.21</b>	<b>42,886.81</b>	<b>9,804.23</b>	<b>31,529.30</b>	<b>41,333.53</b>	<b>8,525.28</b>	<b>27,665.15</b>	<b>36,190.42</b>
Incineration (with energy recovery)	0.00	0.00	0.00	-	-	0.00	0.00	0.00	0.00
Incineration (without energy recovery)	0.00	138.45	138.45	-	303.76	303.76	0.00	210.09	210.09
Burial in a landfill	178.65	8,000.90	8,179.55	9,804.23	25,537.25	35,341.48	8,525.28	24,668.38	33,193.65
Other disposal operations	0.00	2,753.86	2,753.86	-	5,688.29	5,688.29	0.00	2,786.68	2,786.68
<b>Non-hazardous waste (Class II) TOTAL</b>	<b>59,656.27</b>	<b>369,000.81</b>	<b>899,457.73</b>	<b>432,980.51</b>	<b>690,327.08</b>	<b>1,123,307.60</b>	<b>429,513.27</b>	<b>580,053.29</b>	<b>1,009,566.55</b>
Incineration (with energy recovery)	0.00	0.00	0.00	-	6,786.66	6,786.66	0.00	145.06	145.06
Incineration (without energy recovery)	0.00	925.81	925.81	-	-	0.00	0.00	0.00	0.00
Burial in a landfill	59,656.27	285,208.08	344,864.35	432,980.51	663,842.32	1,096,822.83	429,513.27	577,379.92	1,006,893.19
Other disposal operations	0.00	82,866.91	82,866.91	-	19,698.10	19,698.10	0.00	2,528.3	2,528.3
<b>Total</b>	<b>59,834.92</b>	<b>379,894.02</b>	<b>942,344.54</b>	<b>442,784.74</b>	<b>721,856.38</b>	<b>1,164,641.12</b>	<b>438,038.54</b>	<b>607,718.43</b>	<b>1,045,756.98</b>

<sup>1</sup> The data are provided by the units by means of the Sharepoint system.

<sup>2</sup> As part of the management of the mining areas, the company assesses the recovery procedures performed in areas where the tailings and waste piles are stored, ensuring they are correctly maintained with the prevention of possible erosive processes that could affect the bodies of water and other areas neighboring our units.

**GERDAU LONG STEEL - BRAZIL - WASTE ROCK, TAILINGS AND SLUDGE GENERATED BY THE OPERATIONS (T) EM-MM-150A.5, 150A.6, GRI G4-MM3**

	2020	2021	2022
Waste rock <sup>1</sup>	3,011,868.00	8,551,101.19	10,062,361.00
Tailings <sup>2</sup>	243,725.00	273,349.30	618,734.91
Sludge	-	-	-
<b>Total</b>	<b>3,255,593.00</b>	<b>8,824,450.49</b>	<b>10,681,095.91</b>

<sup>1</sup> The increased volume of waste rock in 2022 against 2021 is related to the development of the Várzea do Lopes mine.

<sup>2</sup> The increased volume of tailings in 2022 against 2021 is related to the increased production of the iron ore processing at the Miguel Burnier mine.



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# OUR COMMITMENT TO CLIMATE CHANGE

GRI 3-3 MANAGEMENT OF A MATERIAL TOPIC

Steel is an essential, irreplaceable and 100% recyclable material, that forms a part of the lives of millions of people at different times or places in their daily routines, at the houses in which they live and the means of transport that they use. Steel is contained in the new energy production technologies, as an input in solar panels and wind towers, as well as in new infrastructure solutions, and is a crucial material for the decarbonization process aiming to save the planet. We understand the importance of climate change and its socio-environmental impacts on the world, caused especially by the industrial sector's GHG emissions, which is why the reduction of these emissions is taken into full consideration in our sustainability strategy.

Since 2020, we have published verified data concerning our GHG emissions, based upon the ISO 14.064, the GHG Protocol, and worldsteel methodologies, and we have been evolving each year in the management of this information.

**GRI 305-1** Between 2021 and 2022, the intensity of GHG emissions (Scopes 1 and 2) dropped from 0.89 tCO<sub>2</sub>e/t of steel (adjusted amount following publication due to the inclusion of Gerdau's joint ventures) to 0.86 tCO<sub>2</sub>e/t of steel - less than half the global average for the sector, which is 1.91 tCO<sub>2</sub>e/t of steel. This is due to the improved efficiency of our operations and certain GHG emissions reduction projects, that were mapped in the Marginal Abatement Cost Curve (MACC) and since begun operation. **GRI 305-4**

We invest in renewable energies, such as wind and photovoltaic energy, we are the biggest recyclers of ferrous scrap metals in Latin America, and the biggest producer of charcoal in the world, with 250,000 hectares of our own land, including preserved and planted forest. Our decisions are always anchored in ESG principles and in the generation of value for society and our stakeholders.

We have received an invitation from the Global Compact, together with CDP's Science Based Targets (SBTi), the team responsible for the initiative, to form part of the SBTi's Expert Advisory Group (EAG) for the steel sector. The focus of the group is the development of a methodology designed to guide the adoption of science-based targets aligned with the ambition of achieving 1.5°C, and with the aim of adapting the recommendations made by the SBTi in relation to the particular aspects and growth projections of the sector.

**As well as being the biggest recycler of ferrous scrap metal in Latin America, we are the world's biggest charcoal producer.**

**0.89**

tCO<sub>2</sub>e/t of steel in GHG emissions intensity, against the global average of

**1.91**

tCO<sub>2</sub>e/t of steel

## CDP

In 2022, for the third year running, we reported information on our climate management in the Climate Change module developed by CDP, an organization that is a global benchmark in the assessment of sustainable actions. We received a score of 'B', which is higher than the global average and the average for the metals and metallurgy sector.

## CARBON EFFICIENT INDEX (ICO<sub>2</sub>)

We were the first steel manufacturer to join the ICO<sub>2</sub> index on the B3. This index is made up of shares of companies included in the IBrX-100 indicator. These companies have assumed transparent practices in relation to their GHG emissions, confirming their concern over the impacts of climate change.

## WORLDSTEEL

Gerdau's units are recognized by worldsteel as being amongst those that performed best in terms of the intensity of their GHG emissions. In 2022, the company was announced as having been included in the 2022 edition of the Sustainability Charter for the first time. The Charter brings together a group of leading companies in the steel manufacturing sector which have signed the association's most recent Sustainable Development Charter, reaffirming its commitment to the industry's nine sustainable principles.



