

# Integrated Report 2021

80 YEARS



# Contents

**3 Presentation**

Materiality

**9 Letter from the Board of Directors**

**11 Letter from the CEO**

**13 Highlights in 2021**

**20 Business model**

Steel industry  
Mining  
Cements  
Logistics  
Energy

**47 Corporate governance**

Financial management  
Risk management  
Ethics and compliance management  
Integrated ESG and innovation management  
Innovation management

**91 ESG Goals**

Achieved goals  
Short-term goals  
Medium-and long-term goals  
CSN engagement

**103 Climate change and emission management**

Commitments to a low carbon economy  
TCFD  
Atmospheric emissions

**122 Water management**

Assessment of water stress  
River Basin Committees

**132 Waste management and circular economy**

**141 Dam management**

**145 Biodiversity**

**153 Health and safety**

Health promotion  
Covid-19

**161 Diversity and inclusion**

Staff management  
Employee compensation and benefits  
Staff development

**175 Local communities**

Education  
Culture  
Curatorship  
Articulation

**184 Value chain management**

**189 Annexes**

Complement to GRI disclosures  
GRI content index  
Assurance report  
Corporate information  
Credits



# Presentation

The history of Companhia Siderúrgica Nacional (“CSN” or “Company”) is part of Brazil’s history. In 2021, the company completed 80 years of acting as one of the protagonists in the industrial development and sustainable growth process in the country. The period was also marked by the best result in the Company’s history, boosting business expansion and generating wealth and development for Brazil.

The Integrated Report is an annual publication that documents this continuous evolution of the business of a company that operates with innovation and sustainability in its DNA. Guided by international framework guidelines and aligned with best practices, the document gathers data, information and analysis of projects and programs carried out by CSN Group companies in the mining, steel, cement, logistics and energy segments. The objective is to show how the company integrates the management of environmental, social, and corporate governance (ESG) aspects into strategic planning for the generation of long-term value.



The graphics in this Report are inspired by the logo commemorating the 80<sup>th</sup> anniversary of CSN. They refer to business integration, growth and sustainable value creation of the Company’s business model.

This report has been prepared in accordance with the Global Reporting Initiative (“GRI”) Standards: Essential option. The publication was prepared following the principles and guidelines of the International Framework for Integrated Reporting (IIRC), proposed by the Value Reporting Foundation, and supports compliance with CVM Resolution 014/2020 (Securities Commission), in addition to meeting the standards of the Sustainability Accounting Standards Board (SASB) for the Iron and Steel, Metals and Mining and Construction Materials Industry. The report also addresses the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD) for disclosing climate risks and opportunities.

Performance data is permanently monitored as part of the management level and is correlated with the principles of the Global Compact and the United Nations (UN) Sustainable Development Goals (SDGs). The Integrated Report also meets the requirements of commitments assumed as a signatory company of the Global Compact and is in accordance with the guidelines of ISO 26000:2010.

The financial information follows the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC). CSN also follows the guidelines issued by the Accounting Pronouncements Committee (CPC). Such information can be verified on page 266 of this document and in the Company’s Financial Statements available on CSN’s RI website <https://ri.csn.com.br>.

The information presented in this Integrated Report was obtained through interviews with leaders and the collection and review of data by the administrative and operational areas of the CSN Group’s businesses in Brazil and abroad. Information from the Itá and Igarapava hydroelectric plants and MRS Logística were not incorporated in the responses to the GRI indicators. These operations are only considered in the CSN Group’s financial statements, which consolidate the results using the equity method.

**This report is in line with the main international market frameworks, it was approved by the Board of Directors and submitted to an independent audit**

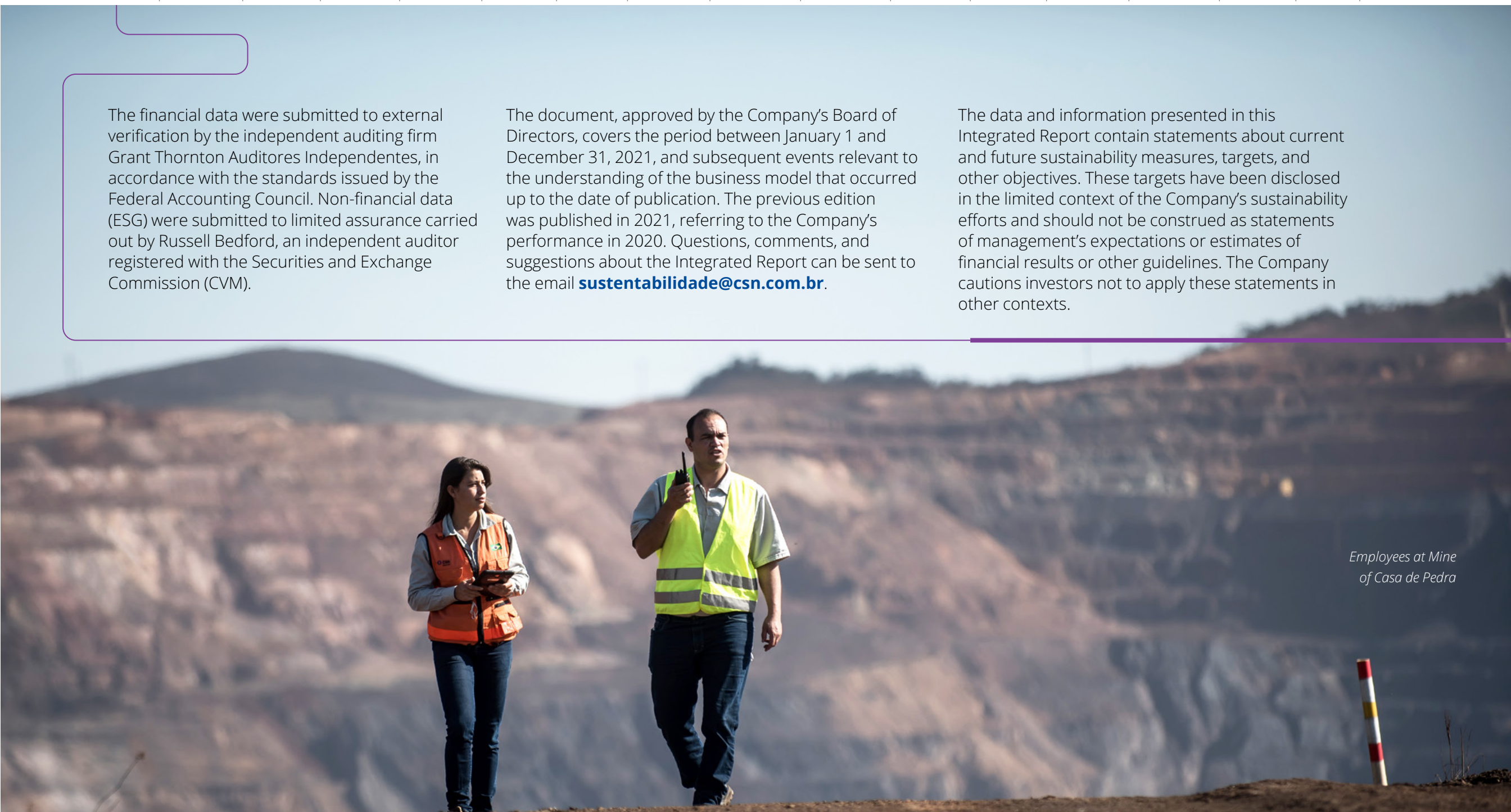


*Pig iron test at the UPV*

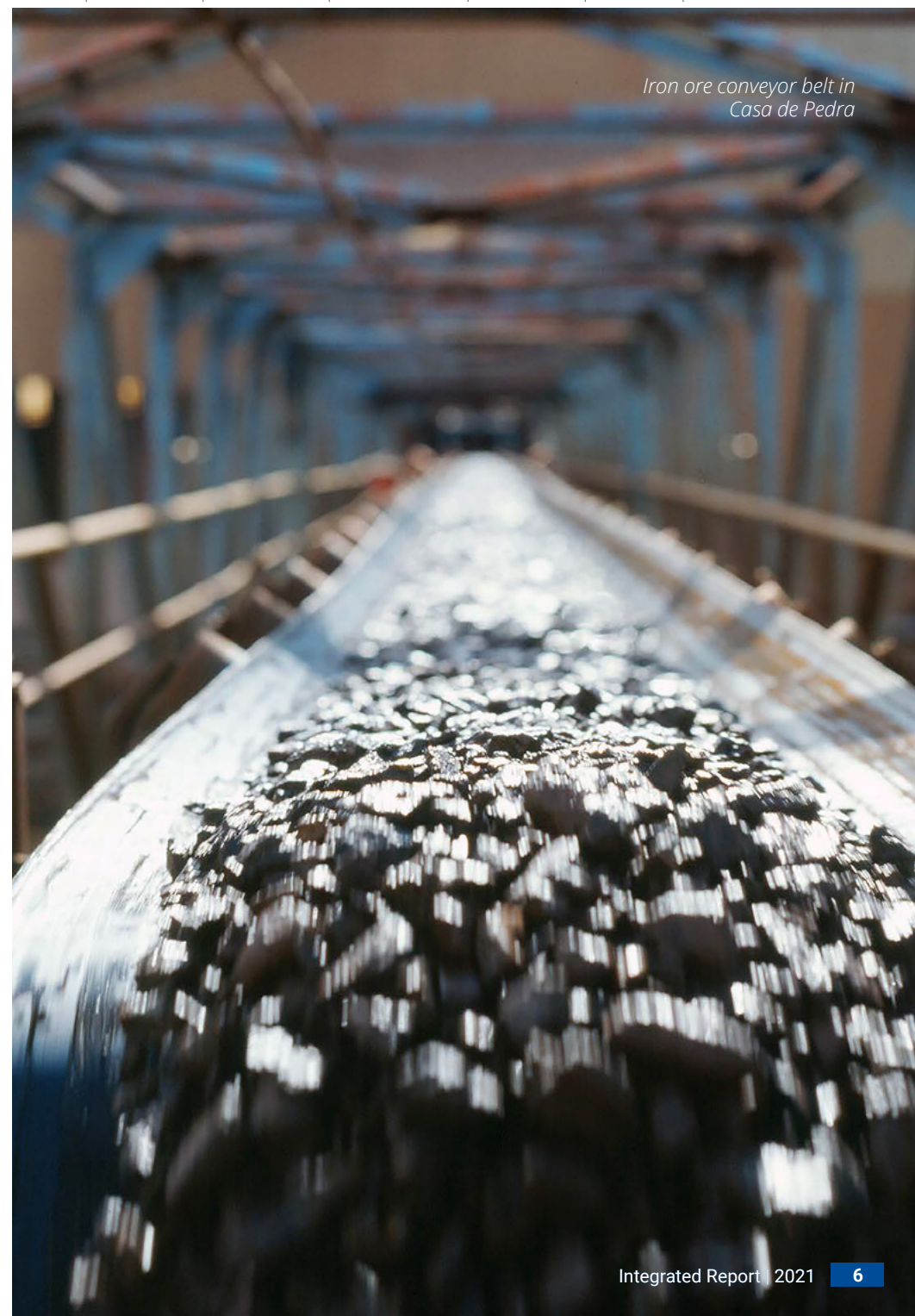
The financial data were submitted to external verification by the independent auditing firm Grant Thornton Auditores Independentes, in accordance with the standards issued by the Federal Accounting Council. Non-financial data (ESG) were submitted to limited assurance carried out by Russell Bedford, an independent auditor registered with the Securities and Exchange Commission (CVM).

The document, approved by the Company's Board of Directors, covers the period between January 1 and December 31, 2021, and subsequent events relevant to the understanding of the business model that occurred up to the date of publication. The previous edition was published in 2021, referring to the Company's performance in 2020. Questions, comments, and suggestions about the Integrated Report can be sent to the email [sustentabilidade@csn.com.br](mailto:sustentabilidade@csn.com.br).

The data and information presented in this Integrated Report contain statements about current and future sustainability measures, targets, and other objectives. These targets have been disclosed in the limited context of the Company's sustainability efforts and should not be construed as statements of management's expectations or estimates of financial results or other guidelines. The Company cautions investors not to apply these statements in other contexts.




*Employees at Mine of Casa de Pedra*



Iron ore conveyor belt in Casa de Pedra

# How to navigate



**Menu**  
 Navigate through the top menu to access the chapters that interest you.

**Arrows**  
 Navigate page by page using the arrows in the upper left corner.

**Contents**  
 Click this icon to return to the table of contents.



**Click on this icon**  
 to access interactive contents.



**Click on highlights**  
 to access additional content online.





The icons of the Sustainable Development Goals (SDGs) and the Global Compact Principles on the side of the pages show the connection of the reported content with these global sustainability frameworks.

GRI 102-1 | 102-45

In the footer, the notes indicate which contents of the Global Reporting Initiative (GRI) are answered on each page. Correlations between GRI content and SASB, UNCTAD, Global Compact Principles and SDG indicators are presented in the GRI Content Index.

# Materiality

CSN's Materiality Matrix aims to identify the most relevant topics for sustainability management and communication of the ESG strategy to internal and external audiences. In 2021, the Company carried out a study to assess how the main topics on the ESG agenda are connected to its strategy and influence stakeholder decision-making.

The process was developed in four different phases: evaluation of sector studies and benchmarking; public engagement through surveys and interviews; consolidation of themes in light of the GRI and Integrated Reporting principles; and validation with the Company's leaders.

In the first phase, 15 companies from the sectors in which CSN operates were analyzed in a benchmarking process, with the report analysis to reporting frameworks and responses to sustainability indexes. In the second phase, a qualitative hearing was carried out, which included 11 individual interviews, four of them with Company executives and seven with representatives of financial institutions, customers, suppliers, and regulators.

The quantitative survey, open to all stakeholders and available in Portuguese and English, received

614 responses. Of this total, 466 responses (76%) were from Company employees, and the remaining 148 from external audiences, such as suppliers, customers, local communities, financial institutions, shareholders and investors, outsourced professionals, non-governmental organizations, academia, and educational and research institutions, public authorities, and civil society.

After identifying and validating the material themes, CSN correlated the Materiality Matrix with the Sustainable Development Goals (SDGs), prepared by the United Nations (UN) to engage member countries in the fight against poverty, environmental preservation, climate change mitigation and promoting peace and prosperity. Material themes were also correlated with the Global Compact Principles and market indicators as presented, in order of greatest to least relevance, in the infographic on the next page.

In this way, the themes of the Materiality Matrix guide the construction of the narrative and content of this Integrated Report. Throughout the chapters, stakeholders can understand how investments, projects and governance systems are directed so that all businesses contribute to the SDGs and meet the main demands of global society.



Rede Brasil

**As a signatory to the Global Compact, CSN promotes the integration of the SDGs into its activities, aligning operations and business strategies with the current and future demands of society**

# Materiality matrix

Learn more about the 12 material issues that make up CSN's materiality matrix, revised in 2021.

## ISSUES

-  **1. Climate change**
-  **2. Labor health and safety**
-  **3. Safety and de-characterization of dams**
-  **4. Waste management, responsible use and circular economy**
-  **5. Biodiversity**
-  **6. Innovation and technology**

## INTEGRATED REPORT CAPITALS

- Financial Capital** 
- Intellectual Capital** 
- Human Capital** 
- Manufactured Capital** 
- Natural Capital** 
- Social & Relationship Capital** 



## GLOBAL COMPACT PRINCIPLES

**Click on the blue boxes** to learn more about the aspects and indicators covered in each material issue and the main sustainability benchmarks to which they are related.

-  **7. Governance, ethics and transparency** 
-  **8. Local communities** 
-  **9. Diversity and inclusion** 
-  **10. Efficient water use and effluent management practices** 
-  **11. Supplier management** 
-  **12. Staff management** 

[Back to the initial screen](#)



# Letter from the Board of Directors

The year 2021 was again marked by the challenges and uncertainties caused by COVID-19. In Brazil and in the world, the pandemic changed the dynamics of markets and logistics chains, resulting in volatility in commodity prices and uncertainties regarding the recovery of production segments.

Within this turbulent context, the strategic decisions of the CSN Group proved to be the right ones to face the instabilities and ensure the achievement of the goals set for the period. In the year during which it celebrated its 80th anniversary, the Company also achieved record results in all business areas, reduced its financial leverage ratio, and made acquisitions that improve its competitiveness, efficiency, and productivity.

