GERDAU
Shape the future

GERDAU'S COMMITMENT TO CLIMATE CHANGE

Climate change is an important topic for Gerdau within its **business and sustainability strategy**. Since its foundation **121 years** ago, the company has been operating with a production matrix based primarily on **recycling scrap and charcoal**, which has always placed it among the lowest greenhouse gas emitters in the global steel industry. In 2020, the company started publishing its audited carbon data and is working on a strategy to further reduce its emissions.

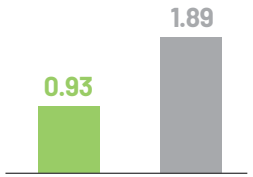
In this report, you will learn about Gerdau's current position in **greenhouse gas emissions** compared to the **steel industry**, and the initiatives proposed to reduce these emissions in the short-, medium- and long-terms. Steel is an **essential and irreplaceable material that is infinitely and 100% recyclable**. It is in the lives of millions of people at different moments and locations in their routines, it is in the houses where they live, and it is used in the modes of transportation they use. Steel is present in new power generation technologies, such as the raw material for solar panels and wind towers, and also in new infrastructure solutions, all of which make it a crucial material for **decarbonizing** the planet.

AN X-RAY OF THE CURRENT SCENARIO

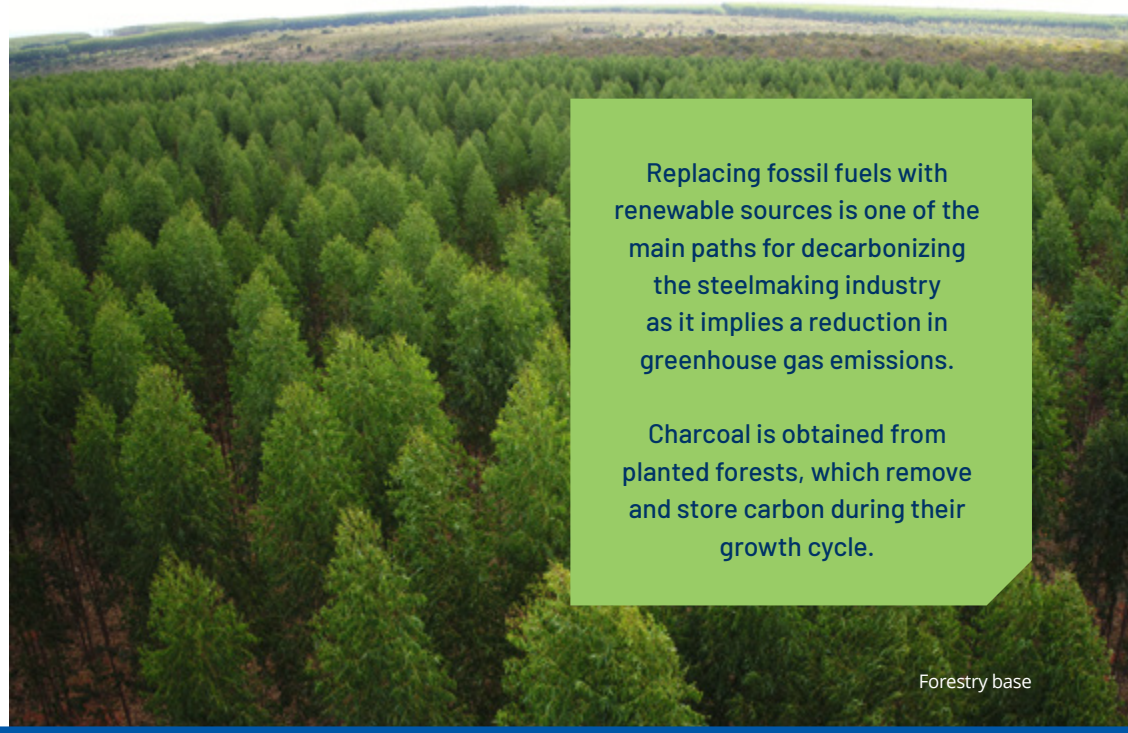
Gerdau today **has one of the lowest average greenhouse gas (CO_2e) emissions in the global steel industry.**

Gerdau's **greenhouse gas emissions are equivalent to** about **half of** the **global emission average of the steel industry**. And this has already ensured Gerdau a prominent position in the industry.