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# STRATEGIES AND TARGETS

EM-IS-110A.2, EM-MM-110A.2



by 2031 Gerdau will reduce its emissions from

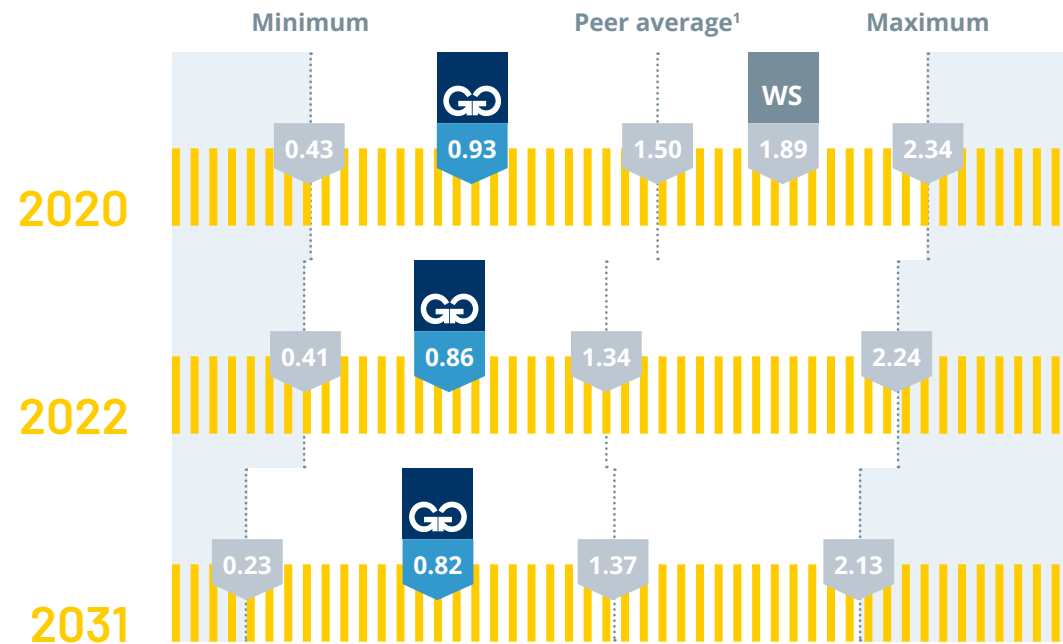
**0.93 tCO<sub>2</sub>e**  
per ton of steel to



**0.82 tCO<sub>2</sub>e**  
per ton of steel

With support from specialist consultants, we have been studying the different scenarios of productive and technological change with the lowest effective cost of carbon to be able to define targets and guide our strategy. The company has adopted the Marginal Abatement Cost Curve (MACC) and the Marginal Energy Abatement Cost Curve (MEAC), and, on February 1, 2022, published its target to reduce Scopes 1 and 2 GHG emissions to 0.82 tCO<sub>2</sub>e/t of steel produced by 2031 (target adjusted following publication due to the inclusion of Gerdau's joint ventures). This target is contained in the long-term incentives scheme applied to our senior management, with the indicator being monitored periodically by the directors.

The production model and the efforts made over the course of more than a century, have meant that Gerdau now occupies a privileged position in this area. We have one of the lowest GHG emissions intensity rates in the steel industry, a rate which stands at approximately half the global average for the sector, which is currently 1.91 tCO<sub>2</sub>/t of steel produced (*worldsteel*).



Gerdau  
 World Steel

<sup>1</sup> Peers: Gerdau, Usiminas, CSN, Arcelor Mittal, Steel Dynamics, Comercial Metals Comany, Nucor, Cleveland Cliffs and US Steel

Source: Transition Pathway Initiative (information published for the market)



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## Our reduction to 0.82 tCO<sub>2</sub>e/t of steel produced, by 2031, in Scopes 1 and 2, prioritizes:



Greater energy and operational efficiency



Expansion of our forest base and renewable energy sources



Increased use of scrap metals

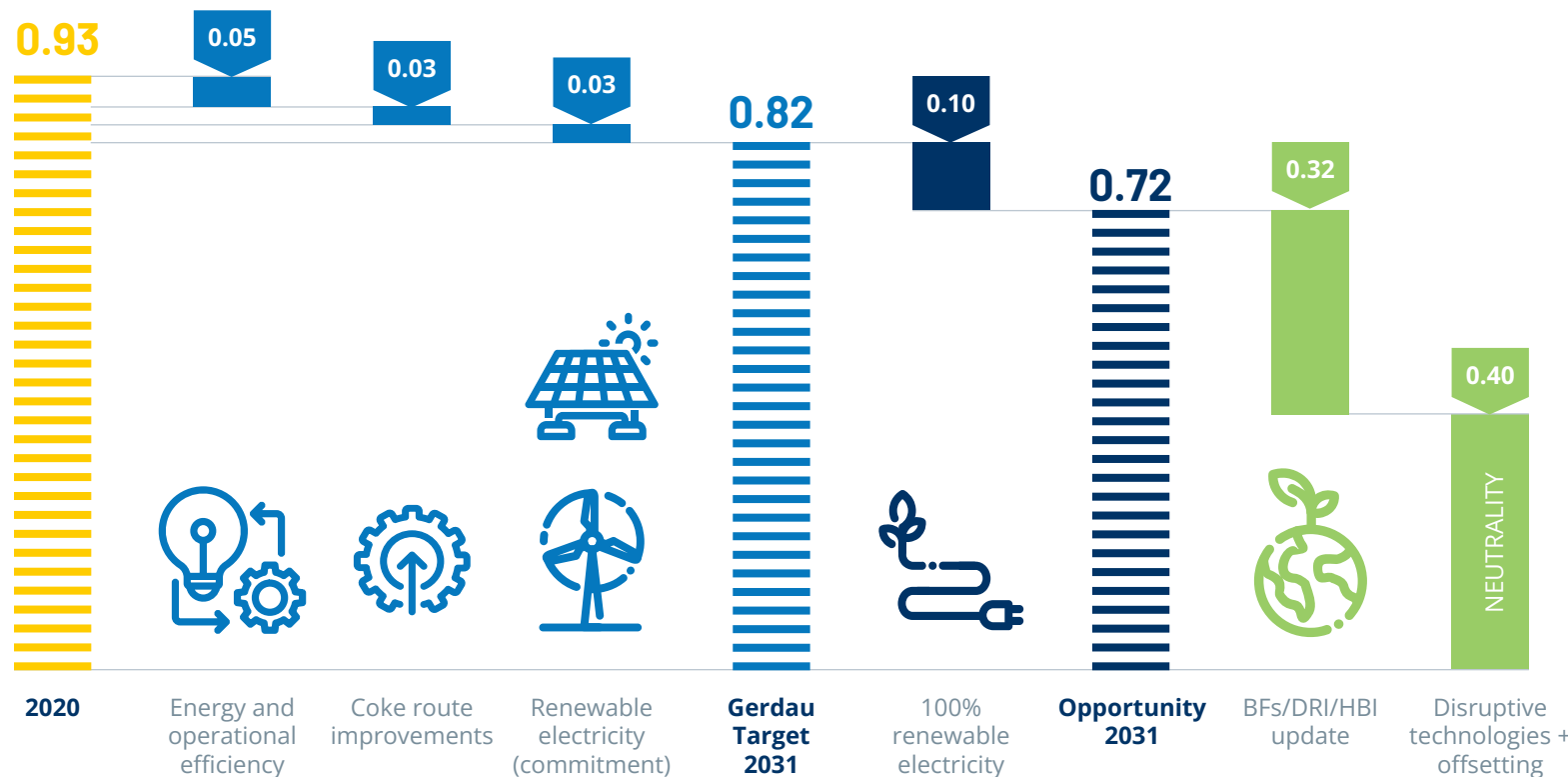


Investment in new technologies and open innovation

With this reduction, we are positioning ourselves at a new level, in which the global steel industry needs to reduce its current emissions by roughly 50% to achieve it. In 2031, once this target has been achieved, the Company should be in an even more strategic position as one of the world's most efficient steel manufacturers in terms of greenhouse gas emissions.

## We aim to be carbon neutral by 2050.

tCO<sub>2</sub>e/t OF STEEL - SCOPES 1 AND 2



To achieve this, disruptive technologies are necessary in steel manufacturing, technologies that are not yet economically or operationally viable on an industrial scale. To contribute to this scenario, we have continued studying and collaborating with different partners and entities within the sector in search of low carbon solutions. As part of this journey, public policies and measures focused on the reduction of GHG emissions in the industrial processes will be needed.