The ability to anticipate future socioeconomic scenarios and adapt the business with a long-term vision is the result of a solid structure and consolidated corporate governance processes, which is in continuous evolution. One of the main examples is the installation of the ESG Committee,

which in 2021 began its work to support the Board of Directors in the assessment of sustainability and innovation trends.

Investments in our business areas are part of a long-term vision to strengthen the capacity to generate value and contribute to sustainable development. Thus, the CSN Group seeks to promote its growth in line with its decarbonization journey vis-à-vis the challenges of climate change, the strengthening of the culture of an increasingly inclusive and diverse company, and the consolidation of education and culture projects that benefit the communities in the municipalities where its units operate.

By 2026, for example, R\$12 billion will be invested in CSN Mineração. After the successful initial offering of shares in B3, in which it raised R\$5.2 billion, the company accelerated plans to increase production capacity and develop new technologies aimed at improving its operational and environmental performance.

With technologies for tailings filtration and water reuse, CSN Mineração has already achieved independence from the use of dams. The entire tailings stacking process follows the highest safety standards. Projects to expand production capacity have already been mapped, being divided into two phases, as well as investments for the development and application of new technologies, in order to reach Net Zero CO<sub>2</sub> emissions by 2044.

**In the year in which we celebrate our 80th anniversary, we achieved record results across all business areas, reduced our financial leverage ratio, and conducted acquisitions that increase competitiveness, efficiency, and productivity.**

**Our business areas are fundamental for the balanced development and society. We intend to continue meeting this demand with excellence in the management of ESG issues and a leading role in the climate agenda.**

Today's society needs iron ore, steel, energy and cement for balanced and sustainable development. Delivering these products with lower environmental impacts, lower greenhouse gas emissions and social and environmental responsibility is the way in which CSN will pursue its purpose of "doing well, doing more, and doing forever."

**CSN Board of Directors**

In the steel industry, the industrial park modernization project foresees an investment of approximately R\$6.3 billion over the next 5 years in operational efficiency projects that should begin in 2022, such as the renovation of blast furnaces, coke batteries, and sintering. These projects are part of the mapped initiatives that will help us achieve the newly announced CO<sub>2</sub> emission targets of a 20% reduction in CO<sub>2</sub> emissions per metric ton of steel produced by the year 2035.

In the cement sector, the highlights were the acquisitions of new plants and progress in managing the environmental aspects of the business. CSN Cimentos achieved a 7% reduction in CO<sub>2</sub> emissions per metric ton produced, applying innovative technologies in its production process – such as the infusion of green hydrogen to increase the efficiency in the burning of ovens, thereby reducing the need for fuel.

On the governance front, the CSN Group continues to reinforce its commitment to ethics, respect for human rights, and diversity. In 2021, the board created to deal specifically with Diversity & Inclusion completed its first year of operation, having engaged 85% of leaders in training actions on the subject.

There was also progress in the processes for managing occupational safety, with the establishment of new manuals and procedures to promote standardized management across all segments. At year-end, the frequency rate of accidents with and without lost time among internal staff and outsourced workers reached its historic low, with a 2% reduction compared to 2020.

One of the CSN Group's priorities is the leading role in the climate agenda. Without neglecting excellence in the management of other ESG topics, all businesses are committed to the search for innovations that promote the decarbonization of production processes.



# Letter from the CEO

The CSN Group celebrated its 80<sup>th</sup> anniversary in 2021, recording the best year in its history. Despite the social and economic challenges still present in the domestic and international markets, due to the COVID-19 pandemic, we managed to advance in productivity and efficiency in all business areas, keeping the focus on the innovation and decarbonization agenda of production processes.

We achieved record results, which have allowed us to significantly reduce our leverage and consolidate our growth strategy, while capturing opportunities in Brazil and abroad. Total net revenue (R\$48 billion) grew by 59% and EBITDA (R\$22 billion) increased by 91% in the year-on-year comparison. This performance, combined with a series of action plans and projects for efficient cost management, have led the net debt/EBITDA indicator (0.76x) to a 63% reduction.

The actions we carried out in 2020 to respond to the risks of COVID-19, with planning and initiatives to ensure the health and safety of people, were maintained over the last year, contributing to the business being able to achieve increases in sales volumes and invoicing. Although several challenges persist, such as logistical bottlenecks in the transoceanic market and the

increase in costs, we continue with investments to increase productivity and achieve even greater eco-efficiency in all the segments in which we operate.

We completed the IPO of CSN Mineração, raising R\$5.2 billion in the IPO with the public offering of shares on B3. With a new capital structure, the company is prepared to continue its growth plan, which should make it the fifth largest global iron ore producer by 2031. This strategy combines increased production capacity, higher ore quality, and a series of innovation projects and new technologies to expand the reuse of water, reduction of greenhouse gas emissions, stacking of tailings, and the elimination of dams, among other initiatives.

In the steel industry, our growth strategy is based on internationalization and addition of value to our products. Expansion projects by SWT, in Germany, and by Lusosider, in Portugal, as well as new long steel plants in the United States, are planned for the coming years. In Brazil, the Presidente Vargas Plant modernization plan is one of our priorities, with investments planned for competitiveness gains and increased production volume and eco-efficiency.



*Benjamin Steinbruch*  
CEO

**As a signatory to the UN's Global Compact, CSN integrates into its ESG strategy and goals the promotion of the Sustainable Development Goals and universal principles for valuing human rights, environmental preservation, and the fight against corruption.**



Hot-rolling process – UPV Unit

**In 2021, we consolidated a form of collaborative and integrated management, with the work of the Integrated ESG Management Commission and CSN Inova, under the leadership of the ESG Committee, which advises the Board of Directors.**

The year 2021 was also a highlight in the cement segment, with the acquisition of new business areas that, in addition to expanding production capacity, position our company in strategic markets and regions in Brazil. The purchase of Elizabeth Cimentos S.A. and Elizabeth Mineração Ltda., in the state of Paraíba, strengthens its operations in the Brazilian Northeast region, one of the markets with the greatest potential for the segment in Brazil. We also advanced in the purchase intention to acquire 100% of LafargeHolcim’s shares in Brazil, with plants in the Southeast, Northeast, and Center-West. This operation is still pending final approval by competition authorities.

In the logistics area, which accounts for approximately 4.5% of the CSN Group’s revenue, we achieved record net revenue in the port segment and an expressive annual growth of 23% in the rail segment. Strengthening this business front is strategic for increasing the competitiveness and efficiency of CSN’s business.

The evolution of the business is driven by a strong commitment to sustainability and the management of environmental, social and corporate governance risks – known by the acronym ESG – across all business areas. In 2021, we consolidated at CSN a form of collaborative and integrated management, with the work of the Integrated ESG Management Commission and CSN Inova, under the leadership of the ESG Committee, which advises the Board of Directors.

This governance structure has allowed the evolution of topics that are central to the sustainability agenda – such as the promotion of diversity and inclusion, decarbonization of production chains, safety in operations, and biodiversity protection. With this impulse, last year, we achieved the lowest accident frequency rate of the last seven years and a 21% increase in female participation among employees, in addition to expressive reductions in emissions, water capture, waste generation, and other environmental aspects. Another relevant aspect was the investment of more than R\$105 million in supporting the social initiatives of Fundação CSN and other entities, encouraging culture, sports and projects related to children, adolescents, and the elderly.

CSN Inova, our corporate innovation platform, is a catalyst for business transformation towards a management with an even greater focus on ESG. With four pillars of action and focus on the challenges of the CSN Group, it acts as a lever in the search for new solutions and technologies that allow increased efficiency and productivity associated with technologies for Industry 4.0, new materials, decarbonization of processes, digitalization, and the circular economy.

The future of the CSN Group has been built with the effort and dedication of all those who work to strengthen the business. With discipline in the allocation of capital and focus on a sustainable business model, we are prepared to continue this successful trajectory that began 80 years ago.

**Benjamin Steinbruch**  
CEO

# Highlights **in 2021**

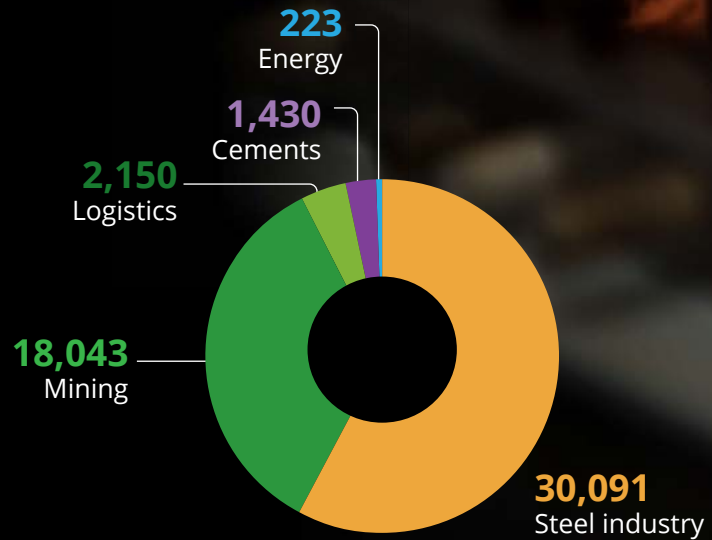


Iron ore quality sample

## FINANCIAL CAPITAL

**R\$ 48 billion**  
in net revenue (+59%)

Net revenue by segment in 2021 (R\$ million)\*



\*Before eliminations.

**R\$ 13.6 billion**  
of net income (+217%)

**R\$ 22.0 billion**  
of adjusted EBITDA (+91%)

**0.76x**  
leverage  
(net debt/EBITDA ratio)

**R\$ 544.2 million**  
earmarked for environmental  
investment and funding

## MANUFACTURED CAPITAL

Acquisition of control of  
**Elizabeth Cimentos S.A.**

Acquisition of  
**Metalgráfica Iguaçu<sup>1</sup>**

Acquisition of the  
**Lafarge – Holcim**  
 operations in Brazil<sup>2</sup>

**4.6 million**  
 tons of steel products sold by  
 the CSN Group (-1%)

**33.2 million**  
 million tons of iron ore sold  
 by the CSN Group (+7%)

**4.7 million**  
 tons of cement sold by CSN  
 Cimentos (+18%)

CSN Cimentos  
 Unit - Arcos

1. Transaction to be submitted for approval by the shareholders of CSN and Metalgráfica.  
 2. Operation awaits final approval from the Administrative Council for Economic Defense (CADE).

Employee of Arcos

## HUMAN CAPITAL

**2%** reduction in the Accident Frequency Rate<sup>1</sup>,  
**lowest result in the last 7 years**

*1. CAF+ SAF - owned and third parties.*

**21%** increase in female representation in the workforce, compared to 2020

**15%** increase in the representation of people with disabilities (PWDs)

**85%** of leaders trained in Diversity & Inclusion

**31%** of representation of the black race in leadership positions in the CSN Group

Free flu **vaccination campaign** for the entire workforce







## INTELLECTUAL CAPITAL

**20 new steels**  
developed by CSN's Research and Development Center

**6 invested**  
by CSN Inova Ventures, two on the theme of green hydrogen

Signing of agreements and partnerships in the **technological innovation and decarbonization agenda**

Adherence to B3 **ICO2**

Adherence of CSN to **MPP – Mission Possible Partnership**

Evolution of the CDP score to B in the **Climate Change** questionnaire

Evolution in the CDP score to B- in the **Water Security** questionnaire

## Natural capital

**7%**

reduction in GHG emissions from Cement production (tCO<sub>2</sub>e/ton of cementitious)

**7%**

reduction in CSN Mineração's GHG emissions (tCO<sub>2</sub>e/ton of ore produced)<sup>1</sup>

1. CSN Mineração iron ore production and CSN Mineração Scope 1 + 2 emissions.

**76%**

increase in the reuse of electric arc furnace powder (FEA Powder) in the production of metallic briquettes

**92%**

of the electricity consumed by the CSN Group comes from a renewable source

**34.7%**

reduction in the sending of process sludge from the Presidente Vargas Steelworks (UPV) to class II landfills

**16.2%**

reduction in specific water abstraction per ton of steel produced compared to 2020

**87%**

of water recirculation at the Central Plant of CSN Mineração

**94%**

of water recirculation in the UPV

**81 thousand**

hectares of natural areas protected by the CSN Group

View of the NHPR of Casa de Pedra

## Social & Relationship Capital

*Students of the Garoto Cidadão project promoted by the CSN Foundation*



**15% increase**

in cities served by social projects

More than **R\$ 100 million**

invested in social responsibility with contributions to 104 projects through CSN Foundation

More than **R\$ 29 billion** paid to suppliers

**5,052** young people benefited from CSN Foundation initiatives

**452** cultural actions carried out with an audience reach of 215,227 views

# Business model

CSN is a company incorporated in Brazil and the first integrated steel producer in the country. Since 1993, when it was privatized by the federal government, the Company has expanded and diversified its business, becoming a multinational group, currently 80 years old, operating in the steel, mining, cement, logistics and energy segments.



The production units of the CSN Group are located in Brazil, Portugal, and Germany. Steel and mining are responsible for around 90% of the Group's net revenue generation, while the other segments represent important avenues for growth and integration between the businesses.

The iron ore deposits of CSN Mineração S.A ("CSN Mineração" or "CMIN"), a company controlled by the Company, located in Minas Gerais, ensure self-sufficiency in a high-quality input for the production of a line of high value-added steel products. CSN Mineração also exports iron ore to the main world markets through the Port of TECAR, a solid bulk terminal under its concession, located in the municipality of Itaguaí, Rio de Janeiro. With an installed capacity to export iron ore of 45 million tons per year, it also receives coal and coke, inputs and raw materials needed for steel production at the Presidente Vargas Steelworks, located in Volta Redonda (RJ), the main unit in the Company's steel industry.

The cement segment, in which CSN started its activities in 2009, is highly complementary to the steel industry. The production processes and the location of the assets of CSN Cimentos S.A. ("CSN Cimentos") in the Southeast allow the reuse of blast furnace slag (generated in the production of pig iron), in order to add value to the by-product and boost the circular economy in the business model.

*Employees in the Casa de Pedra loading area*





Employee of TECON Terminal

Assets in the energy segment guarantee part of the energy used by the Company, one of the largest industrial consumers of electricity in the country. Through participation in consortia of hydroelectric plants and the generation of energy integrated into the production process, CSN materializes important competitive advantages, with competitive energy costs and a more sustainable operation.

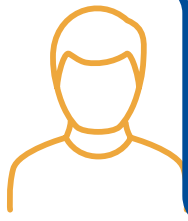
In the logistics area, the CSN Group has the largest container handling terminal in the state of Rio de Janeiro, Sepetiba Tecon S.A (“Sepetiba Tecon”); controls Ferrovia Transnordestina Logística S.A (“FTL”); and jointly controls Transnordestina Logística S.A – (“TLSA”) and MRS Logística S.A. (“MRS”).

This integrated and diversified business model is further strengthened by the work of CSN Foundation, which celebrated its 60th anniversary in 2021. The institution invests in projects and programs that benefit communities close to its operating units, promoting education, culture and the articulation of civil society and public power in favor of citizenship and sustainable development.



**26,119 people**

work directly at the CSN Group (considering Brazil and abroad)



Blast furnace of UPV

# Essence

## Do well

We are a reference in what we do, always seeking operational excellence. We act with passion, we care like owners and we achieve consistent results, with safety, quality and satisfaction of our customers.

## Do more

We do more with less, being innovative and committed. We constantly seek to optimize results and processes for continuous and responsible growth.

## Do forever

Our learning is constant so that we can always act with a view to building a sustainable future. This is our success.



*Thermoelectric  
Power Station of  
Volta Redonda*



## Mission

To act in an integrated and innovative fashion, generating perpetual and sustainable development

## Vision

To be the most respected and renowned company, to strengthen what it means to be Brazilian.

## Values

Our path is one of respect for life, ethics and the planet;  
Our focus is on operational excellence;  
Our solutions are innovative and integrated;  
Our strength comes from people who make a difference;  
Our pride is TO BE CSN.



# Business model

**Click on the blue boxes** to learn more about the inputs and the value generated by CSN in the six capitals of the Integrated Report, in addition to knowing the corporate guidelines and the Company's management differentials.