GREENHOUSE GAS EMISSIONS
(tCO_2 per ton of steel)



Sources: [1]Gerdau Annual Report 2020
[2]worldsteel (2020 data)



Replacing fossil fuels with renewable sources is one of the main paths for decarbonizing the steelmaking industry as it implies a reduction in greenhouse gas emissions.

Charcoal is obtained from planted forests, which remove and store carbon during their growth cycle.

Forestry base

Here's how Gerdau has achieved these lower averages.

1. **Gerdau's production model stands out:**

73% of the steel produced comes from recycled scrap.

2. **Gerdau is the largest recycler in Latin America:**

11 million tonnes of scrap are transformed into steel every year.

Using ferrous scrap enables lower emission of greenhouse gases during steel production, in addittion to saving natural resources, such as water and raw materials, and reducing energy consumption.

Steel is an infinitely recyclable material. Each ton of scrap recycled avoids the emission of 1.5 tonne of CO_2e.

3. **Gerdau is the world's largest charcoal producer and has over**

617,763 acres

of **planted forests in the state of Minas Gerais, Brazil**, for this purpose. Approximately 224,866 acres are preserved native forests, an **area larger than the city of São Paulo.**

4. **Gerdau's planted forests are renewable raw materials for charcoal**, which functions as a bioreducer when producing pig iron. This results in steel that is produced with lower greenhouse gas emissions.

IN OTHER WORDS: Around

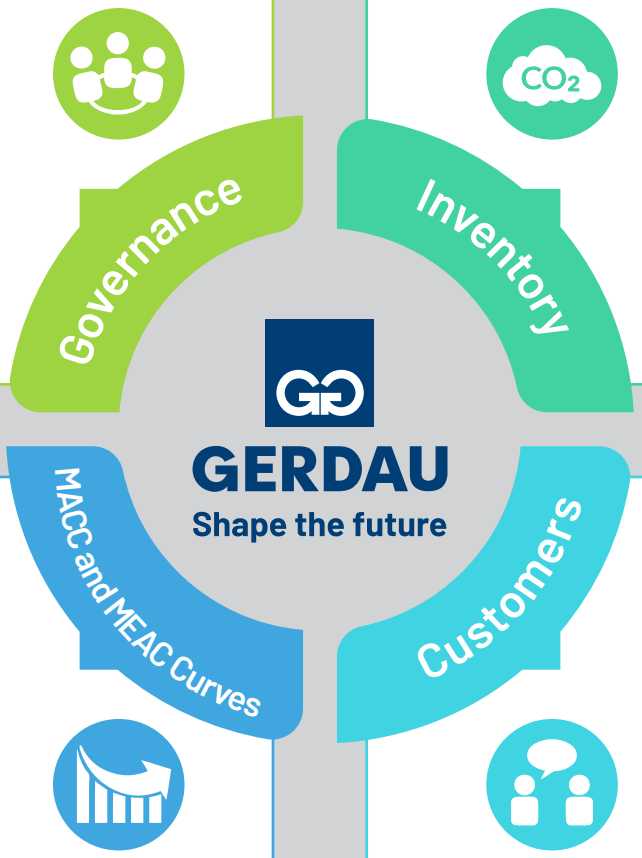
80% of Gerdau's production

is already based on the use of recycled (scrap) or renewable (charcoal) raw materials.

ASPECTS OF OUR MANAGEMENT

Gerdau has been making great strides in how it manages this subject. Currently, the company's efforts are based on 4 pillars:

In 2019 Gerdau established its Strategy and Sustainability Committee that works closely with the Board of Directors to incorporate ESG factors when determining capital allocation and defining investment plans - not just the production and return on capital aspects. Additionally, in 2021, **the performance targets for ESG indicators**, such as CO2e emissions, were included in the Long-Term Incentive Plans (ILP) of the company's senior executives.



The Company's **greenhouse gas (GHG) inventory** data is subject to independent external audit. Scope 1: direct GHG emissions; Scope 2: indirect energy GHG emissions; and Scope 3: other indirect GHG emissions for units in Brazil, United States and Canada. Suggestions for improving Scope 1 and 2 at the operational units have been raised, and are being addressed in actions plans, with monthly follow-up.

Gerdau has adopted the **MACC (Marginal Abatement Cost Curve) and MEAC (Marginal Energy Abatement Cost Curve)** methodologies to establish the short-, medium- and long-term emission reduction targets. These studies aim to explore both available and evolving technologies that are relevant to Gerdau's steelmaking process, prioritize and plan investments.