To achieve our target by 2031, we have planned investments focused on energy and operational efficiency, including initiatives concerning the improvement and verticalization of raw-materials. In the order of billions of dollars, these investments have been included in Gerdau's planning and identified in the carbon abatement marginal curves as effective costs.



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## GOVERNANCE

In 2022, the Ouro Branco (MG) and Cosigua (RJ) units made headway in the management and governance of GHG emissions through operational excellence and Industry 4.0. These tools have allowed for reductions of GHG emissions at these units, which have been able to better understand and critically analyze their precursors, through awareness-raising engagements and workshops. These days, the units have an advanced management model, systematically monitor their information, and have action plans designed to address errors and specific committees to handle the issues. Gerdau will be expanding this rationale. These units were pilots. Studies performed by worldsteel show that by means of certain tools, such as those used in our operations based upon energy and operational efficiency, we can achieve reductions of up to 20% in our GHG emissions.

The GHG emissions calculator has also been developed, a tool that can be applied to projects involving investments of over US\$ 1.5 million. It has been incorporated into the investment validation process, after the Engineering and Environment teams had received training, along with the leaders at Gerdau's business operations around the world. As part of the strategy, an internal carbon price has been established that helps with the Company's decision-making.

## REDUCTION OF GHG EMISSIONS

In 2022, we implemented a number of projects as part of the MAC Curve, including electric trucks at the Miguel Burnier mine, installation of a modern electric arc furnace in Monroe, and a new continuous caster in Pindamonhangaba. The projects resulted in a reduction in GHG emissions and demonstrated the advances made in Gerdau's decarbonization strategy.

Over the last year, the Miguel Burnier mine, in Ouro Preto (MG), began testing the use of electric trucks (traction trucks and loading shovels), aimed at evaluating the viability of switching the existing fleet over to electric vehicles in these operations. The electric vehicles provide a series of benefits, since they emit less pollution, are quieter and, above all, are more energy efficient. The initiative allows for a reduction of GHG emissions of around 500 tCO<sub>2</sub>e per year.

At our Monroe unit, in the US, we have installed an electric arc furnace that is more efficient for the manufacture of steel. By doing so, we have made significant improvements in production capacity and achieved a number of other benefits, including a reduction of more than 30% in the consumption of natural gas, significant reductions in the consumption of electricity, oxygen, electrodes and carbon in the operation of the process, thereby contributing to the reduction of the unit's greenhouse gases, which in turn resulted in a 25% reduction in the intensity of emissions (Scopes 1 and 2).



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As part of a new sustainable growth cycle at Gerdau, the Company announced the beginning of operation of the new continuous block and dowel caster at the plant in Pindamonhangaba (SP). The equipment will allow for a more automated process, resulting in the delivery of unique products and an even higher level of quality to the different markets, whilst also operating with better yield, which will mean reductions of around seven thousand tCO<sub>2</sub>e per year. The updating of the technology at the unit is aligned with future perspectives to increase the network of electric and hybrid vehicles in Brazil.

Our operations in Canada are affected by the Federal GHG Pricing Law. 2% of Gerdau's Scope 1 emissions are generated by our operations in Canada. However, due to the excellent performance of the Manitoba and Whitby units in this field, they were able to generate carbon credits, which resulted in gains of more than one million Canadian dollars in 2022. This reflects the effective management of the matter, as well as the actions implemented to reduce GHG emissions.

At our Cambridge unit, we have used sanitary landfill gas as a replacement for natural gas since 1999. This gas is transported to the plant where it is mixed with natural gas and used in the furnace for the manufacture of steel. In 2022, landfill gas supplied 7% of the plant's energy requirements. To date, the project has delivered around 1.9 million GJ of energy to the unit, plus an environmental benefit of more than 27,000 tCO<sub>2</sub>e avoided.



## NEW TECHNOLOGIES

But Gerdau has more than one solution for the decarbonization of steel. However, the innovative solutions are not yet scalable. The International Energy Agency (IEA) forecasts that the broad implementation of innovative technology will speed up between 2030 and 2050, but its implementation will depend largely on the availability of funding and local policies.

One of Gerdau's strategic decarbonization pillars involves investment in new technologies and open innovation. We interact with startups and pay close attention to solutions that use new technologies for the production of increasingly more sustainable steel.

We have maintained our active participation in collaborations with sectoral entities, universities and research centers in search of disruptive technologies. Through Gerdau Next, the company's new business arm, we are studying possibilities that go beyond steel as we look for solutions with high added value.

Furthermore, we have a working group which involves specialists from different areas, and which meets periodically to direct any possible technologies aligned with the Company's decarbonization strategy. Opportunities such as carbon capture and carbon capture and storage (CCU and CCUS), and hydrogen are some of the focal points of the analyses performed by this group.

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## RISKS AND THEIR FINANCIAL IMPLICATIONS GRI 201-2

One of the possible effects of the increase in demands relating to the reduction of greenhouse gas emissions is a rise in costs, mainly due to the demand for a reduction in the consumption of fossil fuels and the implementation of new technologies in the production chain.

Climate risk involves a formal analysis of the consequences, likelihoods and responses to the impacts of climate change. The Task Force on Climate-Related Financial Disclosures (TCFD) was created in 2015 by the Financial Stability Board (FSB) to develop consistent information on financial risks related to the climate that can be used by companies, banks and investors when communicating with their stakeholders. According to the TCFD, the risks can be classified as transition and physical. Gerdau has evaluated the risks relating to climate using these concepts, taking into account the likelihood of their occurrence and their impact, as well as the size and scale.

## The main risk factors identified in relation to climate change are:

- Lower availability of electricity due to a period of water stress
- Wildfires or severe climate conditions
- Water shortages due to a period of water stress

### OPPORTUNITIES

- Use of renewable energy sources
- Gerdau has one of the lowest GHG emissions intensities in the sector
- Gerdau Next: new businesses

### Climate change - Physical Risks

- Water stress - water shortage or unavailability
- Failure to adapt to extreme climate events or gradual changes to the climate

### Climate change - Risk of transition to a low-carbon economy

- Failure to adapt to technological changes driven by climate change and product applications
- Failure to comply with current or emerging compulsory regulations on greenhouse gas emissions
- Failure to adapt to changes in the market
- Loss of reputation



**DIRECT EMISSIONS (SCOPE 1) OF GREENHOUSE GASES (tCO<sub>2</sub> EQUIVALENT)<sup>1, 2, 3, 4, 5, 6, 7, 8, 9</sup>**  
**GRI 305-1 | EM-IS-110A.1**

	2020	2021	2022
Total Scope 1 Gerdau	9,621,850.10	10,003,673.71	9,636,231.73
Total Scope 1 Gerdau's JVs	77,569.60	169,215.12	240,705.46
Biogenic emissions of CO <sub>2</sub> Gerdau <sup>10</sup>	1,738,242.72	3,364,928.79	2,149,044.16

<sup>1</sup> Gases considered in the calculation: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCS and PFCS.

<sup>2</sup> The methodologies and emission factors used are based upon worldsteel, the GHG Protocol, the Intergovernmental Panel on Climate Change (IPCC), and internal measurements.

<sup>3</sup> The global warming potential (GWP) rates used were drawn from the IPCC's Fifth Assessment Report (AR5).