The representation of CSN's business model in accordance with the principles and capitals of the Integrated Report (IIRC) is a way of synthesizing the generation of financial and non-financial value in the business.

## INPUTS

- Financial capital
- Manufactured capital
- Human capital
- Intellectual capital
- Social & relationship capital
- Natural capital

Natural capital

Mineral resources and inputs for production processes

Energy (mainly renewable) and water for operational activities

Environmental management adhering to good market practices



## VALUE GENERATED

- Financial capital
- Manufactured capital
- Human capital
- Intellectual capital
- Social & relationship capital
- Natural capital

Natural capital

**34.7%** reduction in the sending of process sludge from the Presidente Vargas Steelworks (UPV) to class II landfills

**81 thousand** hectares of natural areas protected by the CSN Group

**92%** of the electricity consumed by the CSN Group comes from a renewable source

Back to the initial screen

# Map of operations

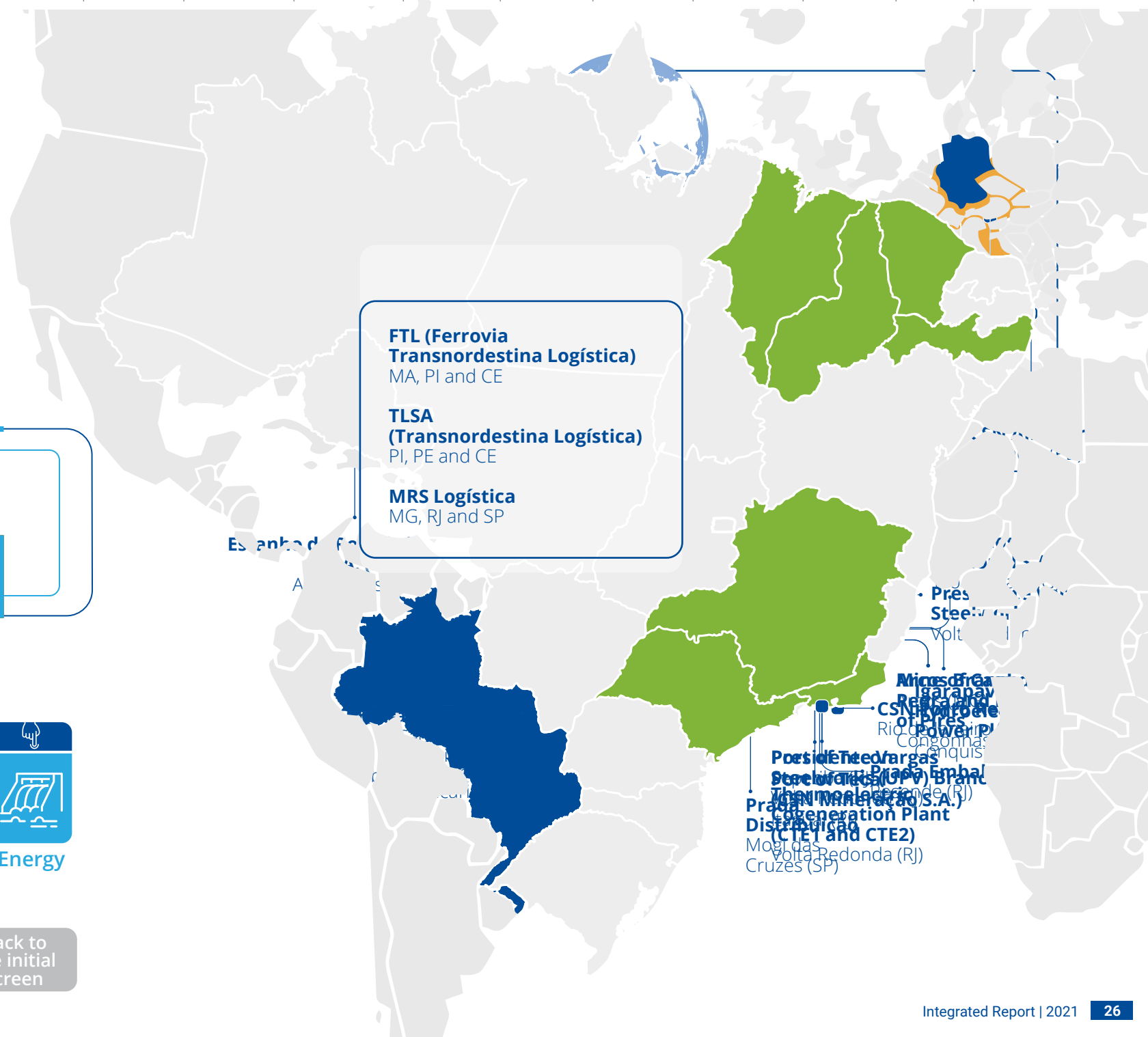
Through its five business segments, the CSN Group has production units in 16 Brazilian states, Portugal and Germany.

**2 shareholdings**  
 in hydroelectric plants +  
 1 cogeneration plant

**0.85%**  
 Click on the icons  
 to find out where their production  
 units are located.

**Steel industry** | 
 **Mining** | 
 **Cements** | 
 **Logistics** | 
 **Energy**

Back to the initial screen



**FTL (Ferrovia Transnordestina Logística)**  
 MA, PI and CE  
  
**TLSA (Transnordestina Logística)**  
 PI, PE and CE  
  
**MRS Logística**  
 MG, RJ and SP

Pres Steel  
 Volta Redonda (RJ)  
  
 Minas Gerais  
 Itabira (MG)  
 Rio de Janeiro  
 Volta Redonda (RJ)  
 CTE1 and CTE2  
 Volta Redonda (RJ)  
 Cruzes (SP)



# Steel industry

With an installed capacity to produce 6.7 million tons of steel, CSN operates in an integrated manner throughout the steelmaking chain, with one of the lowest production costs in the global industry. The Company extracts iron ore, produces steel in steel plants in Brazil and abroad and sells a diversified line of steel products that serve industries in different segments - automotive, aeronautics, naval, white goods (appliances), civil construction, packaging, among other sectors.

CSN's main steel production unit is the Presidente Vargas Steelworks (CSN UPV), located in Volta Redonda (Rio de Janeiro), with an installed capacity of 5.6 million tons of crude steel, 5.2 million of which at its flat steel plant and 0.4 million at its long steel

plant. The Company also owns a plant for the production of long steel in Germany, Stahlwerk Thüringen GmbH ("SWT"), specialized in the manufacture of profiles, with an installed production capacity of 1.1 million tons of steel per year. With high use of scrap in the production of steel, its main consumer market is Europe.

In Portugal, the Company owns the company Lusosider Aços Planos, S.A. ("Lusosider"), a re-rolling steel unit whose raw material is hot-rolled steel coils for the production of galvanized products – a high added value product aimed at the civil construction market –, in addition to producing cold-rolled and pickled-oiled steel and commercializing tinplate produced by CSN in Brazil.

**The steel segment consolidates all operations related to the production, distribution and sale of flat steel, long steel, metallic packaging, and galvanized steel**



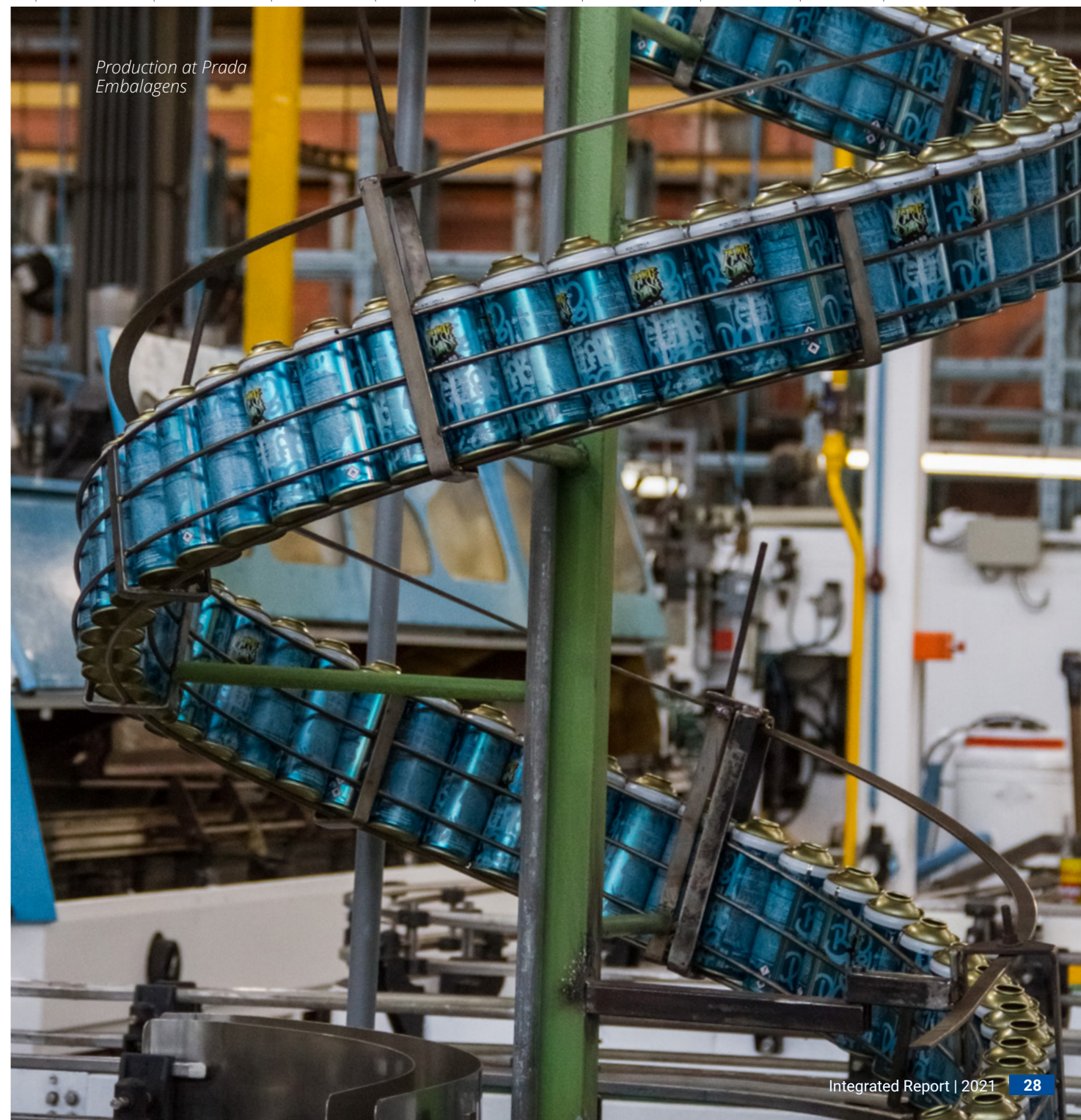
Hot rolling in the UPV

With its metallurgical units in Porto Real – RJ (CSN Porto Real) and in Araucária – PR (CSN Paraná), CSN has its units specialized in galvanized products, such as lamination and coating, with CSN Galvalume products (galvanized steel with an alloy of zinc and aluminum), pre-painted steel and galvanized steel with pure zinc coating, Galvanneal (galvanized steel with Fe-Zn alloy), among others.

The vertical operation in the segment is complemented by the seven steel distribution units of Prada Distribuição, which works with the processing and distribution of flat and long steel, and by the units specialized in the production of metallic packaging of Prada Embalagens, one of the main manufacturers of cans and steel packaging in the country with production units in: São Paulo (SP), where there are assembly, stamping and lithography lines; Resende (RJ), with lithography and stamping lines; and in Uberlândia (MG) and Pelotas (RS), with assembly lines.

In 2021, the Company formalized the process of intention to acquire Metalgráfica Iguaçu S.A. (“Metalgráfica”), focusing on expanding its participation in the packaging sector. This operation, when incorporated, will increase the competitiveness of CSN’s metal packaging business and strengthen the Company’s national chain, mainly in relation to substitute packaging, - the operation was approved by the Administrative Council for Economic Defense (CADE) in April 2022.

**Vertical operations in the steel industry include manufacturing units in Brazil, Germany and Portugal and units specialized in distribution and manufacturing of metallic packaging**





## CSN's installed production capacity/year

### CSN PRESIDENTE VARGAS STEELWORKS – UPV

**5.6 million**  
tons of crude steel

**5.2 million**  
tons of flat steel

**400,000**  
tons of long steel

#### SWT

**1.1 million**  
tons of steel profiles

### CSN PARANÁ

**960 thousand**  
tons of steel to produce:

- **295 k tons** of Galvalume® galvanized steel
- **150 k tons** of sheets and rolls
- **131 k tons** of pre-painted
- **384 k tons** of hot rolled coils

### LUSOSIDER

**550 thousand**  
tons of steel to produce:

- **276 k tons** of galvanized
- **36 k tons** of cold rolled
- **105 k tons** of pickled coil
- **133 k tons** of oiled sheet

### CSN PORTO REAL

**700 thousand**  
tons of steel to produce:

- **354 k tons** of blanks, sheets, and rolls
- **350 k tons** of galvanized steel (including Galvanneal)

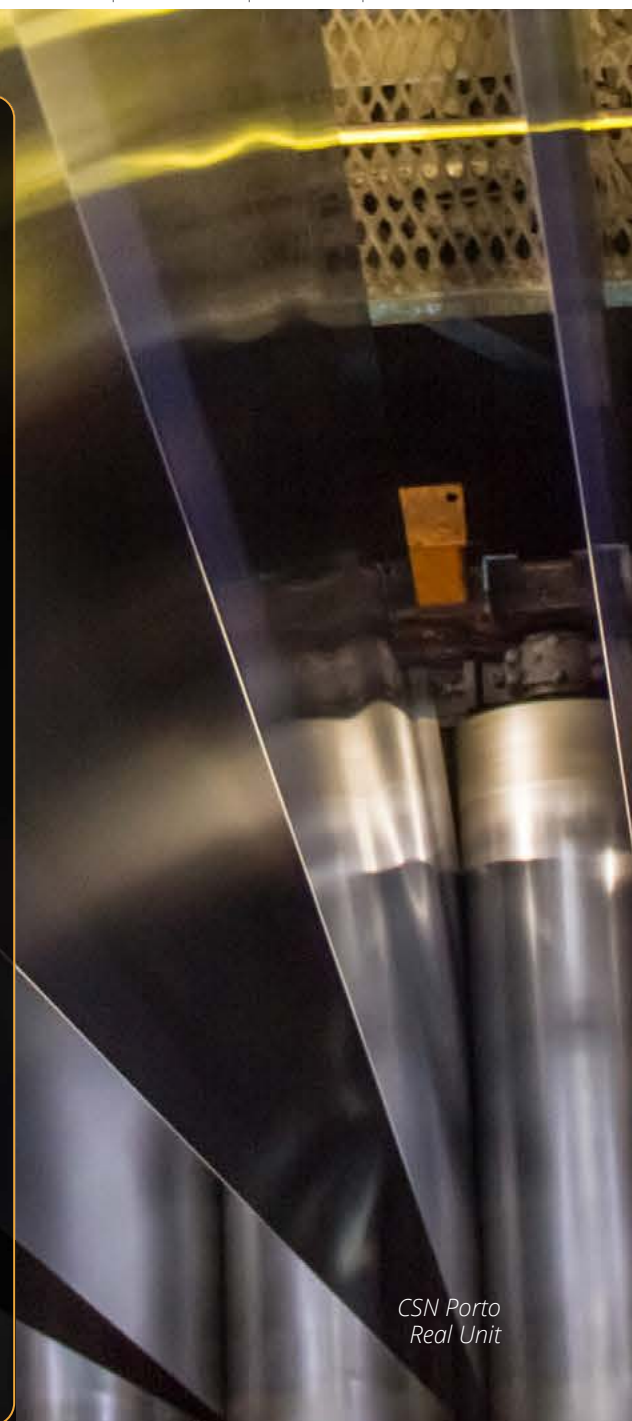
### PRADA EMBALAGENS

**65 thousand**  
tons of steel to produce:

**1 billion** cans

### PRADA DISTRIBUIÇÃO

**600 thousand**  
tons of steel



CSN Porto Real Unit

## Performance in 2021

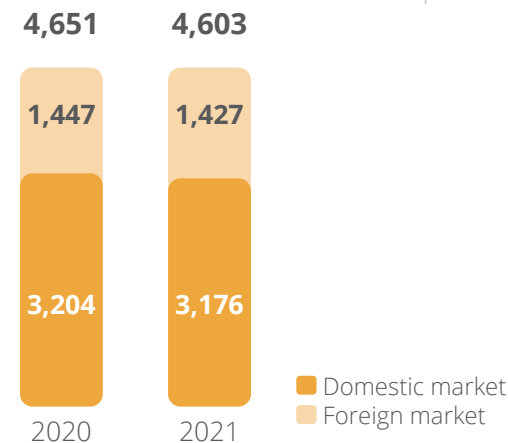
In 2021, the increase in demand for steel and the recovery in prices positively impacted the steel sector. The year was marked by strong domestic demand in the first half and an increase in exports in the second half.