Gerdau aims to **listens to all its stakeholders**, including customers, investors and communities, to know their needs on this subject, such as inventories, life cycle analysis and environmental product declaration.

Araçariguama Unit (Brazil)

RECOGNITION

- **Our greenhouse gas emissions** were rated B- by the Carbon Disclosure Project (CDP) **in the Climate Change module, which was higher than the average for South America and the industry in 2021.**

- **Gerdau units** are recognized as among the **best performers in greenhouse gas emissions** by the World Steel Association (worldsteel).

- **Gerdau is the first steelmaker included in the Carbon Efficient Index (ICO2)**, compiled by B3, the Brazilian Stock Exchange, in partnership with the Brazilian Development Bank (BNDES). This index consists of stocks of companies included in the **IBrX-50 index which follows practices in relation to their greenhouse gas emissions (GHGs), underscoring their concern with global warming.**

LEARN ABOUT OUR COMMITMENT FOR 2031

Gerdau is committed to a low-carbon economy and has drawn up a medium- and long-term strategy to be part of the solutions in this regard. This is Gerdau's target:

Reduction
of greenhouse gas emissions
by 2031*

**Base year 2020. The target refers to Scopes 1 and 2.*

What does that mean?

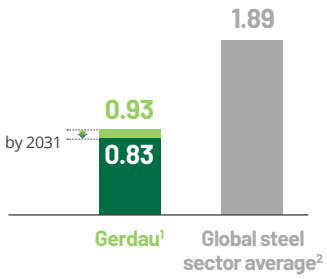
Gerdau will reduce its emissions from

0.93 t/CO_2e per tonne of steel

to

0.83 t/CO_2e per tonne of steel
by 2031.

GREENHOUSE GAS EMISSIONS
(tCO_2 per tonne of steel)



Sources: [1]Gerdau 2020 Annual Report
[2]worldsteel (2020 data)

In 2031, Gerdau will be in a select group of the world's most efficient steelmakers in reducing emissions.

To put things into perspective, the global steel industry would have to cut its current greenhouse gas emissions by 50% to reach our new level.

And how will Gerdau do this?

1. **Greater energy and operational efficiency**
2. **Higher use of scrap in the production matrix**
3. **Expansion of the forestry base and investments in the renewable energy business**
4. **Investments in new technologies and open innovation**

Scrap yard at the Araçariguama Unit (Brazil)

BUT WE KNOW THAT WE MUST GO FURTHER *READ OUR AMBITION FOR 2050*

Gerdau believes that, as Brazil's largest and one of the world's leading steelmakers, it must be part of the **innovative solutions and disruptions** for a low-carbon economy in the steel industry:

Being
carbon neutral
in 2050 is our ambition

Solar farm

What does that mean?

Despite the lack of mature technologies and public policies to aid the steel industry in neutralizing its carbon emissions today, **Gerdau wants to lead** this quest to shape the future of such an essential sector by **reducing its greenhouse gas emissions in line with global commitments.**

And how will Gerdau do this?

1. **By actively collaborating** with industry organizations, universities and research centers **in the pursuit of disruptive steelmaking technologies.**

2. **By streamlining our production processes and investing in clean and renewable energy matrices:**

   Examples already in place:

   - Solar Farm in Minas Gerais, Brazil: capacity: 200MWdc.

   - Gerdau Solar: photovoltaic complex located in Midlothian, Texas, with installed capacity of 80MWdc, starting in 2022.

3. **Through dialog and joint development with diverse segments of society to implement public policies, new technologies and improve industrial processes.**

   - Public policies: *access to special local, national or transnational financing lines from public or private sources will be crucial, given the heavy investments required to develop disruptive technologies for producing steel with low greenhouse gas emissions. The financing lines currently available do not meet the needs of the steel industry and it is necessary to ensure competitiveness in the transition of existing assets to a scenario of low GHG emissions.*

To learn more about the topic, you can watch **Gerdau's Commitment to Climate Change** on our YouTube channel or see the presentation at on our website **www.gerdau.com/climatechange**. To learn more about our Environmental Management, watch the video at **ri.gerdau.com**.

WE WANT TO HEAR FROM YOU

What do you think of these commitments and our long-term ambition? This is just one part of our ESG journey, whose mission is to build an increasingly sustainable future based on steel. If you have any questions or want to share your opinion on the subject with us, send an email to: **gerdau.clima@gerdau.com.br**.

To learn more about this and other topics, visit our website and our social media.

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