<sup>4</sup> Sources of emissions considered in Scope 1: agricultural, stationary combustion; mobile combustion; fugitive emissions; changes in land-use; industrial processes; solid waste; and liquid effluents

<sup>5</sup> Units considered: Argentina: Ludueña and Perez. Brazil: Ouro Branco, Cosigua, Pindamonhangaba, Araçariгуama, Charqueadas, Divinópolis, Riograndense, Barão de Cocais, Açonorte, Summit, Cearense, Mogi das Cruzes, Sete Lagoas, São José dos Campos, Cotia, Corte e Dobra Brasil, Cumbica, Corporativo, Várzea do Lopes mine, Miguel Burnier mine, and Florestal. Canada: Whitby, Manitoba and Cambridge. Peru: Si-derperu. Uruguay: Laisa. United States: Midlothian, Cartersville, Monroe, Jackson, Fort Smith, Petersburg, Charlotte, Wilton and Saint Paul.

<sup>6</sup> The Scope 1 emissions of Gerdau Next are not included in these calculations, but they are equivalent to 3,878 tCO<sub>2</sub>eq, the source being the proprietary means of transportation of G2L.

<sup>7</sup> Base Year: 2020, due to the reliable collection of data.

<sup>8</sup> The percentage covered by emissions limitation regulations equals 2% of Gerdau's inventory.

<sup>9</sup> The emissions from the joint ventures (Mexico, Colombia and Dominican Republic) were considered in proportion to their shareholding interests on December 31 of the reported year.

<sup>10</sup> Biogenic emissions are those emissions related to the natural cycle of carbon and are reported separately.

<sup>11</sup> Amount adjusted following publication due to the inclusion of the Florestal division's emissions.

**INDIRECT EMISSIONS (SCOPE 2) OF GREENHOUSE GASES ORIGINATING FROM THE ACQUISITION OF ENERGY (tCO<sub>2</sub> EQUIVALENT)<sup>1, 2, 3, 4, 5, 6</sup>**  
**GRI 305-2**

	2020	2021	2022
Total Scope 2 Gerdau	2,050,660.07 <sup>6</sup>	1,975,561.14	1,604,700.79
Total Scope 2 of Gerdau's JVs	185,407.90	207,285.78	285,913.11

<sup>1</sup> Gases considered in the calculation: CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O.

<sup>2</sup> Sources of emissions considered in Scope 2: acquired electricity (market-based).

<sup>3</sup> The methodologies and factors used are based upon worldsteel, the GHG Protocol and the Intergovernmental Panel on Climate Change (IPCC).

<sup>4</sup> The global warming potential (GWP) rates used were drawn from the IPCC's Fifth Assessment Report (AR5).

<sup>5</sup> Base Year: 2020, due to the reliable collection of data.

<sup>6</sup> Amount adjusted following publication due to the correction of the Ludueña energy emission factor.



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## INDIRECT EMISSIONS (SCOPE 3) OF GREENHOUSE GASES (TCO<sub>2</sub>EQUIVALENT)<sup>1, 2, 3</sup> GERDAU GRI 305-3

	2021	2022
<b>Upstream</b>		
Commodities and services acquired	619,505.24	584,422.79
Upstream transportation and distribution	65,534.81	206,305.93
Waste generated in operations	398,897.96	384,039.25
Business travel	865.85	3,575.48
Employee transportation	4,765.85	8,789.89
<b>Subtotal</b>	<b>1,089,569.71</b>	<b>1,187,133.34</b>
<b>Downstream</b>		
Downstream transportation and distribution	N.D.	294,266.85
<b>Total</b>	<b>1,089,569.71</b>	<b>1,481,400.19</b>
Biogenic emissions of CO <sub>2</sub>	N.D.	53,945.23

Intensity of greenhouse gas emissions (tCO <sub>2</sub> e/t of steel produced) GRI 305-4	2020	2021 <sup>1</sup>	2022
Intensity (Scope 1 + Scope 2) <sup>1</sup>	0.93	0.89	0.86

<sup>1</sup> Amount adjusted following publication due to the inclusion of Gerdau's joint ventures.

<sup>1</sup> Gases considered in the calculation: CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O.

<sup>2</sup> The methodologies and factors used are based upon worldsteel, the GHG Protocol and the Intergovernmental Panel on Climate Change (IPCC).

<sup>3</sup> The global warming potential (GWP) rates used were drawn from the IPCC's Fifth Assessment Report (AR5).



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# BIODIVERSITY

**W**ith the revision of the materiality matrix in 2022, biodiversity came to be considered a strategic topic for Gerdau. However, we always take into consideration the existing best practices, focusing on the preservation and conservation of natural resources and the biomes in which we have operations. Brazil, where the majority of our operations are located, is home to the world's greatest biological diversity, with between 15% and 20% of the planet's biodiversity, according to the Brazil Climate Center (CBC).

Through Gerdau Florestal, in Minas Gerais, we are present in the Cerrado and Atlantic Rainforest regions, with more than 250,000 hectares of forest, of which 91,000 are conservation areas (read more on [page 80](#)). Management of the areas is based upon internal policies, processes and legal regulations, with practices that range from mosaic eucalyptus plantations to biological control and Solutions Based on Nature (SbNs).

The same care is taken in the mining business. We perform impact studies as part of our environmental licensing and, during this process, land use and occupation assessments are developed which define all the characteristics of the biomes that are affected or potentially impacted by the implementation and operation of the projects, as well as actions necessary for environmental compensation. Prior to implementation of the compensation measures, we consider alternative locations or projects which could minimize the potential impacts.

As part of our mining operations we have a Damaged Areas Recovery Program (Prad). This program is linked to other initiatives such as that covering the control of erosive processes and the water monitoring program, aimed at establishing a set of measures that will provide the damaged areas with the means of establishing a new balance, with conditions suitable for future use.

Amongst its actions designed to benefit biodiversity, the company has voluntarily designated 1,247 hectares of land for the creation of a conservation unit under the category of Private Natural Heritage Reserve - the Luis Carlos Jurovsky Tamassia RPPN, in the municipality of Ouro Branco (MG). The RPPN brings together economic development with the conservation of the region's natural resources, opening up space for recreational and educational tourist activities, integrated into the Gerdau Germinar Biocenter's environmental education project.



**Impact studies forming part of the environmental licensing assess land use and occupation and environmental compensation actions.**

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# GERMINAR

Created in 1990, the Gerdau Germinar Program is dedicated to the practice of environmental education, with the aim of building a more sustainable and participative society. The foundations of the program are: socio-environmental education, scientific research as a source of current and reliable information, conservation of biodiversity, and prioritization of environmental content in accordance with the local circumstances.

Through the implementation of a wide range of activities and adoption of methodologies based upon active learning, Germinar is aimed at different groups of society, benefiting children and young people of school age, educators, the communities neighboring the company's units, as well as our own employees and those of our partner companies.

The principal results of the program are the encouragement of leadership on socio-environmental issues, the broadening of environmental perception and awareness, the strengthening of ties and relationships between the company and society, and coordination between communities, the company and universities with a focus on promoting studies and educational actions that can lead to decisions being taken in line with sustainability.

The Gerdau Germinar Program is considered to be a benchmark in practical environmental education in the region, the state of Minas Gerais and throughout Brazil, having been awarded the Semad Seal ('State Department for the Environment and Sustainable Development'), in 2021.

## GERMINAR INITIATIVES IN 2022

### PEA - Environmental Education Program (a strong program in compliance with Normative Decision 238/2020).

Guided by a participative socio-environmental investigation, this program consists of a training plan for our employees, consisting of modules focused on socio-environmental themes, whilst involving participation and learning indicators. In 2022, 12,167 employees at the Usina Ouro Branco and Mineração units participated in the classes. As well as the employees, the PEA also involves the communities in the regions neighboring the units by providing environmental education workshops. A total of 184 people were involved in this way in 2022. Each of Gerdau's units in Minas Gerais has developed its own PEA depending upon the local circumstances.