The apparent consumption of steel in the country (local sales and imports) totaled 26.5 million tons, an expansion of 23.5% compared to 2020, according to data from Instituto Aço Brasil. International steel prices remained high throughout the year. The increase was influenced, in addition to the heated demand, by the reduction in production in China.

In this scenario, CSN reached a growth of 16% in the production of crude steel compared to 2020. For rolled steel, there was an increase of 12% compared to the previous year, with 94% represented by flat steel and 6% by the production of long steel. The performance reflects advances in projects to optimize processes and modernize the units.

The combination of the market context with a commercial strategy of diversifying the customer base, taking advantage of the best opportunities and prioritizing added value in sales, allowed the company to register a record net revenue – over R\$30 billion, a growth of 81% compared to the previous year. In 2021, CSN achieved consistent sales growth in the automotive (+26%), white goods (+19%) and industrial (+19%) segments.

Sales volume (thousand tons)



**4,046 kton**  
of crude steel produced at the UPV (+16%)



**3,789 kton**  
of flat laminates produced at the UPV (+12%)

**236 kton**  
of long steel produced at the UPV (+9%)

**811 kton**  
of crude steel produced at SWT

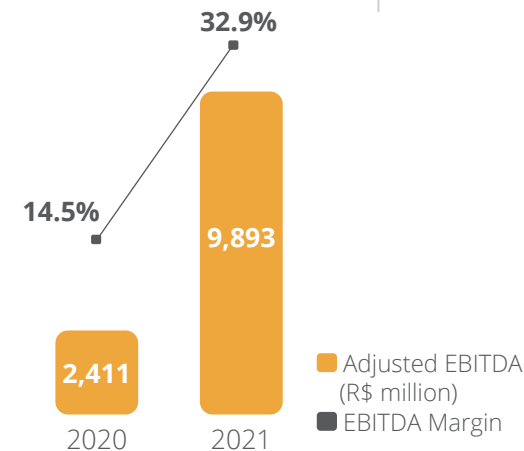
Net revenue of **R\$ 30 billion** from the steel industry



**Record adjusted EBITDA**

R\$ 9.9 billion (+310%)

CSN Siderurgia's EBITDA



In 2021, the steel segment was responsible for **63%\*** of the CSN Group's net revenue

*\*Before eliminations.*



## Industry modernization

Driven by the prospect of growth and steel appreciation, CSN established an investment plan of around R\$6.3 billion until 2026 for the modernization of the steel industry, focusing on reducing operational bottlenecks and increasing volume competitiveness.

The projects considered as priorities will start in 2022 and include, among other actions, the renovation of blast furnaces, coke batteries and sintering at the UPV. Projects to expand and diversify production at the units in Brazil and abroad are also planned.

*Long steel melt shop at UPV*



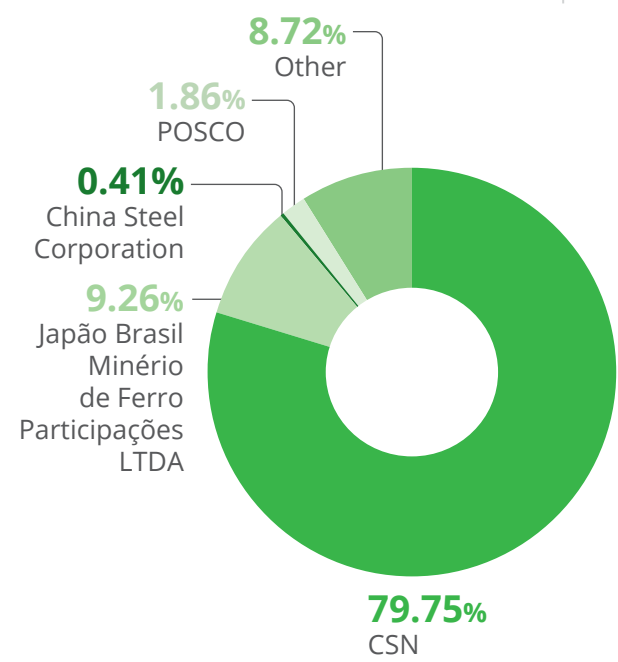
# Mining

CSN Mineração S.A is one of the largest iron ore producers and exporters in Brazil. In February 2021, the company completed its initial public offering (IPO) of shares on B3 – Brasil, Bolsa e Balcão and became a publicly traded company (CMIN3), listed in the Level 2 segment of Corporate Governance.

CSN Mineração's IPO was one of B3's ten largest in volume, with funding of around R\$5.2 billion in the primary and secondary offers. The funds will enable projects to expand productivity and increase operational efficiency, strengthening the commitment to the ESG agenda.

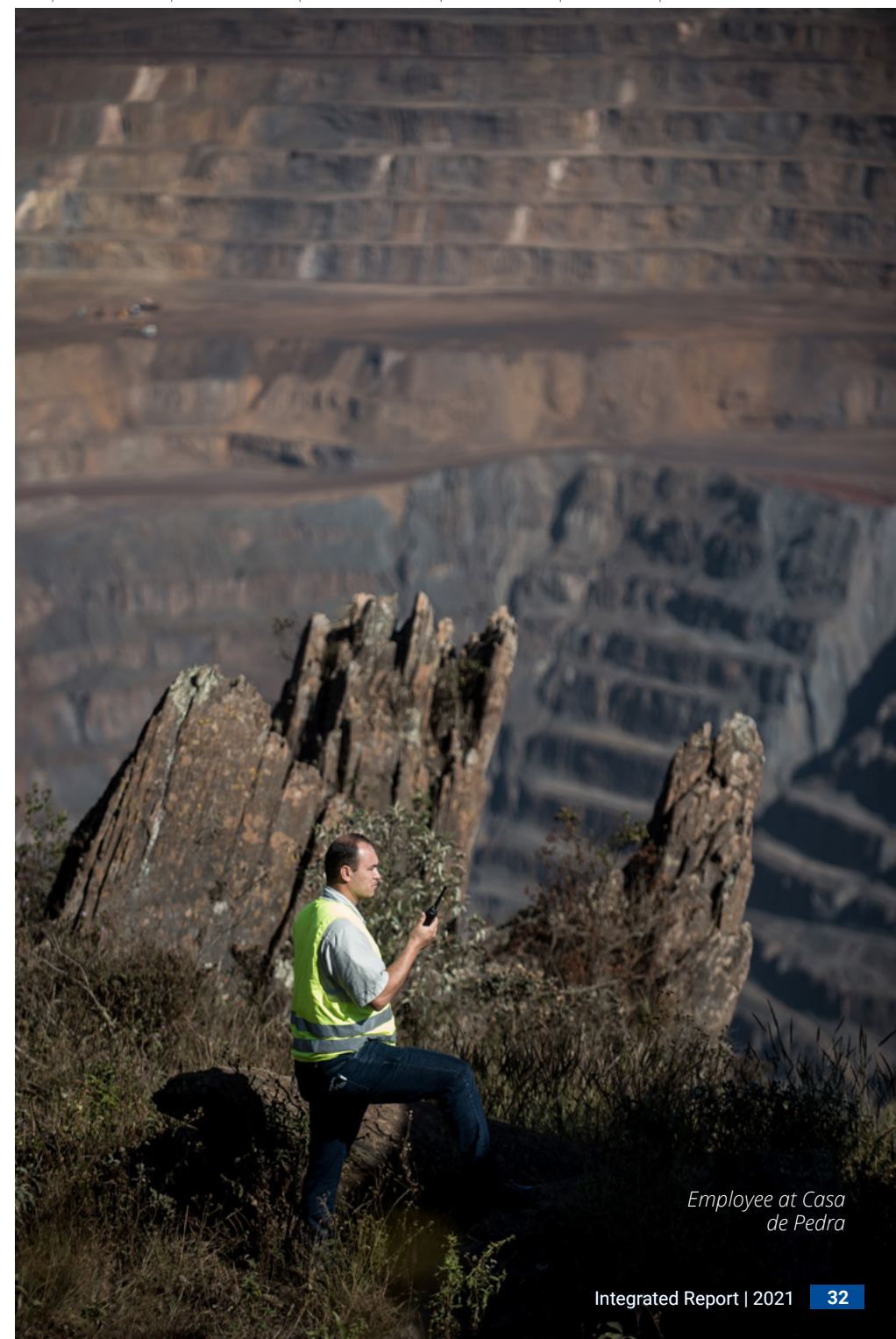
CSN Mineração ("CMIN") has a history of more than 100 years in the production of iron ore. Casa de Pedra reserves reached 2.80 Bt in 2020. Considering the material extracted in 2021 (depletion), the total reserves were 2.77 Bt. In 2022, the mineral reserve was updated by 2.1 Bt, according to the rules established by the SEC (Securities and Exchange Commission). For detailed information regarding the update, [click here](#) and access the Technical Report Summary for Casa de Pedra Operations.

## Shareholding structure of CSN Mineração\*



*\*On May 18, 2022, the Company published via a material fact, filed with the CVM, that the treasury shares of CSN Mineração were cancelled, and the total number of common shares of CSN Mineração increased to 5,485,338,838 shares.*

**With the IPO conclusion, CSN's shareholding in the subsidiary CSN Mineração increased from 87.52% in December 2020 to 78.24% in December 2021**



*Employee at Casa de Pedra*



CSN Mineração is also the lessee of Port of Tecar, a port terminal located in the Port of Itaguaí (Rio de Janeiro) with an installed capacity to ship 45 million tons of iron ore and unload 4 million tons of reducers (coke and coal). It also has a direct shareholding of 18.63% in MRS.

Also part of the CSN Group is Minérios Nacional S.A., comprising the Fernandinho (operational), Cayman and Pedras Pretas (mineral resources) mines, operating in the production and sale of iron ores in the municipality of Rio Acima (MG). The company has an installed capacity of 700 thousand tons per year.

In the northern region of Brazil, state of Rondônia, is located Estanho de Rondônia S.A. ("ERSA") formed by the Santa Bárbara Mine, in the municipality of Itapuã do Oeste, and by the foundry, located in Ariquemes. Cassiterite is extracted in this mining unit. In Ariquemes, the ore is smelted and transformed into tin, grade "A", in the form of ingots. The deposit has demonstrated reserves of almost 30 thousand tons which, with the resources, total more than 60 thousand tons of tin contained in the entire ERSA. The foundry has a nominal capacity to process 3,6 thousand tons of metallic tin annually.



*Pile of iron ore in Casa de Pedra*

The acquisition of ERSA in 2005 was strategic for the CSN Group, as tin is used in the manufacture of tinfoil, a high added value coating and used in packaging. The Company is the only manufacturer of this product in Brazil and one of the five largest in the world





Off-road truck in front of mine - Casa de Pedra Unit

## Performance in 2021

The mining sector was impacted in 2021 by the high volatility of iron ore and sea freight prices. In the first half of the year, the commodity reached historic prices, reaching US\$ 233/ton, driven by the resumption of economic activity, heated demand in China and limited supply at a global level. In the second half of the year, uncertainties regarding greater control over Chinese steel production and inflationary pressures led to market adjustments, with a drop of more than 61% in ore prices.

Within this scenario, the CSN Group produced and purchased a total of 36,156 million tons of iron ore, 99% of which is represented by the subsidiary CSN Mineração. The total growth was 18% compared to the previous year.

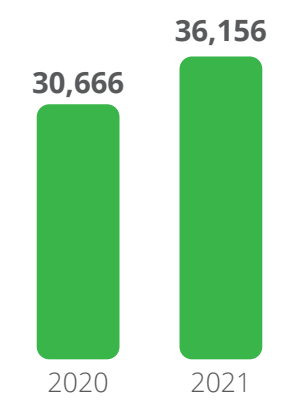
The volume of ore sales also showed growth in the annual comparison. In 2021, CSN Mineração sold 33.2 million tons, an increase of 7% over the previous year. Approximately 15% of this total was sold to the UPV to supply CSN's steel production. With the appreciation of the ore, CSN Mineração also obtained a net revenue of R\$ 18.0 billion and a record EBITDA of R\$ 10.7 billion.

**In 2021, the mining segment was responsible for 38%\* of the CSN Group's net revenue**

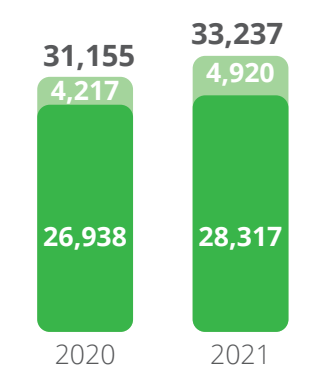
\*Before eliminations.



Total production of iron ore (thousand t)



Sales of CSN Mineração (thousand t)



■ Sales to third-party  
■ Sales to UPV

## Efficiency, growth, and sustainability

CSN Mineração is the second largest iron ore exporter in Brazil and has an investment plan to increase efficiency and production capacity, becoming the fifth largest global producer by 2031. The projects designed to achieve this objective were divided into two phases.

In the first one, until 2026, a total of R\$ 12 billion will be invested, increasing production capacity by 33 million tons per year (Mtpy) and the outflow capacity of the Port of TECAR to 60 million tons per year. In the second phase, between 2027 and 2031, more than 100 Mtpy of premium product with the highest iron content, in addition to the expansion of the Port of TECAR to 130Mtpy of annual capacity.

In both cycles, the initiatives include adaptation and new equipment to improve processes, expand the recovery of tailings and ultrafine, currently deposited in dams and, mainly, the implementation of processing plants for poor itabirite feed reserves, which will produce very high-quality ore with up to 67% iron content.



*Iron ore conveyor belt - Casa de Pedra Unit*

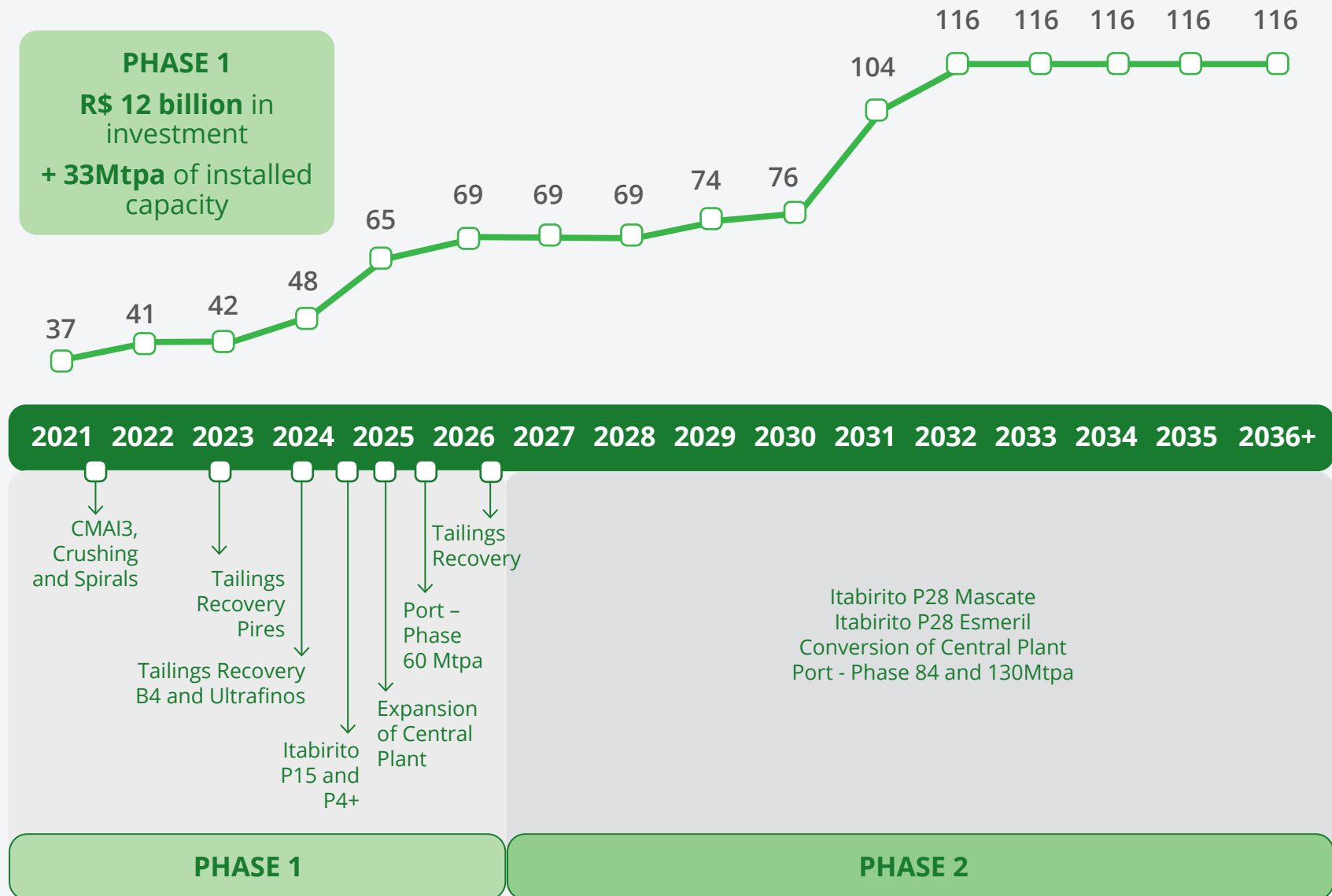
In addition to efficiency and quality gains, the projects will also allow for an improvement in the environmental performance of CSN Mineração S.A., with actions for the recirculation and reuse of water. A pioneer in the use of technologies that result in the possibility of dry stacking the tailings generated in the iron ore production process, since January 2020 the Company is 100% independent from the use of tailings dams.

After significant investments in recent years to raise the reliability level of the dry stacking process of generated tailings, the Company has advanced to a scenario in which 100% of its tailings undergo a dry filtration process and are disposed of in piles, geotechnically controlled, in areas exclusively destined for the process.

With two tailings filtration plants, CSN Mineração S.A. has a total filtration capacity of 9 million tons per year, which will be increased with the entry of new projects.

As a result of the decision to operate independently of the use of dams, the projects to de-characterize the currently existing structures is the natural way, including through new investments in magnetic concentration projects to reprocess the tailings contained therein.

### Expansion Plan of Productive Capacity<sup>1</sup>



<sup>1</sup>. Company estimates (does not include volume of ore purchases, only own production).



# Cements

The year 2021 was marked by the exponential growth of CSN Cimentos, which carried out acquisitions of strategic assets and completed the corporate restructuring that left the company ready to unlock its growth projects.

In August, CSN Cimentos acquired 99.99% of the shares of Elizabeth Cimentos S.A. and 99.97% of the capital of Elizabeth Mineração Ltda., both operating in the Northeast region, especially in Paraíba and Pernambuco, with significant limestone reserves, the main raw material in the cement production process. The acquisition of such equity interests added production capacity to CSN Cimentos of 1.3 million tons per year (Mtpy), raising CSN Cimentos' total annual capacity from 4.7 Mtpy to 6 Mtpy.

**In August 2021, the acquisition of Elizabeth Cimentos increased the production capacity of CSN Cimentos from 4.7 Mtpy to 6 Mtpy. The new operations became the CSN Alhandra unit**





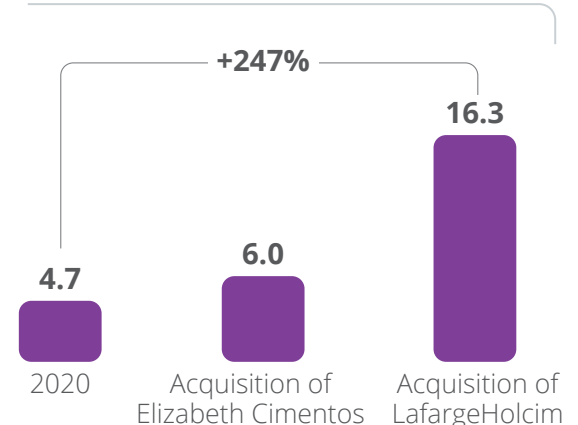
Limestone Pile - Arcos Unit

In September 2021, CSN Cimentos started the process of purchase and sale of shares through which it intends to acquire 100% of the shares issued by LafargeHolcim (Brasil) S.A. This operation is still subject to approval by the competition authority – Administrative Council for Economic Defense (CADE).

Once the acquisition of LafargeHolcim (Brasil) S.A. is approved, CSN Cimentos' installed capacity will increase from 6 Mtpy to 16.3 Mtpy through cement plants located in the Southeast, Northeast, and Midwest, in addition to limestone reserves and concrete and aggregates units. The new units join the factories of CSN Cimentos located in Volta Redonda (Rio de Janeiro) and Arcos (Minas Gerais) and Elizabeth Cimentos, located in Alhandra (Paraíba).

CSN Cimentos also has a mining unit in Arcos (MG). The Bocaina Mine, an asset from which 6 million tons of limestone are extracted per year, is integrated into the CSN Group's steelmaking process as it supplies essential fluxes for the production of the UPV. The tailings from the flux crushing process are also processed in a pulp thickening plant and decanted into bays, with the dolomite fines sold as agricultural correctives and the calcitic limestone fines used for the production of cement at the CSN Cimentos Plant integrated with the mine.

**Evolution of installed capacity (Mtpy)**



**Once approved, the acquisition of LafargeHolcim will increase CSN Cimentos' installed capacity to 16.3 Mtpy through plants in the Southeast, Northeast and Midwest regions, limestone reserves and concrete and aggregates units**

## Elizabeth Cimentos

**R\$ 1.08 billion** invested

**1.3 million**  
tons/year of installed capacity

**150 million**  
tons of limestone reserves

**1 production** unit

**1 mining**

Cement factory - Arcos Unit

## LafargeHolcim

Business valued at

**US\$ 1.02 billion**

**5 integrated plants**  
(4 in the Southeast and 1 in the Northeast)

**4 grinding** stations (Southeast, Northeast, and Midwest)

**1 mixer** in Rio de Janeiro

**6 aggregate** plants

**19 concrete** plants

**215 franchise**  
and retail channels



## Performance in 2021

The volume sold by CSN Cimentos in 2021 grew by 18% compared to the previous year, totaling 4.7 million tons. This performance is above the average growth of the market in the annual comparison, which was 6.6%, according to data from the National Cement Industry Union (SNIC).

Self-construction remains one of the main growth drivers in cement consumption in the country. Thus, the strategy of prioritizing the sale of bagged products via small and medium-sized retailers has provided positive commercial results.

With this performance, CSN Cimentos obtained a net revenue of R\$ 1.4 billion in 2021, a growth of 40% in the annual comparison. Operations also achieved a record EBITDA of R\$531 million, 96% higher than in 2020.



**Cement sales volume (thousand tons)**



*Cement packaging process - Arcos Unit*

**In 2021, the cement segment was responsible for 3%\* of the CSN Group's net revenue**

*\*Before eliminations.*







# Logistics

Operations in the logistics segment increase the competitiveness and efficiency of CSN's business, integrating different types of modes (highways, railways, and ports) for the production flow.

*Transnordestina Locomotive*



## Railroads

In the railway sector, the Company holds a total direct and indirect interest of 33.22% (18.64% direct and 14.58% indirect through CSN Mineração), of the total capital stock of MRS Logística. MRS is a logistics operator that manages a 1,643 km rail network in the states of Minas Gerais, Rio de Janeiro and São Paulo, a region that concentrates around half of Brazil's GDP. Today, the company is among the largest freight railroads in the world, with production almost four times higher than that recorded in the 1990s. Almost 20% of all that Brazil exports and a third of all the cargo transported by trains in the country passes through the MRS tracks. MRS operates with the transport of cargo such as ore, coal, and coke (heavy haul). In 2021, approximately 63% (107.2 million tons) of the total cargo transported by MRS was made of these materials.

The services provided by MRS are essential to guarantee the supply of raw materials such as iron ore, coal, and coke, consumed in the UPV and the export flow of the ore produced by CSN Mineração and the steel produced in Volta Redonda by the UPV.

CSN also counts in its logistics portfolio with Transnordestina Logística S.A. ("TLSA"), holder of the concession for the construction and operation of the Nova Transnordestina railroad, a company in which CSN holds a 47.26% interest in the capital stock. With a length of 1,753 km, the section under construction will connect the railway terminal in Eliseu Martins (Piauí) to the ports of Suape (Pernambuco) and Pecém (Ceará).

Ferrovia Transnordestina Logística S.A. ("FTL"), a company in which CSN holds a 92.71% interest in the capital stock, has the concession of an operational railway network that connects the states of Maranhão, Piauí and Ceará along 1,237 km.

**In 2021, FTL transported 2.9 million tons of products, of which 1.5 million were cellulose, 621 thousand were fuel and 322 thousand were cement**



## Ports

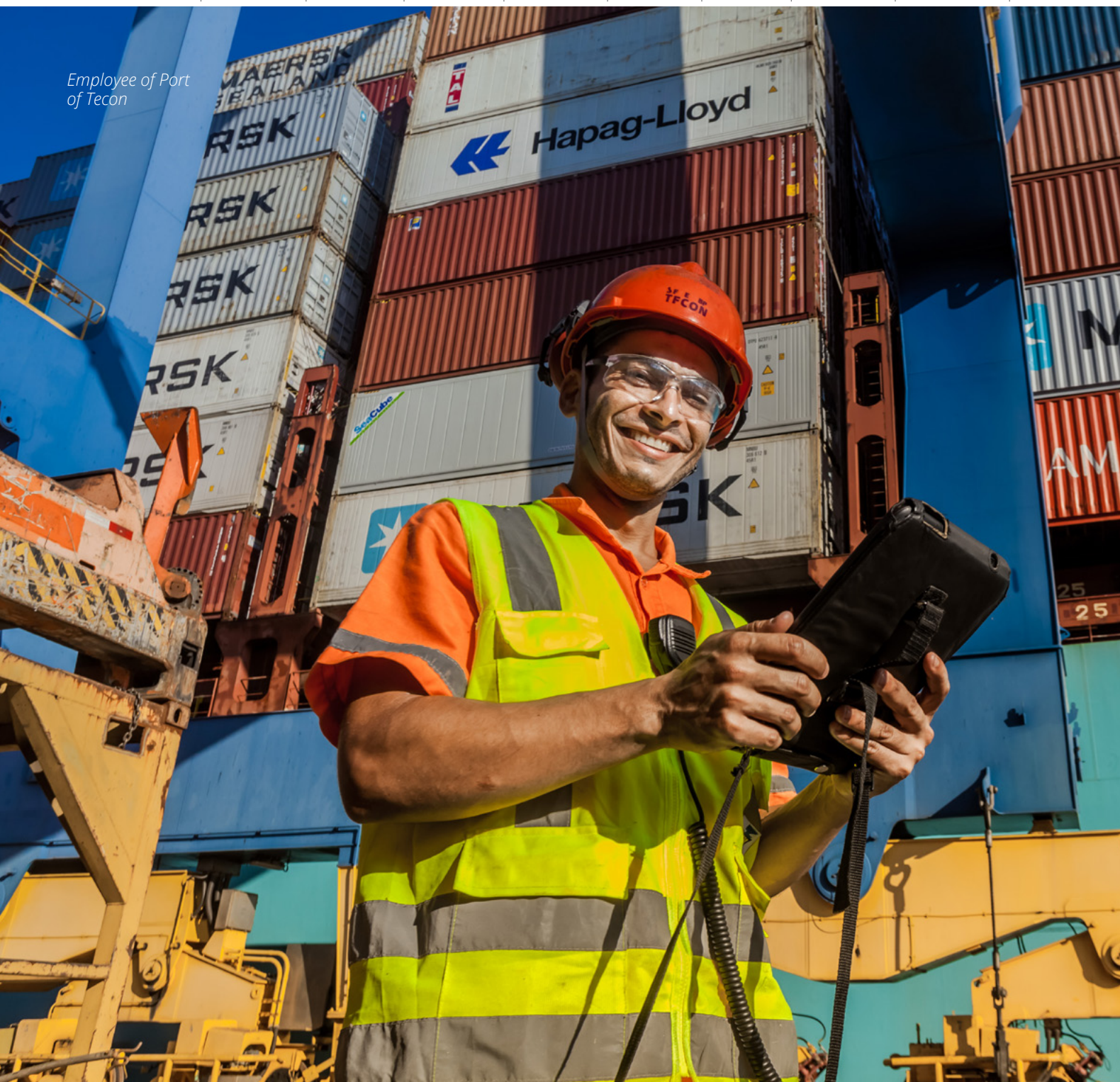
The Port of TECON is the largest container handling terminal in the state of Rio de Janeiro and one of the largest in Brazil. Located in Itaguaí (Rio de Janeiro) and managed by Sepetiba Tecon S.A., the asset is strategic for the shipment of CSN's steel products and has an annual capacity of 660 thousand TEUs (Twenty-Foot Equivalent Unit).

The Port of Tecar, in Itaguaí (Rio de Janeiro), is managed by CSN Mineração and is connected to the MRS rail terminal. The asset has the capacity to export 45 million tons of iron ore per year and can unload up to 4 million tons of reducers per year, with the possibility of operating other types of solid bulk. Tecar's expansion plan envisages increasing export capacity to 60 Mtpy in phase I, reaching another 130Mtpy in phase II.



**660 thousand TEUs**

is the annual capacity of the Port of TECON



Employee of Port of Tecon

## Performance in 2021

The volume of containers handled at Tecon decreased by 22%, due to the crisis in the logistics segment triggered by the Covid-19 pandemic. To mitigate the effect of this extraordinary condition, the terminal sought new markets and started to operate sugar shipments, in addition to new bulk, including solid bulk, limestone, ore pellets, gypsum, dolomite and large general cargo projects.

With this strategy, the CSN Group's port logistics revenue reached a record amount of R\$ 311 million, 21% higher than in 2020. The EBITDA recorded was also the highest in history, totaling R\$ 91 million, an increase of 22% in the annual comparison.

In rail logistics, both net revenue and EBITDA showed an annual growth of 23%, totaling R\$1,839 million and R\$883 million, respectively.