### Environmental education for the school community and NGOs

Aimed at involving the schools and NGOs in the region, the program hosts a Planning Workshop, at which the results and activities planned for the year are presented. The following activities then begin:

- **Environmental Laboratory** An annual program of courses and workshops on different socio-environmental issues are offered to educators and community leaders, with the aim of contributing to their socio-environmental awareness and, consequently, encouraging individual and collective actions aligned with sustainability in the region.

- **Student visits to the Biocenter** Guided by socio-environmental issues that fit in with the school curriculum, the interactive spaces at the environmental education center (Biocenter), including the environmental discovery trails, the Brazilian Biomes Space, '*Ovolândia*' (a collection of eggs collected from nature in Brazil and around the world), the Organic Vegetable Garden and the Sustainable Home, are used for practical environmental education.
- **Special week** Over the course of a week, multi-sensory and informative environmental education activities are provided for students who are members of 'Apaes' (Association of Parents and Friends of Exceptional People) and special education schools in the region.
- **Gerdau Germinar Award** Undertaken in partnership with the Gerdau Institute, this awards program was created to encourage schools and NGOs to develop environmental projects that can make a difference in the way people see and relate to nature. The 7<sup>th</sup> edition of the awards was held in 2022, with 58 competing projects, and R\$ 105,000 being invested for development of the seven successful selected projects. In 2022, a total of 6,093 people benefited from these projects. The awards were also implemented in the towns of Barão de Cocais and Divinópolis, with seven more projects being included for development with technical support and funds from Gerdau.



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## Projects for the preservation and conservation of Biodiversity Participative Monitoring of Waterways

Developed in partnership with UFMG (Federal University of Minas Gerais), this is an initiative focused on communicating and spreading practices with the aim of training the community in the physical, chemical and biological monitoring of the waters in the region. After training provided by a team from UFMG, the educators and students use an 'ecokit' to evaluate the quality of the water in the streams, rivers and lakes in the region. After the studies have been made, time is spent thinking about the results, observing the causes of the impacts and looking for ways of possibly improving the quality of the water.

### Research and Innovation Unit located in the Campos Rupestres Ferruginosos region

This is a space dedicated to the conservation of samples of flora that have been rescued from mining areas, the growing and distribution of species threatened with extinction, the development of protocols for the propagation of the species, and development of scientific articles in partnership with UFV (Federal University of Viçosa) and UFLA (Federal University of Lavras).

### Friends of the RPPN

This project is aimed at addressing the concerns of the local community and takes as its base the management plan which has established a shared relationship for protection of the Luis Carlos Jurovsky Tamassia Private Natural Heritage Reserve Training sessions are provided focusing on biodiversity and the natural resources in the area, with expeditions and educational activities being organized, and improvements being made to the local infrastructure.

**In 2022, 212 people were involved in the Participative Monitoring of Waterways project, and 144 people were involved in the Friends of the RPPN project.**

### MOTUS

The Motus Wildlife Tracking System (Motus) is an international collaborative research network that uses coordinated automated radio telemetry to enable research and education on the ecology and conservation of migratory animals. It is a Birds Canada program developed in partnership with collaborator researchers and organizations. Our unit in Whitby, Ontario, in Canada, the country which hosted the 15<sup>th</sup> United Nations Biodiversity Conference (COP15) in 2022, is a partner in the project. Gerdau is located in an area that is ideal for detecting migratory birds and the monitoring station is installed on our premises. Birds and animals that are fitted with radio tags can be detected, and many of these species, such as the Loggerhead Shrike and the Common Nighthawk, are considered to be at risk of extinction in Ontario.

### REVITALIZATION OF SPRINGS

On World Water Day, in 2022, Gerdau and the Municipal Government of São José dos Campos (SP) signed a partnership agreement for the adoption of a natural water spring in the Chácaras Unidas district, thus becoming a member of the city council's Revitalization of Springs Program. Over the course of the year, as part of the unfolding of the partnership, the area around the spring was cleaned and tree saplings were planted. We brought together students from a school with the aim of focusing on environmental education and hosted a sustainable toys workshop with support from internal volunteers. At the end of the year, we received an award from the São José dos Campos Municipal Government, being named a Partner Institution in the Revitalization of Springs Program.



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# ATMOSPHERIC EMISSIONS

All of Gerdau's units follow the Sustainability Policy and the Corporate Environment Directive. As such, we are able to ensure compliance with the current legal and regulatory standards on atmospheric emissions and air quality. Management of this topic is essential to be able to mitigate the impact on the communities where we operate.

We ensure the correct operation, maintenance and calibration of the atmospheric emissions control equipment, thereby efficiently eliminating or reducing visible emissions of particulate matter. We manage the emissions from fixed sources (stacks), with monitoring of: particulate matter, NOx and SOx, in line with the specificities of the process and the legislation of each region in which we are present. Our targets are connected to the legal conditions of the operations in which we are installed. We have emissions control equipment, including electrostatic precipitators, an exhaust system, filter bags and gas washers. To reduce the diffuse or fugitive sources we moisturize, apply polymers, or use mechanized sweeping in areas where there is movement or piles of materials.

The Ouro Branco (MG) plant has a system that automatically monitors the quality of the air around the facility. The stations operate 24/7 and the monitored data are sent to the interested parties. In 2022, acting proactively, the plant undertook a dust removal study and monitored

its fugitive and diffuse emissions, in accordance with the recommendation of the Environmental Protection Agency (EPA), in order to be able to include actual data, instead of data drawn from academic works, in its inventory, a move which was a great step forward in relation to the theme. Approximately 100 points were monitored in this study.

In 2022, we registered 29 reports from the community relating to atmospheric emissions incidents at our operational units in Brazil. The incidents were investigated and monitored, with action plans being drafted to be able to correctly mitigate them. The senior management of our units monitor this indicator, guaranteeing that the matter is managed and handled in the best possible manner.

Over the years, we have invested in processes, systems and projects designed to improve the environmental conditions of the plants and their surrounding regions, as well as in equipment to remove dust from the atmospheric emissions, in line with our strategy, and in compliance with the current legislation and the demands of our stakeholders.



## SIGNIFICANT AIR EMISSIONS (TONS) <sup>1, 2, 3, 4</sup> GRI 305-7 EM-IS-120A.1

	2020	2021	2022
Nitrogen oxides (NOx)	8,062	11,508	5,752
Sulfur oxides (SOx)	4,991	6,993	10,714
Particulate matter (PM)	4,027	3,347	3,342

<sup>1</sup> Fixed sources are mapped.

<sup>2</sup> The amounts are monitored by methods established in compliance with local legislation.

<sup>3</sup> In 2022, there was an increase in the emissions of SOx against 2021, due to the inclusion of new sources in the monitoring performed at the Ouro Branco Plant (MG), and a reduction in the emissions of NOx at some units, especially at the Ouro Branco plant, due to the improvement of processes.

<sup>4</sup> Gerdau does not produce atmospheric emissions related to Volatile Organic Compounds (VOC).

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# AWARDS AND RECOGNITION



In 2022, the innovations, differentials and results achieved by Gerdau, in synergy with the management of its ESG agenda, were once again recognized in the form of Brazilian and international awards.

### **THINK WORK FLASH INNOVATIONS AWARD**

The HR Innovator seal, in the Leadership category, recognized the Leadership Developer initiative, which received the highest score in the Innovative Index from the award's judging commission. The Leadership Developer is an action developed by Gerdau that involves research amongst our employees to identify those leaders who stand out in the process of personnel development.