**In 2021, the logistics segment was responsible for 4.5%\* of the CSN Group's net revenue**

*\*Before eliminations.*



# Energy

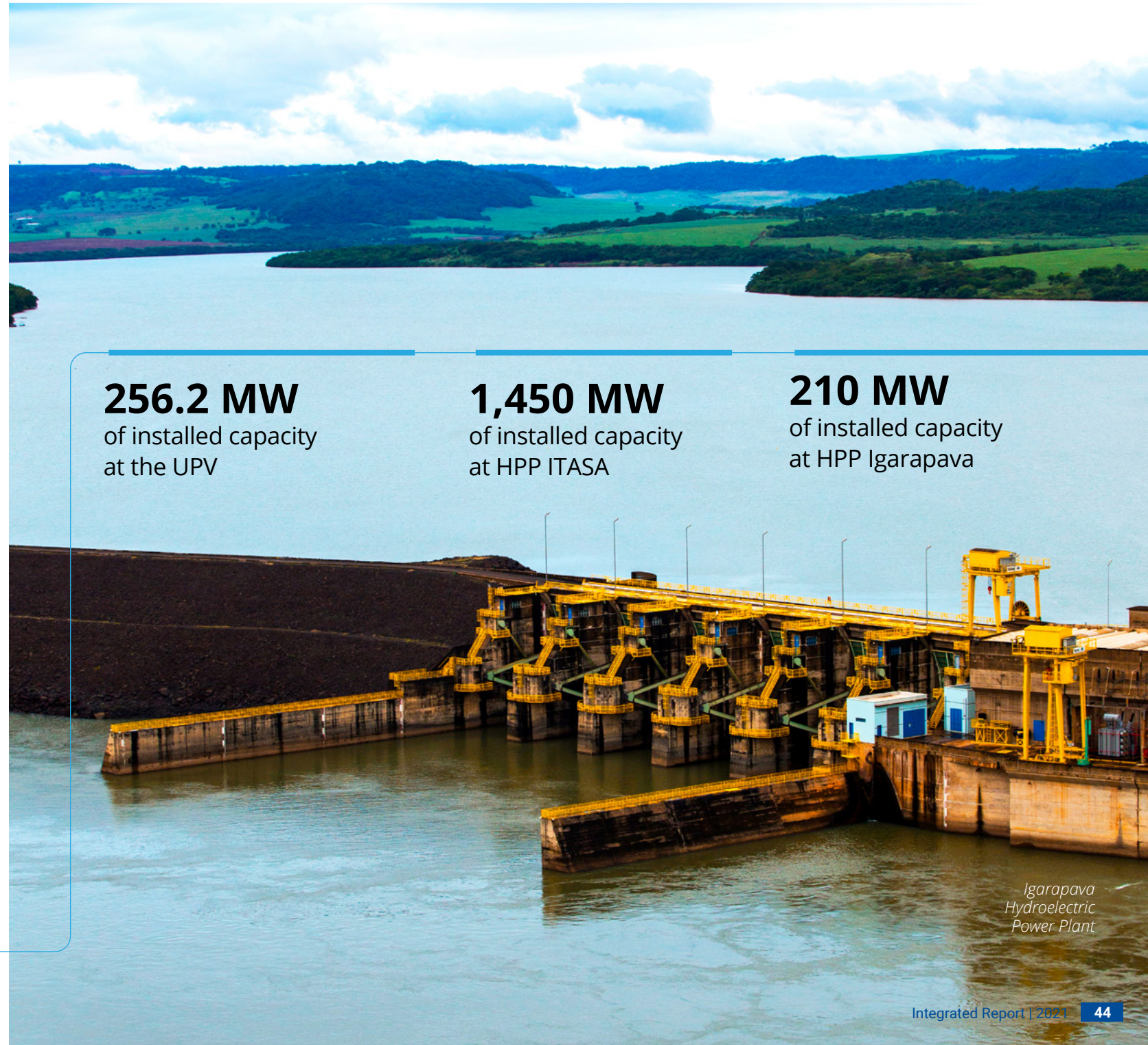
Electric energy consumption is intensive in CSN's business and, therefore, the management and investment in generation assets is part of the growth strategy and consolidation of a sustainable business model.

At the Presidente Vargas Steelworks (UPV), in Volta Redonda (RJ), there is a Thermolectric Cogeneration Plant (CTE1 and CTE2) with an annual installed capacity of 10 MW and 235 MW, which uses waste gases from steel production as fuel. Since 2014, there has also been a Top Recovery Turbine (TRT), located in Blast Furnace 3 of the UPV, which takes advantage of the gas outlet pressure to generate energy and has an installed generation capacity of 22 MW.

CSN also holds a 48.75% interest in the capital stock of Itá Energética S.A., which in turn holds an interest in the Itá Hydroelectric Power Plant ("ITASA"), located on the border between Santa Catarina and Rio Grande do Sul, and 17.92% stake in the investment in the Igarapava Hydroelectric Power Plant consortium, located in the city of Conquista (Minas Gerais).

**In 2021, the energy segment was responsible for 0.5%\* of the CSN Group's net revenue**

*\*Before eliminations.*



**256.2 MW**  
of installed capacity  
at the UPV

**1,450 MW**  
of installed capacity  
at HPP ITASA

**210 MW**  
of installed capacity  
at HPP Igarapava

*Igarapava  
Hydroelectric  
Power Plant*

*Igarapava hydroelectric dam*

The management of the interest in energy generation assets is carried out by CSN Energia S.A. ("CSN Energia"), also responsible for the sale of energy in synergy with the assets installed in the UPV. The company also interfaces with regulatory bodies and agents in the national electricity sector, such as the National Electric Energy Agency (ANEEL), the National System Operator (ONS) and the Electric Energy Commercialization Chamber (CCEE).

In 2021, the energy segment posted net revenue of R\$223 million and an Adjusted EBITDA of R\$62 million, which represents an increase of 29% and 93%, respectively, compared to 2020.

The CSN Group's growth strategy provides for investment to ensure, by 2027, 100% self-generation of energy to support expansion in the mining, steel and cement segments and the consumption of energy exclusively from renewable sources.

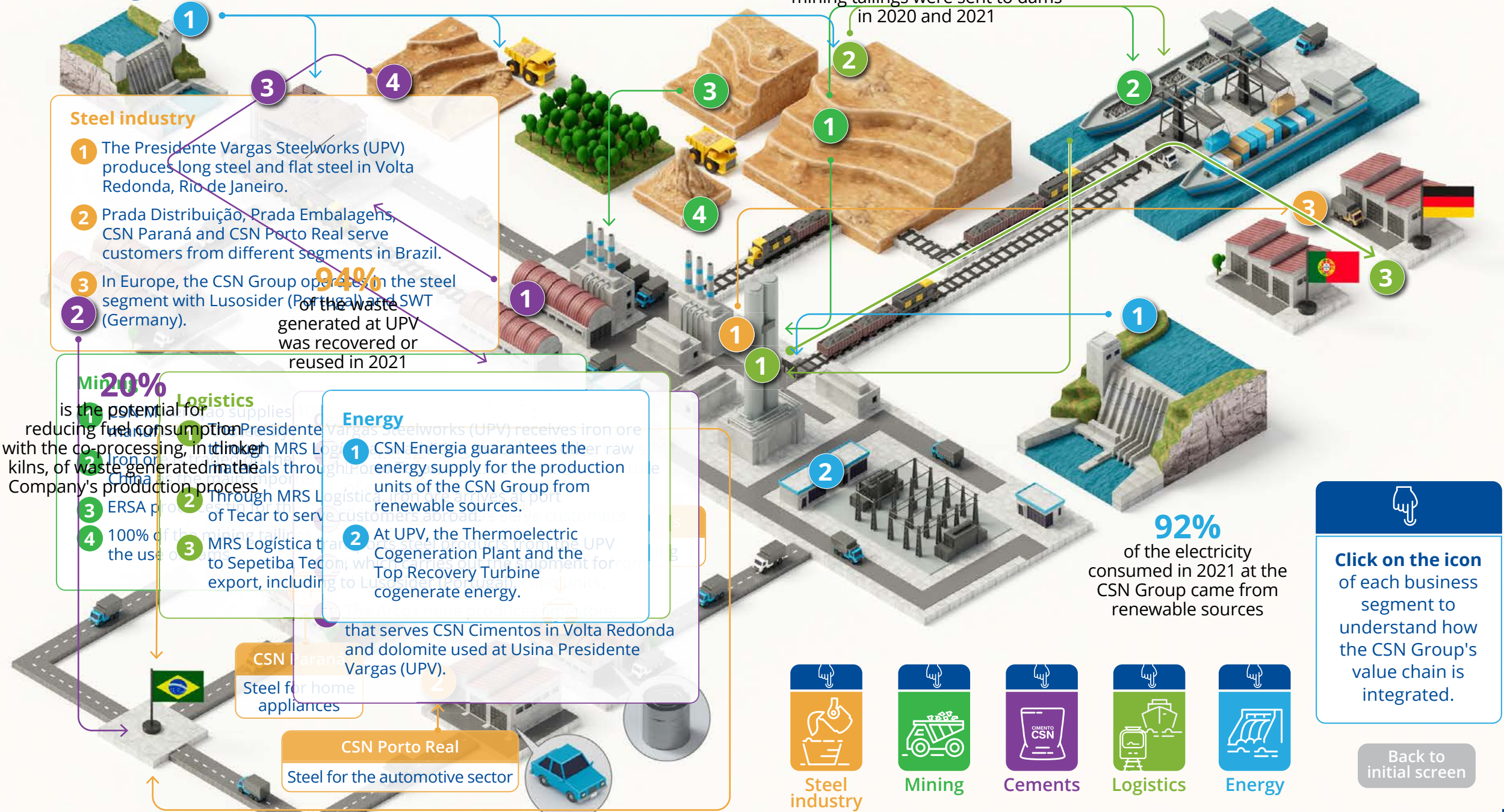
## Acquisition in 2022

In April 2022, CSN Cimentos and CSN Energia entered into a purchase and sale agreement with the investment fund Brookfield Americas Infrastructure, for the acquisition of Santa Ana Energética. Completion of the transaction is subject to approval by regulatory and competition authorities (CADE). The company is the holder of a concession to operate the small hydroelectric power plant (SHP) Santa Ana, in Santa Catarina, as well as Topázio Energética, and indirectly, Brasil Central Energia, operator of the SHP Sacre II, in Mato Grosso.

The acquisition aimed to support and strengthen CSN's business expansion strategy, through investments in renewable energy and self-production for greater competitiveness of its businesses. Altogether, the PCH operations will add 32.80 MW to the installed capacity of the CSN Group.



# Integrated Value Chain



## Steel industry

- 1 The Presidente Vargas Steelworks (UPV) produces long steel and flat steel in Volta Redonda, Rio de Janeiro.
- 2 Prada Distribuição, Prada Embalagens, CSN Paraná and CSN Porto Real serve customers from different segments in Brazil.
- 3 In Europe, the CSN Group operates in the steel segment with Lusosider (Portugal) and SWT (Germany).

**94%**  
 of the waste generated at UPV was recovered or reused in 2021

## Logistics

- 1 is the potential for reducing fuel consumption with the co-processing, in the kilns, of waste generated in the Company's production process.
- 2 Through MRS Logística, 100% of the mining tailings are transported to Sepetiba Tech export, including to Lusosider (Portugal).

## Energy

- 1 CSN Energia guarantees the energy supply for the production units of the CSN Group from renewable sources.
- 2 At UPV, the Thermolectric Cogeneration Plant and the Top Recovery Turbine cogenerate energy.

that serves CSN Cimentos in Volta Redonda and dolomite used at Usina Presidente Vargas (UPV).

**Zero**  
 mining tailings were sent to dams in 2020 and 2021

**92%**  
 of the electricity consumed in 2021 at the CSN Group came from renewable sources

Click on the icon of each business segment to understand how the CSN Group's value chain is integrated.

- Steel industry**
- Mining**
- Cements**
- Logistics**
- Energy**

CSN Paraná  
 Steel for home appliances

CSN Porto Real  
 Steel for the automotive sector

Back to initial screen

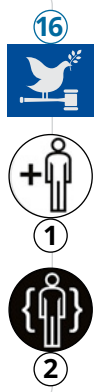


# Corporate governance



The corporate governance structure and management policies and processes drive the strategic conduct of the CSN Group with a view to long-term growth and value creation, the management of financial and non-financial risks and the contribution of all businesses to the sustainable development of society and the environment.

CSN Cimentos Call Center



The Company's **Executive Board** leads the general conduct of business guided by the strategic guidelines and policies established by the Board of Directors. It is composed of seven (7) executive directors with complementary competences, defined by the Board of Directors.

The **Board of Directors**, the highest governance body, is responsible for establishing strategic guidelines and approving the Company's investment and expansion plans, through organic growth or acquisitions. The collegiate consists of five members elected by the shareholders at the General Meeting - all with knowledge and experience to deal with and deliberate on economic, social, and environmental issues that have an impact on business or corporate strategy, with three members of the Board being independent and one of them is a representative of the employees, in line with the best governance practices.

The Board's work is supported by statutory and non-statutory committees specializing in different topics, which analyze matters relevant to their areas of activity and make recommendations for the Board of Directors' deliberation (learn more on the side).

### Audit Committee

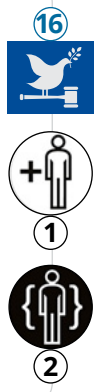
Formed exclusively by independent members, elected by the Board of Directors from among its members, with a term of office of two years, reelection being permitted, it advises the Board of Directors in assessing the quality of internal controls, financial statements, management of risks and compliance, and the Company's internal audit and investigations program, as well as the work and independence of the external auditors.

### ESG Committee

Supports deliberation on environmental, social and governance (ESG) risks. It covers topics such as practices and technologies to act in line with the sustainability concepts and material themes of the CSN Group, such as diversity and inclusion, risks and opportunities associated with climate change, waste management, water & effluents, biodiversity, territories, health & safety, value chain and governance & compliance.





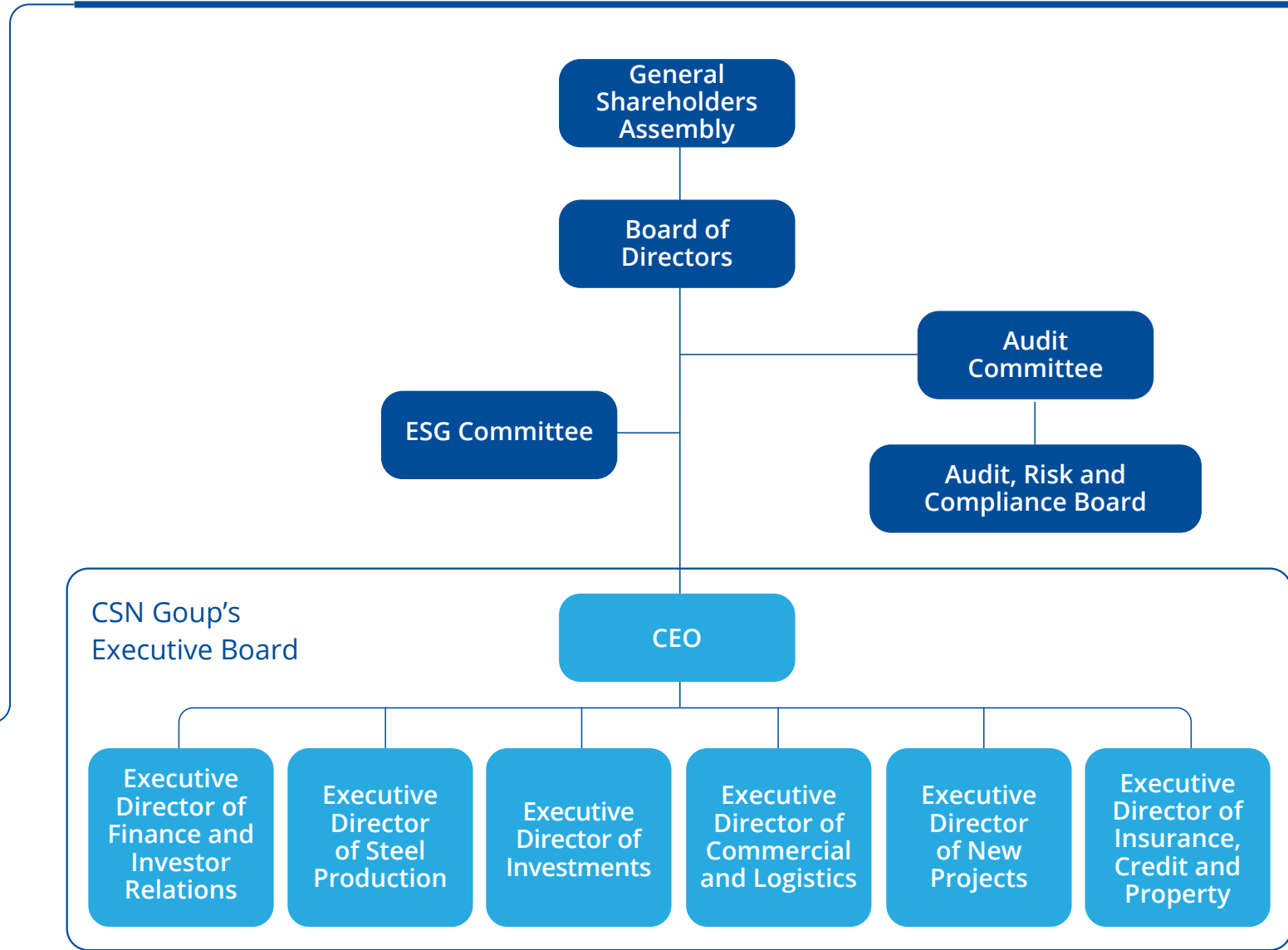


There is also the **Ethics, Risks and Compliance Committee**, responsible for evaluating the most relevant cases and for the deliberation regarding such cases, when they are related to violations of the Code of Ethics and other internal policies and rules of the Company, reported by the Audit, Risk and Compliance Board. The Audit, Risk and Compliance Board reports to the Audit Committee the main cases of complaints and investigations, including those evaluated by the Ethics, Risks and Compliance Committee.