### **JATOBÁ AWARD 2022**

Elected company of the year in the area of Communication by the awards hosted by the Grupo Empresarial de Comunicação (GECOM), one of the country's most prestigious recognitions in the corporate communication sector. The company also won in the Special Project category for the press conference held for the launch of its partnership with Rock in Rio Brasil 2022, with presentation of the construction of the scenography developed for the World Stage, and in the Diversity and Inclusion category, for its management of social media. Gerdau was also a finalist in the Institutional/Public Utility Campaign category for its '120 years of the Company' campaign; Communication with the Community category, for the 'Brazilian by Birth, *Mineira* at Heart' case; and Cases of the Year category for the 120 Years and press conference projects.

### **BRAZILIAN LEADERS AWARD**

We were highlighted in the 12<sup>th</sup> edition of the Brazil Leaders Award, organized by 'LIDE' - Group of Business Leaders. Gustavo Werneck, the Company's CEO, won in the Steel Industry category, announced during the awards ceremony itself.

### **REVENDA CONSTRUÇÃO TOP OF MIND**

Highlighted in the 26<sup>th</sup> edition of the awards hosted by the Revenda Group. Gerdau won Best Product of the Year in the Rods and Mesh, Lattice and Annealed Wire categories. More than 30,000 store owners took part in the voting, which identified those products which enjoyed the highest rates of turnover and profitability at the points of sale.

### **ABERJE AWARD 2022**

Elected Company of the Year in Communication by the awards hosted by the Brazilian Association for Business Communications (Aberje). At the same awards, Gustavo Werneck (CEO), was presented with the CEO Communicator of the Year Award, and Pedro Torres, the Company's global Communicator and Brand leader, was elected Communicator of the Year. Gerdau also won in the national Press and Influencers category, for the press conference held for the launch of its partnership with Rock in Rio Brasil 2022 for construction of the scenography developed for the World Stage, made with Gerdau steel.

### **COMPANIES WHICH BEST COMMUNICATE WITH JOURNALISTS STUDY**

For the 12<sup>th</sup> time, Gerdau was recognized as one of the companies that best communicates with journalists in the Steel and Metallurgy category, part of the awards presented by the Business Communication Platform and the Communication Studies Center (CECOM). Gerdau's CEO, Gustavo Werneck, was one of the ten CEOs who best communicate with journalists in Brazil.

### **ANAMACO AWARD**

Winner of three Master trophies in the Steel Mesh or Screens for Concrete, Nails and Steel Rebars at the 31<sup>st</sup> edition of the awards hosted by the National Association of Construction Materials Traders.

### **STEELIE AWARDS 2022**

Winner in the Excellence in Communication category at the 13<sup>th</sup> edition of the awards hosted by the World Steel Association (worldsteel), the biggest institution in the global steel sector, which recognizes the contributions made to the industry by its member companies over the year.



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## FORBES BRASIL AND BLOOMBERG LÍNEA

Gustavo Werneck, CEO of Gerdau, was elected one of the ten CEOs who most stood out in Brazil in 2022, according to Forbes Brasil. The annual list brings together the executives who are most admired and who have developed the best strategies to face the challenges of the period. The CEO was also amongst the 500 most influential people in Latin America, according to Bloomberg Línea, a digital business and finance content platform hosted by the Bloomberg technology and data multinational.



## MERCO ESG RESPONSIBILITY RANKING

Gerdau was the best positioned Brazilian B2B company (37<sup>th</sup> overall out of the 100 most admired companies) in the Merco ESG Responsibility Ranking. The Company was also the only one from the mining, steel and metallurgy category to be included amongst the 50 best positioned companies in each one of the ESG categories (environment, social and governance).



## HRC EQUITY BR

Recognized as one of the most advanced companies in Brazil in terms of LGBTI+ diversity and inclusion in the first edition of the study undertaken by the Global Workplace Equality Program, developed by the Human Rights Campaign Foundation.



## CHAMPIONS OF INNOVATION 2022

Recognized as the most innovative company in the Southern region in the 18<sup>th</sup> edition of the ranking, hosted by the AMANHÃ Campeãs de Inovação 2022 Group, with technical support from the XL Center for Innovation, Excellence and Leadership, located in Cambridge (US).



## MARCAS DE QUEM DECIDE

Elected one of the most recalled brands in the Rio Grande do Sul Brand of the Year and Rio Grande do Sul Environmental Brand in the 24<sup>th</sup> edition of the ranking hosted by Jornal do Comércio (RS), in partnership with Qualidata.

## BIGGEST AND BEST

Recognized as a leader in the Steel, Mining and Metallurgy category in the 2022 edition of the ranking published by the Exame magazine.

## SPORTS PROMOTER COMMENDATION

The House of Representatives' Sports Commission recognized Gerdau as one of the five company that most invested and supported projects in the area in Brazil through the Federal Sports Incentive Law.

## EXECUTIVO DE VALOR 2022

Gustavo Werneck, CEO of Gerdau, was elected *Executivo de Valor* for the third time running in 2022, in the Mining, Metallurgy and Steel category, at the 22<sup>nd</sup> edition of the awards hosted by the Valor Econômico magazine.

## CORPORATE REPUTATION COMPANY MONITOR (MERCOS)

Recognized as the industrial company with the best reputation in Brazil in the Mining, Steel and Metallurgy category, according to the results of the 8<sup>th</sup> edition of the survey.

## GREAT PLACE TO WORK

A certificate, granted to Gerdau's administrative head office in São Paulo, that supports organizations to obtain their best results by means of a culture of trust, excellent performance and innovation.



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# IRON & STEEL PRODUCERS

## PRODUCTION (T) EM-IS-000.A, EM-IS-000.B, EM-IS-000.C

	2021	2022
Crude steel production	13,300,000.00	5,634,151.00
Percentage of processes performed using a Basic Oxygen Furnace	29%	31%
Percentage of processes performed using an Electric Arc Furnace	71%	69%
Total production of iron ore	3,800,000.00	6,424.00
Total production of coking coal	N.D.	3,800.00

# STAKEHOLDER ENGAGEMENT

## STAKEHOLDERS INVOLVED IN ENGAGEMENT PROJECTS GER-2 (IN-HOUSE INDICATOR)

	2020	2021	2022
People benefiting from engagement projects	665,866	4,221,811	2,739,974
Number of businesses developed	1,757	1,318	3,485
Number of projects	350	479	300
Number of volunteers	1,538	1,969	5,254



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<b>Declaration of use</b>	Gerdau used the GRI Standards as its base for reporting the period between January 1 and December 31, 2022.
<b>GRI 1 used</b>	GRI 1: 2021 Foundations
<b>Applicable GRI Sector Standards</b>	GRI Mining and Metals 2013

GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>General Disclosures</b>							
GRI 2: General disclosures 2021	2-1 Details of the organization	15					
	2-2 Entities included in the organization's sustainability reporting	15					
	2-3 Reported period, frequency and point of contact	6					
	2-4 Restatements of information	There were no restatements of information in relation to previous years.					
	2-5 External assurance	No external assurance took place.					
	2-6 Activities, value chain and other commercial relationships	15				-	
	2-7 Employees	46, 51-52				-	
	2-8 Workers who are not employees	52				-	



GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	2-9 Governance structure and composition	20				-	
	2-10 Nomination and selection of the highest governance body	24					
	2-11 Chair of highest governance body	The Chairperson of the highest governance body is not a senior executive within the organization.					
	2-12 Role of the highest governance body in overseeing the management of impacts	21				-	
	2-13 Delegation of responsibility for managing impacts	33				-	
	2-14 Role of the highest governance body in sustainability reporting	6				-	
	2-15 Conflicts of interests	30				-	
	2-16 Communication of critical concerns	33	b	Information not available	Gerdaud does not possess a calculated figure concerning the critical concerns communicated to the highest governing body during the reported period, but it does monitor all the types of risk listed, in accordance with the information cited in the 20-F public document, filed with the SEC.	-	
	2-17 Collective knowledge of highest governance body	22				-	

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	2-18 Evaluation of the performance of highest governance body	22				-	
	2-19 Remuneration policies	25				-	
	2-20 Process to determine remuneration	25				-	
	2-21 Annual total compensation ratio		All	Confidential information.	This concerns strategic information and the company invokes the regulation allowing it to not provide details of these data. We can, however, provide the following information: in the financial year ending 31-Dec-2022, the costs involved in the remuneration of the administration, salaries, variable remuneration and benefits, totaled R\$ 42,164 million, whilst in relation to the financial year ending 31-Dec-2021, the total was R\$ 61,747 million. On 31-Dec-2022, the contributions made to the defined contributions plan, in relation to its administrators, totaled R\$ 2,040 million, whilst on 31-Dec-2021, the total was R\$ 1,932 million. The cost involving long-term incentives scheme recognized in the results, attributable to the board members and directors, totaled R\$ 19,548 million on 31-Dec-2022, whilst on 31-Dec-2021, the total was R\$ 19,637 million. The total amount of social contributions concerning the administration was R\$ 20,455 million on 31-Dec-2022, whilst on 31-Dec-2021, it was R\$ 23,266 million.	-	
	2-22 Statement on sustainable development strategy	4-5				-	

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
	2-23 Policy commitments	19				-	
	2-24 Embedding policy commitments	19				-	
	2-25 Processes to remediate negative impacts	32				-	
	2-26 Mechanisms for seeking advice and raising concerns	33				-	
	2-27 Compliance with laws and regulations	31				-	
	2-28 Membership associations	75				-	
	2-29 Approach to stakeholder engagement	69				-	
	2-30 Collective bargaining agreements	In 2021, 100% of employees were covered by collective bargaining agreements. In 2022, 97.95% were covered, with around 432 employees not being covered, but for whom internal regulations/ policies are applicable.				-	
<b>Material topics</b>							
GRI 3: Material Topics 2021	3-1 Process to determine material topics	7				-	
	3-2 List of material topics	8				-	



GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>Waste management and the circular economy</b>							
GRI 3: Issues Materials 2021	3-3 Governance of material topics	100					
GRI 301: Materials 2016	301-2 Recycled input materials used	98					8, 12
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	101					3, 6, 11, 12
GRI 306: Waste 2020	306-2 Management of significant waste-related impacts	101					3, 6, 11, 12
GRI 306: Waste 2020	306-3 Waste generated	102					3, 6, 12, 15
GRI 306: Waste 2020	306-4 Waste diverted from final disposal	103					3, 11, 12
GRI 306: Waste 2020	306-5 Waste destined for final disposal	104					3, 6, 11, 12, 15
GRI G4 Sector Supplement	MM3 Total amounts of waste rock, tailings, and sludges and their associated risks	104					

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>Energy management</b>							
GRI 3: Issues Materials 2021	3-3 Governance of material topics	90					
GRI 302: Energy 2016	302-1 Energy consumption within the organization	93					7, 8, 12, 13
GRI 302: Energy 2016	302-2 Energy consumption outside of the organization		All	Information not available	Guideline not yet implemented in the Gerdau report.		7, 8, 12, 13
GRI 302: Energy 2016	302-3 Energy intensity	93	a.ii	Information not available	Guideline not implemented in the Gerdau report.		7, 8, 12, 13
GRI 302: Energy 2016	302-4 Reduction of energy consumption		All	Information not available	Guideline not directly monitored for this purpose.		7, 8, 12, 13
<b>Management of water and effluents</b>							
GRI 3: Issues Materials 2021	3-3 Governance of material topics	94					
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	94					6, 12
GRI 303: Water and Effluents 2018	303-2 Management of water discharge related impacts	94	a-c.vi	Information not available	Gerdau does not make a distinction in relation to the water purchased from third parties.		6
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	97					6
GRI 303: Water and Effluents 2018	303-4 Water discharge	94	d.iii	Information not available	The collection of this information is not standardized across the units.		6
GRI 303: Water and Effluents 2018	303-5 Water consumption	97					6

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>Climate change management</b>							
GRI 3: Issues Materials 2021	3-3 Governance of material topics	106					
GRI 305: Emissions 2016	305-1 Direct (Scope 1) emissions of greenhouse gases (GHG)	105, 111					3, 12, 13, 14, 15
GRI 305: Emissions 2016	305-2 Indirect emissions (Scope 2) of greenhouse gases (GHG) arising from the acquisition of energy	111					3, 12, 13, 14, 15
GRI 305: Emissions 2016	305-3 Other indirect (Scope 3) GHG emissions	112		Information not available	Management of Scope 3 emissions has been improving each year. In this case, the increase in Scope 3 emissions is due to the more rigid monitoring of the emissions sources in this scope.		3, 12, 13, 14, 15
GRI 305: Emissions 2016	305-4 Intensity of emissions of greenhouse gases (GHG)	105, 112					13, 14, 15
GRI 305: Emissions 2016	305-5 Reduction of emissions of greenhouse gases (GHG)		All	Information not available	Guideline not directly monitored for this purpose.		13, 14, 15
GRI 305: Emissions 2016	305-7 Nitrous oxides (NOx), sulfur oxides (SOx), and other significant air emissions	116					3, 12, 14, 15

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>Diversity and Inclusion</b>							
GRI 3: Issues Materials 2021	3-3 Governance of material topics	47					
GRI 405: Diversity and Equal Opportunities 2016	405-1 Diversity of governance bodies and employees	47, 53					5, 8
GRI 405: Diversity and Equal Opportunities 2016	405-2 Ratio of basic salary and remuneration of women to men		All	Information not available	Gerdau has not surveyed the information requested.		5, 8, 10
<b>Health and Safety at Work</b>							
GRI 3: Issues Materials 2021	3-3 Governance of material topics	47					
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	39					8
GRI 403: Health and safety at Health and Safety 2018	403-2 Hazard identification, risk assessment and incident investigation	41					8
GRI 403: Occupational Health and Safety 2018	403-3 Occupational health services	42					8
GRI 403: Occupational Health and Safety 2018	403-4 Worker participation, consultation, and communication on occupational health and safety	42					8, 16

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
GRI 403: Occupational Health and Safety 2018	403-5 Training for workers in occupational health and safety	43					8
GRI 403: Occupational Health and Safety 2018	403-6 Promotion of worker health	43					3
GRI 403: Occupational Health and Safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	45					8
GRI 403: Occupational Health and Safety 2018	403-8 Workers covered by an occupational health and safety management system	45					8
GRI 403: Occupational Health and Safety 2018	403-9 Work-related injuries	43-44					3, 8, 16
GRI 403: Occupational Health and Safety 2018	403-10 Work-related ill health				In 2022, the organization did not register any fatalities or cases of recordable work-related illness amongst employees and workers. The principal target related to this topic is the elimination of serious accidents and fatalities. As such, two indicators with targets established for 2022 are monitored: rate of seriousness = 100, and rate of frequency = 0.9. In 2022, we recorded our best result ever in relation to the rate of frequency of accidents with time off work.		3, 8, 16

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>Innovation in processes and products</b>							
GRI 3: Material Topics 2021	3-3 Governance of material topics	55					
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported		All	Information unavailable	No data were compiled for this cycle.		5, 9, 11
GRI 301: Materials 2016	301-3 Reclaimed products and their packaging materials		All	N.A.	Packaging is not relevant to this sector.		8, 12
In-house indicator	GER-1 Percentage of investments in innovation in relation to the net revenue	55					
In-house indicator	GER-2 Number of stakeholders involved in engagement projects	121					
<b>Community relations</b>							
GRI 3: Material Topics 2021	3-3 Governance of material topics	69					
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers selected following consideration of environmental criteria		All	Information unavailable	Guideline not globally monitored for this purpose.		
GRI 308: Supplier Environmental Assessment 2017	308-2 Negative environmental impacts in the supply chain and actions taken		All	Information unavailable	Guideline not globally monitored for this purpose.		