The Company also has a **Fiscal Council**, which is non-permanent and installed at the request of shareholders. The members (three full members and three substitutes) are elected by the General Meeting and are responsible for supervising the acts and legal compliance by the members of the Board of Directors and the Executive Board.

**The Company's management is the responsibility of the Executive Board and the Board of Directors**

## Governance structure



# Senior Management Composition

## EXECUTIVE BOARD

- Benjamin Steinbruch (68 years)** — CEO
- Marcelo Cunha Ribeiro (44 years)** — Executive Director of Finance and Investor Relations
- Milton Picinini Filho (62 years)** — Executive Director of Steel Production
- Stephan Heinz Josef Victor Weber (60 years)** — Executive Director of Investments
- Luis Fernando Barbosa Martinez (58 years)** — Executive Director of Commercial and Logistics Area
- Eduardo Guardiano Leme Gotilla (41 years)** — Executive Director of New Projects
- David Moise Salama (55 years)** — Executive Director of Insurance, Credit and Property

## BOARD OF DIRECTORS

- Benjamin Steinbruch (68 years)** — Chairman of the Board of Directors
- Fabiam Franklin (54 years)** — Effective member
- Yoshiaki Nakano (77 years)** — Independent member
- Antônio Bernardo Vieira Maia (62 years)** — Independent member
- Miguel Ethel Sobrinho (75 years)** — Independent member

## AUDIT COMMITTEE

- Yoshiaki Nakano (77 years)** — Independent member - President
- Antonio Bernardo Vieira Maia (62 years)** — Independent member
- Miguel Ethel Sobrinho (75 years)** — Independent member

## FISCAL COUNCIL<sup>1</sup>

- Angélica Maria de Queiroz (65 years)** — Chairwoman of the Fiscal Council
- André Coji (58 years)** — Effective member
- Valmir Pedro Rossi (60 years)** — Effective member
- Beatriz Santos Martini (67 years)** — Alternate member
- Nilton Maia Sampaio (70 years)** — Alternate member
- Andriei José Beber (48 years)** — Alternate member

1. Current composition, according to the election held at the last Annual General Meeting, on 4/29/22.

## ESG COMMITTEE<sup>2</sup>

- Victoria Steinbruch (29 years)** — Advisor to the Presidency – Chairwoman of the ESG Committee
- Felipe Steinbruch (28 years)** — Head of CSN Inova – Vice President of the ESG Committee
- Alberto de Senna Santos (39 years)** — Advisor to the Presidency - Effective member
- Claudia Maria Sarti (52 years)** — Corporate Legal, Governance and Capital Market Manager - Effective member
- Edvaldo Araújo Rabelo (63 years)** — Director of Operations of CSN Cimentos – Effective member
- Enéas Garcia Diniz (61 years)** — Superintendent Director of CSN Mineração – Effective member
- Harry Morgenstern (70 years)** — Director of Supplies and Investments - Effective member
- Helena Brennand Guerra (45 years)** — Director of Sustainability and HSE - Effective member
- Leonardo de Abreu (43 years)** — People and Management Director - Effective member
- Marcelo Cunha Ribeiro (44 years)** — Executive Director of Finance and Investor Relations – Effective member
- Milton Picinini Filho (62 years)** — Executive Director of Steel Production - Effective member
- Mônica Garcia Fogazza Rego (53 years)** — Chief Executive Officer of CSN Foundation – Effective member
- Nuno Francisco Bruno Saramago (51 years)** — Director of Logistics Planning and Special Sales - Effective member
- Pedro Barros Mercadante Oliva (36 years)** — Executive Director of Finance of CSN Mineração – Effective member
- Rogério Gonçalves Pizeta (51 years)** — Energy Director - Effective member
- Ubaldo Marques Silva Filho (44 years)** — Procurement Director - Effective member

2. Current composition, according to the last update approved by the Board of Directors on 5/4/22.

CSN's business management is also supported by executive committees, which advise the Board in monitoring strategic and operational issues, in evaluating action plans to mitigate risks and in business development.

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### Crisis Committee

Its objective is to minimize the effects of a crisis or adopt preventive measures for events that could trigger a crisis with impacts on employees, operations, transactions, financial results, and the Company's reputation.



### Occupational Health and Safety Committees

They ensure the health and safety of their own employees and third parties through verification, planning and promotion of continuous improvement of the Management System. The committees are deployed across the entire organizational line, from executive to operational levels. They are: Corporate and Directive Committee on Occupational Health and Safety; Central Safety Committee – Business Unit; Leadership Committee and Technical Groups for critical risk assessment and compliance with Regulatory Standards – NRs (10, 12, 13, 20, 33 and 35).



### Internal Environmental Management Committee

It seeks the continuous improvement of the Environmental Management System, as well as detecting and preventing possible environmental impacts.



### Investment Committee

Advisory body to support the Chief Executive Officer, with the objective of analyzing, validating, and prioritizing the investment projects of the CSN Group.



### People, Management and Career & Succession Committee

It works with the objective of promoting a strategy for attracting and developing people in the CSN Group, implementing, and strengthening the performance management process, as well as evaluating and developing talents with the potential to occupy leadership positions.



### Portfolio Committee

Advisory committee to support CSN Inova Ventures, whose objective is to analyze, validate and prioritize CSN Group's venture capital investment projects.

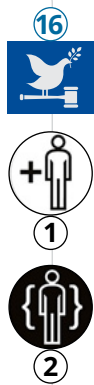


CSN Faria Lima office

# Business governance

The CSN Group's governance structure has evolved in order to decentralize decisions and give greater autonomy to the management of the business of each of the Company's operating segments.

In this sense, CSN Mineração S.A. and CSN Cimentos S.A. have their own Boards of Directors and Executive Boards. CSN Mineração S.A. has an independent Audit Committee.



## COMPOSITION OF THE BOARD OF DIRECTORS OF CSN MINERAÇÃO S.A.<sup>1</sup>

- Benjamin Steinbruch — Chairman of the Board of Directors
- Marcelo Cunha Ribeiro — Effective member
- Victoria Steinbruch — Effective member
- Helena Olímpia de Almeida Brennand Guerra — Effective member
- Hiroshi Akiba — Effective member
- Miguel Ethel Sobrinho — Independent effective member
- Yoshiaki Nakano — Independent effective member
- Daisuke Hori — Alternate member

1. Current composition, as last updated at the Ordinary General Meeting of 4/29/22.

## COMPOSITION OF THE STATUTORY BOARD OF CSN MINERAÇÃO S.A.

- Enéas Garcia Diniz — Managing Director
- Ricardo Grossi Neves — Operations Director
- Hironori Makanae — Strategic Planning Director
- Pedro Barros Mercadante Oliva — Chief Financial and Investor Relations Officer
- Otto Alexandre Levy Reis — Investment Director

## COMPOSITION OF THE AUDIT COMMITTEE OF CSN MINERAÇÃO S.A.<sup>2</sup>

- Angélica Maria de Queiroz — Independent President of the Audit Committee
- Yoshiaki Nakano — Independent effective member
- Beatriz Santos Martini — Independent effective member

2. Current composition, according to the election held at the Board of Directors' Meeting on 5/4/22.

## COMPOSITION OF THE BOARD OF DIRECTORS OF CSN CIMENTOS S.A.

- Benjamin Steinbruch — Chairman of the Board of Directors
- Yoshiaki Nakano — Independent effective member
- Miguel Ethel Sobrinho — Independent effective member
- Helena Olímpia de Almeida Brennand Guerra — Effective member
- Victoria Steinbruch — Effective member

## COMPOSITION OF THE STATUTORY BOARD OF CSN CIMENTOS S.A.

- Marcelo Cunha Ribeiro — Superintendent and Investor Relations Officer
- Edvaldo Araújo Rabelo — Operational Director
- Luis Fernando Barbosa Martinez — Commercial Director

## Evaluation and remuneration

The processes and mechanisms for evaluating the performance of the members of the Board of Directors and advisory committees are not formalized in the CSN Group but occur at least with each election of its members. When the election of the members is decided by the competent bodies, the performance and attendance at meetings during the previous term (if applicable), as well as their experience and level of independence are taken into account.

In addition, the Board of Directors has full autonomy to discuss the individual performance of each member and, therefore, propose improvement measures during the term of office.

The performance of the Directors is evaluated based on the recognition of specific works, projects or differentiated goals – financial or otherwise. The evaluation process is supported by the Staff & Management Department and its result is taken into account for the retention and promotion of executives in their respective positions.

Regarding the Audit Committee, there is an annual performance self-assessment procedure, based on an individual questionnaire that is part of the minutes of the body's meeting. Individual responses are discussed among all members. As a result of

this self-assessment and the discussions held, improvement measures are implemented depending on need. The Audit Committee's last performance review was carried out on May 25, 2022.

The remuneration of the Board of Directors and the Audit Committee is fixed and defined based on market practice. Regarding the remuneration of the Fiscal Council, this is defined by the General Shareholders' Meeting and is based on the amount of 10% of the average value of the fixed remuneration of the Executive Officers, in accordance with the legal provision.

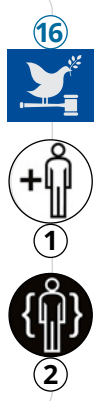
The remuneration of Executive Directors and non-statutory directors is based on market practice, es. Compensation for performance is determined based on the assessment of the achievement of the financial and non-financial goals established by the strategic and budgetary planning.

The amounts are defined based on biennial or triennial market studies carried out by consulting firms specializing in remuneration and are approved by the Chairman of the Board of Directors. There is no share-based compensation plan for the Board of Directors and the Statutory Executive Board.



*Employee at the Santo Amaro unit*

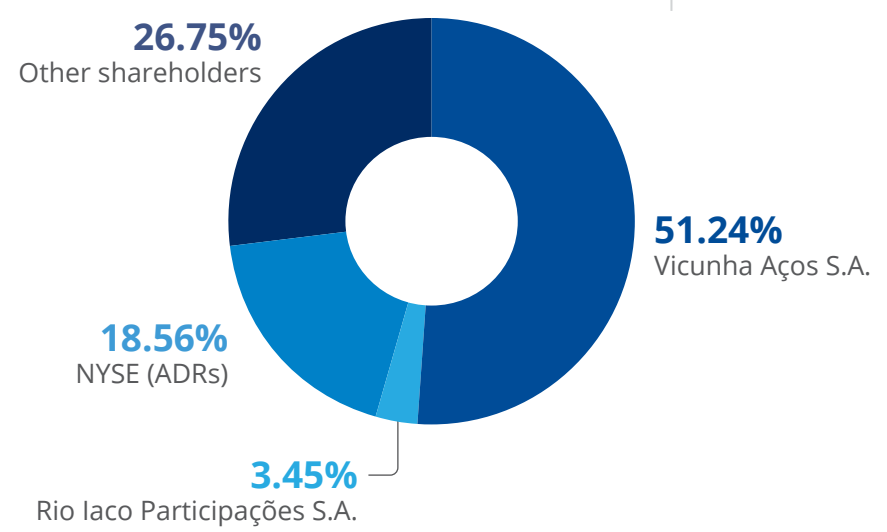
**The performance evaluation of governance members takes place at least at each election for the respective bodies**



## Ownership structure

CSN is a publicly traded company with shares listed on the B3 – Brasil, Bolsa e Balcão and the New York Stock Exchange (NYSE). The capital stock, fully subscribed and integrated, is divided into common and book-entry shares, with no par value. Each common share gives the right to one vote in the resolutions of the General Meeting – the controlling group owns 54.689% of the company's voting capital.

Shareholding structure of CSN\*



*\*On May 19, 2022, the Company published via a material fact, filed with the CVM, that the Company's treasury shares were cancelled, and the Company's total common shares now total 1,236,093,947 shares.*

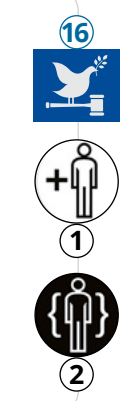


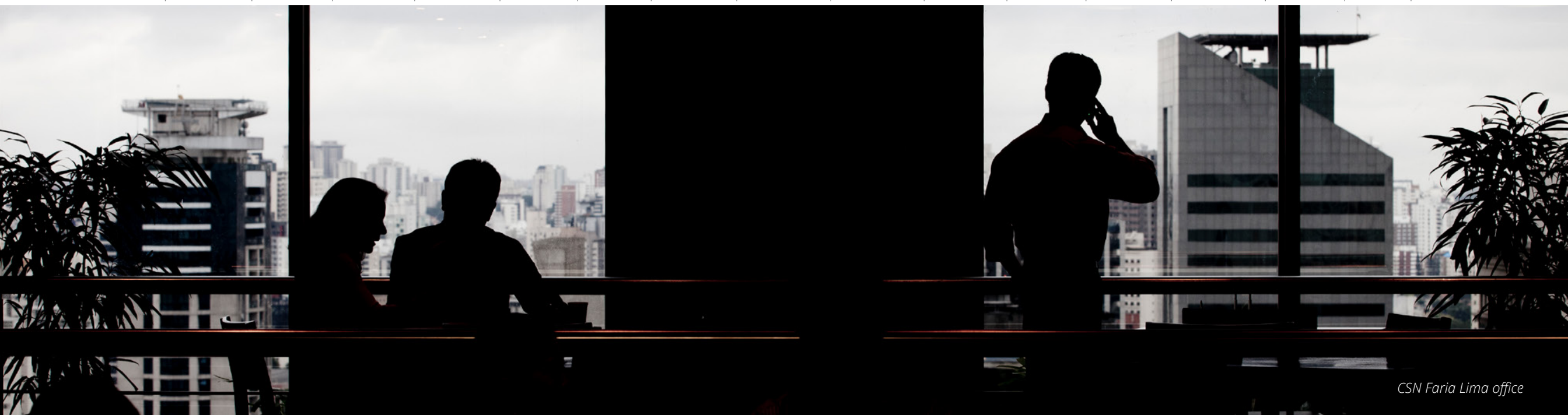
Employee at CSN Faria Lima office

[Click here to learn more about CSN's structure and shareholding composition](#)



*Sale of shares: On May 7, 2021, CSN sold 56,000,000 preferred shares issued by Usinas Siderúrgicas de Minas Gerais S.A. ("Usiminas"), reducing its direct and indirect interest to 10.07% of preferred shares.*





CSN Faria Lima office

# Financial management

In 2021, CSN achieved record results in its history. The business strengthening strategy, associated with the control and reduction of financial leverage levels, enabled growth in all sectors of activity and the structuring of a basis for investment in projects aimed at increasing the Company's efficiency, productivity, and competitiveness.

In 2021, CSN's total revenue was the highest ever recorded – R\$48 billion. EBITDA also reached a record level of R\$22 billion. These results reflect, in addition to the successful materialization of the corporate strategy, the

favorable pricing environment and the increase in sales volume in all segments. Revenue growth also contributed to the increase in added value generated and distributed, which totaled R\$27.0 billion in 2021.

Net income for 2021 reached R\$13.6 billion, an increase of more than 217% compared to the previous year. In addition to the positive operating performance, the result was driven by gains in the public offering of shares of CSN Mineração and the sale of part of the shares that the company held in Usiminas.