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments and development programs	69					
GRI 413: Local Communities 2016	413-2 Operations with significant (actual and potential) negative impacts on local communities	<p>Gerdau has operations in Minas Gerais that cause both real and potential impacts on the local communities, such as the installation of mining dams for the disposal of tailings.</p> <p>The Company's mining exploration activities are subject to the conditions and limitations imposed by the Federal Constitution of Brazil, by the Brazilian Mining Code and by the laws and regulations related to the matter, including requirements concerning, amongst other aspects, the manner in which the mineral deposits are used, occupational health and safety, environmental protection and restoration, prevention of pollution, and the health and safety of the local communities where the mines are located.</p>				1, 2	
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	74					5, 8, 16
GRI 414: Supplier Social Assessment 2016	414-2 Negative social impacts in the supply chain and actions taken	74	d and e.	Information not available	Gerdau does not yet calculate the information requested.		5, 8, 16

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GRI Standards	Contents	Location	Omission			Reference nr. of the GRI sector standard	SDGs
			Requirement(s) omitted	Reason	Explanation		
<b>Non-material topic, but strategically disclosed: Ethics and corporate governance</b>							
GRI 205: Anti-corruption 2016	205-1 Operations assessed in terms of the risks relating to corruption	31-32					16
GRI 205: Anti-corruption 2016	205-2 Communication and training on anti-corruption policies and procedures	30					16
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	31					16
GRI 206: Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices			Gerdaу has not registered any cases of anti-competitive behavior or violations of anti-trust or monopoly laws.			16
GRI 207: Tax 2019	207-1 Approach to tax	23					1, 10, 17
GRI 207: Tax 2019	207-2 Tax governance, control and risk management	23					1, 10, 17
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken		All	Confidential information	This information is confidential given its sensitivity and secrecy, and it is addressed internally by the responsible departments (Personnel and Ethics Hotline).		5, 8
GRI 408: Child Labor 2016	408-1 Operations and suppliers considered to have significant risk for incidents of child labor				In Gerdaу's operations there are no significant risks of the occurrence of child labor, or forced or compulsory labor, nor is there any similar level of risk amongst its suppliers, since the risks are all mapped.		5, 8, 16

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GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor	No operations or suppliers are exposed to this risk.	5, 8
GRI 415: Public Policy 2016	415-1 Political contributions	Gerdaud does not make any political financial contributions or any other contributions made either directly or indirectly by the organization, discriminated by country or recipient/beneficiary.	16



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# SASB CONTENT INDEX



SASB Topic	CODE	REPORTING METRIC	PAGE AND/OR CONTENT
<b>METALS &amp; MINING</b>			
Activity	EM-MM-000.B	Total number of employees – percentage of contractors	46, 51-52
Greenhouse gas emissions	EM-MM-110a.2	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	106
Water management	EM-MM-140a.2	Number of incidents of non-compliance with water quality permits, standards, and regulations	87
Management of waste and hazardous materials	EM-MM-150a.4	Total weight of non-mineral waste generated	102
	EM-MM-150a.5	Total weight of tailings generated	104
	EM-MM-150a.6	Total weight of waste rock generated	101
	EM-MM-150a.7	Total weight of hazardous waste generated	102
	EM-MM-150a.8	Total weight of hazardous waste recycled	103
	EM-MM150a.10	Description of waste and hazardous materials management policies and procedures for active and inactive operations	102
Community relations	EM-MM 210b.1	Discussion of the process to manage risks and opportunities associated with community rights and interests	In relation to the care shown to the residents of the Self-rescue Zones (ZAS), Gerdau has installed seven sirens and each month performs sound tests, playing classical music. Informative seminars and meetings have also been held to clarify any doubts the communities may have.
Labor relations	EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by Brazilian and foreign employees	As in 2021, 100% of the employees are covered by collective bargaining agreements.
	EM-MM-310a.2	Number and duration of non-technical delays	There were no strikes or lockouts in the period covered by the report.

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SASB Topic	CODE	REPORTING METRIC	PAGE AND/OR CONTENT
Occupational Health & Safety	EM-MM-320a.1	<ul style="list-style-type: none"> <li>• MSHA incident rate</li> <li>• fatality rate</li> <li>• near-miss frequency rate (NMFR) and</li> <li>• average hours of health, safety and emergency response training for (a) full-time employees and (b) contract employees</li> </ul>	The average number of hours of health, safety and emergency response training is not available.
Business ethics and transparency	EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	31
Management of tailings storage installations	EM-MM-540a.1	Tailings storage facility inventory table: <ul style="list-style-type: none"> <li>• facility name,</li> <li>• location,</li> <li>• ownership status,</li> <li>• operational status,</li> <li>• construction method,</li> <li>• maximum permitted storage capacity,</li> <li>• current amount of tailings stored,</li> <li>• consequence classification,</li> <li>• date of most recent independent technical review,</li> <li>• material findings,</li> <li>• mitigation measures,</li> <li>• site-specific EPRP</li> </ul>	82
	EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	81
	EM-MM-540a.3	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	81

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SASB Topic	CODE	REPORTING METRIC	PAGE AND/OR CONTENT
<b>IRON &amp; STEEL PRODUCERS</b>			
Activity	EM-IS-000.A	Crude steel production	121
	EM-IS-000.B	Total production of iron ore	121
	EM-IS-000.C	Total production of coking coal	121
Greenhouse gas emissions	EM-EP-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	111
	EM-EP-110a.2	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	106
Air quality	EM-EP-120a.1	<ul style="list-style-type: none"> <li>• Air emissions of the following pollutants:</li> <li>• CO,</li> <li>• NOx (excluding N<sub>2</sub>O),</li> <li>• SOx,</li> <li>• particulate matter (PM10),</li> <li>• manganese (MnO)</li> <li>• lead (Pb)</li> <li>• volatile organic compounds (COVs) and</li> <li>• polycyclic aromatic hydrocarbons (PAHs)</li> </ul>	116
Energy management	EM-EP-130a.1	(1) total energy consumed, (2) percentage grid electricity, (3) percentage renewable	93
	EM-EP-130a.2	(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable.	93
Water management	EM-EP-140a.1	(1) Total freshwater withdrawn, (2) percentage recycled, (3) percentage in high or extremely high baseline water stress regions	97
Occupational Health & Safety	EM-EP-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time and (b) contract employees	43-44
Supply chain management	EM-EP-430a.1	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	Information not available for this cycle.

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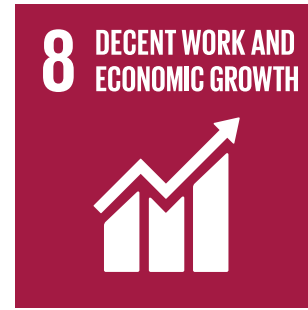
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