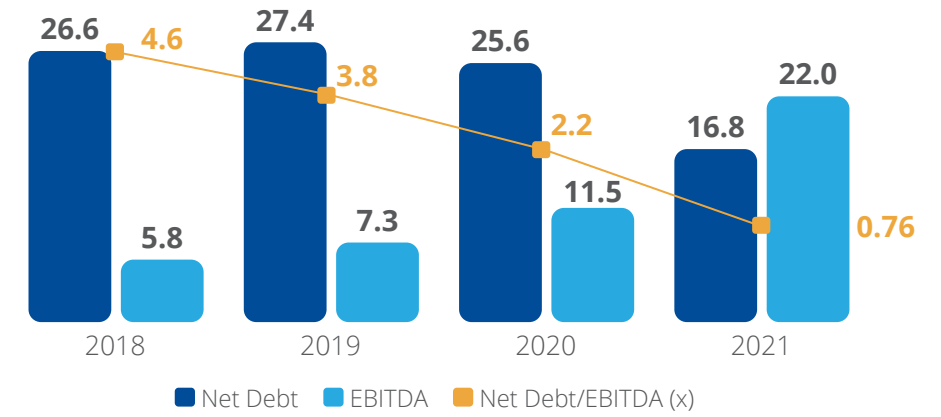


NET REVENUE  
 2020 → **R\$ 30.0 billion**  
 2021 → **R\$ 47.9 billion** + 59%

NET PROFIT  
 2020 → **R\$ 4.3 billion**  
 2021 → **R\$ 13.6 billion** + 217%

ADJUSTED EBITDA  
 2020 → **R\$ 11.5 billion**  
 2021 → **R\$ 22.0 billion** + 91%

Indebtedness (R\$ billion)



**Statement of added value - main lines (R\$ million)**

	2020	2021
Revenues	34,077.13	57,886.65
Inputs purchased from third parties	(21,940.50)	(30,817.30)
Gross added value	12,136.64	27,069.36
Withholdings	(2,516.73)	(2,212.41)
Net added value produced	9,619.91	24,856.95
Added value received in transfer	2,491.32	2,151.53
<b>Total added value to be distributed</b>	<b>12,111.23</b>	<b>27,008.49</b>
<b>Added value distribution</b>		
Personnel and charges	2,209.98	2,307.07
Taxes, fees, and contributions	2,380.59	7,183.93
Remuneration of third-party capital	3,228.05	3,921.86
Equity remuneration	4,292.62	13,595.62
<b>Total added value distributed</b>	<b>12,111.24</b>	<b>27,008.49</b>

CSN's goal is to keep the Net Debt/EBITDA ratio below 1x with discipline in allocating resources and making investments





## Investments

In 2021, CSN invested a total of R\$2,934 million, a level 73% higher than in 2020. The main investments were aimed at initiatives to improve productivity and modernization and improve the performance of the UPV plant, with emphasis on the coke battery project, expansion projects, and the acquisition of a mining fleet.

In addition to the investments aimed at the operation and fostering the protection and reduced impacts on the environment, in 2021, the Company recorded a total of R\$544.2 million encompassing funding and investments in projects and processes of environmental adequacy, an amount 29% higher than the than intended in 2020.



# Tax management

The main objectives of the CSN Group's tax management are to ensure compliance with the tax rules and requirements set forth in the legislation, to determine and pay taxes due in a correct, controlled, and timely manner, and to obtain tax incentives that promote greater competitiveness in the business segments. This governance is carried out within the scope of the Company's Financial Board and carried out by the General Tax Department.

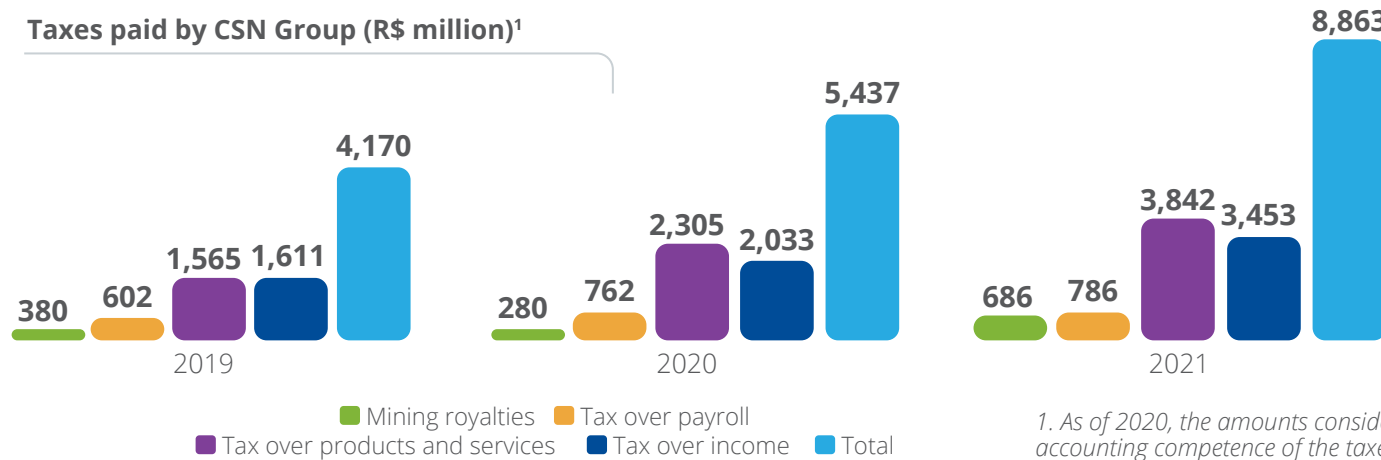
The identification and management of tax risks are attested by technical structures (Tax and Fiscal Areas) jointly with the Legal Department and result from the internal processes of constant monitoring of the compliance rules established by the tax authorities in the jurisdictions where the Company is present.

To ensure the mitigation of risks and minimization of tax impacts, the company carries out monitoring and formal and centralized assessment of changes in federal, state, and municipal legislation applicable to its business.

Operating in the United States, Portugal, and Germany, the CSN Group observes local legislation and rules to calculate the Transfer Price between international transactions, as well as ensures the completion and delivery of the Country-by-Country Report, accessory obligation for the tax administration of Brazil.

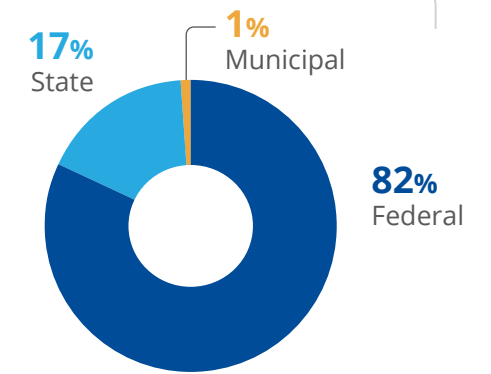
Also considering operations carried out internationally, the CSN Group is subject to the Universal Basis Taxation rules (CFC rules) and the Indebtedness Limits (Thin Capitalization rules) established by Brazilian legislation.

Taxes paid by CSN Group (R\$ million)<sup>1</sup>

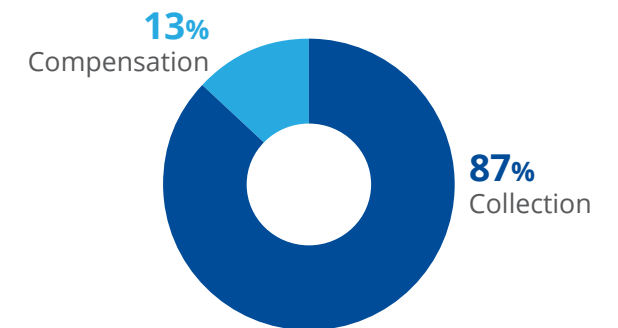


1. As of 2020, the amounts considered respect the accounting competence of the taxes.

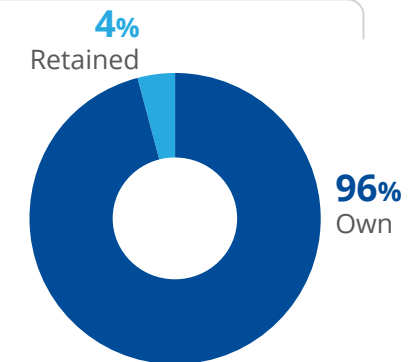
Destination of paid taxes (%)



Form of payment of taxes due (%)



Classification of taxes



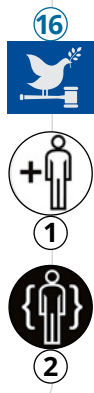
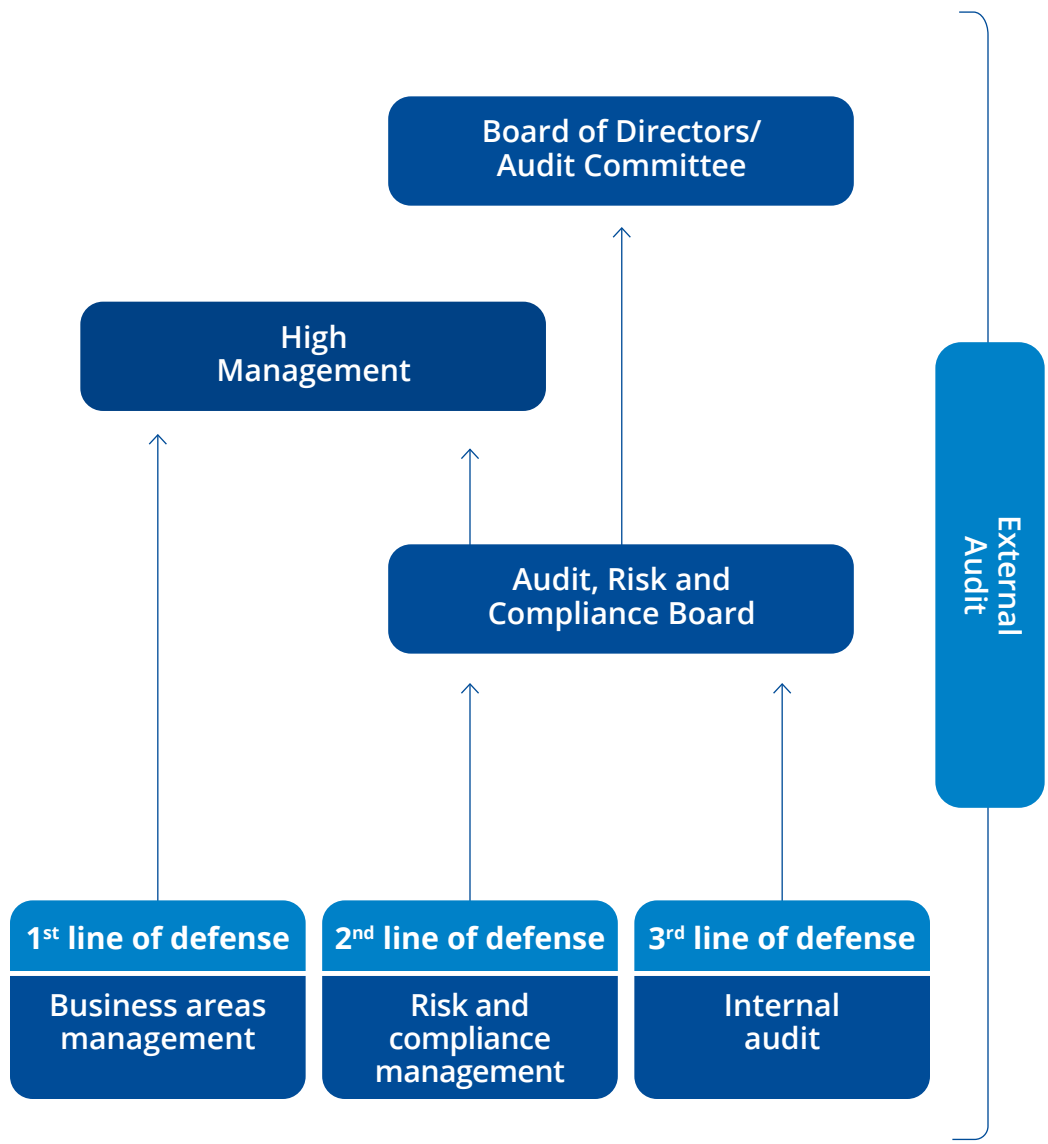
# Risk management

Risk management is applied throughout the organization to identify, assess, report, and mitigate the risks inherent to the operations of the CSN Group, not only restricted to financial risks, but also covering strategic, ESG, operational and compliance risks, taking into account based on the guidelines of the ISO 31000 standard and the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

As illustrated in the organizational chart, the Risk Management structure at CSN is operated in a partially decentralized manner, based on the concept of Lines of Defense, and risk control and management activities must be performed at all levels of the Company and in various stages within the corporate processes.

The risk management process, based on the COSO framework, has five elements that are interrelated and present throughout the Company's internal controls scenario:

- 1** Control Environment
- 2** Risk Assessment
- 3** Control Activity
- 4** Information and Communication
- 5** Monitoring





*Employees of SWT – Germany*

the provisions of its Code of Ethics. The Audit Committee, in turn, supports the Board of Directors in monitoring the effectiveness and quality of internal controls, supervising the Organization’s risk management structure and activities.

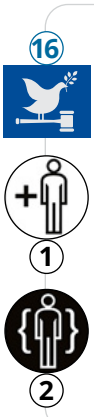
The Audit Management and the Corporate Risk Coordination, subordinated to the Audit, Risk and Compliance Board, linked to the Board of Directors, acts objectively and independently in carrying out its activities to assess the effectiveness and integrity of the control environment, using its own methodology and tools, in line with the best market practices.

The Corporate Risk Coordination is responsible for carrying out the General Risk Analysis (AGR); perform independent tests regarding internal controls and monitor the implementation of action plans addressed to the business areas to mitigate any deficiencies identified in the processes; specialists responsible for the activities of the Compliance Program, including the investigation of all reports reported via the CSN Reporting Channel independently and ensuring confidentiality and non-retaliation of the complainant. The results of the activities carried out by the Audit, Risk and Compliance Board are reported to the Audit Committee.

The Executive Boards of the business areas are responsible for the direct management of the risks inherent to their processes, being responsible for the management and execution of mitigating actions. These Boards are responsible for the technical and regulatory assessment of aspects such as environmental licensing, maintenance, and operational risks of the Company’s assets.

**The governance of the risk management model encompasses the Audit, Risk and Compliance Board, the Audit Committee, and the Board of Directors**

The Board of Directors and Audit Committee work in the risk management process. The Board of Directors sets the general guidelines for the Company’s business, approving the guidelines and objectives that guide its operations. The body, aiming at the perpetuity and sustainable growth of the Company and the creation of long-term value, considers the impacts of the company’s activities on society and the environment, in accordance with



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For risk management, the Company uses the organizational structure described on the previous page, in which the Risk Coordination, subordinated to the Audit, Risk and Compliance Board, conducts the AGR. During the preparation of the AGR, the following activities are carried out:

- Interviews with key executives, who report their perceptions and concerns regarding the risks inherent to their respective business processes;
- Obtaining information and categorizing risks;
- Impact and probability analysis;
- Definition of critical categories; and
- Presentation of the results to the Audit Committee, as well as, when applicable, to the ESG Committee and other specific advisory bodies to the Board of Directors.

Risks are analyzed and classified according to their probability of occurrence and impact. After classification, the responsible areas develop detailed action plans to prevent the materialization of risks and mitigate their potential impacts. In order to ensure that risk management is effective and continuous in supporting organizational performance and strategic decision-making by Senior Management, the Company conducts continuous monitoring by combining the preparation of the AGR, self-assessments of internal controls in the areas of business, independent assessments (internal and external audits) of internal controls and information obtained from external entities, when necessary, thus providing timely information on the maturity of the environment, as well as the timely reporting of deficiencies to the governance structure.

**The results of risk assessments are also used as a basis for preparing the Company's reports to regulatory bodies, such as the Securities and Exchange Commission (CVM) and Security Exchange Commission (SEC), in addition to the Annual Internal Audit Plan**



*SWT production process - Germany*



# Climate risk management

The TCFD was created by the Financial Stability Board (FSB), the financial affairs operating arm of G20. Since 2015, the year of its birth, financial institutions have been demanding the internalization of the TCFD recommendations as it is a consistent methodology applicable to multiple sectors.

The TCFD tool consists of 11 recommendations divided into 4 pillars (Governance, Strategy, Risk Management and Metrics). When responding to the TCFD, the company provides information on how it is managing climate risks and opportunities, informing how these can financially impact the company and the responsibilities of senior management on this topic. The report following the TCFD structure aims to meet the need for information for consistent decision-making by investors and stakeholders.

In order to meet this need, in 2021, the CSN Group began its mapping and assessment of climate risks and opportunities. The objective of the study was to map and detail the most relevant climate-related risks and opportunities in the context of activities, sectors, and regions in which CSN operates. Although climate risk is already considered by the Company, this was the first study carried out by the CSN Group from a systemic perspective, aiming to implement the 11 recommendations of the TCFD framework in its entirety.

Throughout the process, the Audit, Risk and Compliance Board participated in the study, ensuring that the mapped risks were incorporated into the company's risk matrix. The company's Risk Matrix has 58 risk categories, including ESG risks.

NHPR of Casa de Pedra

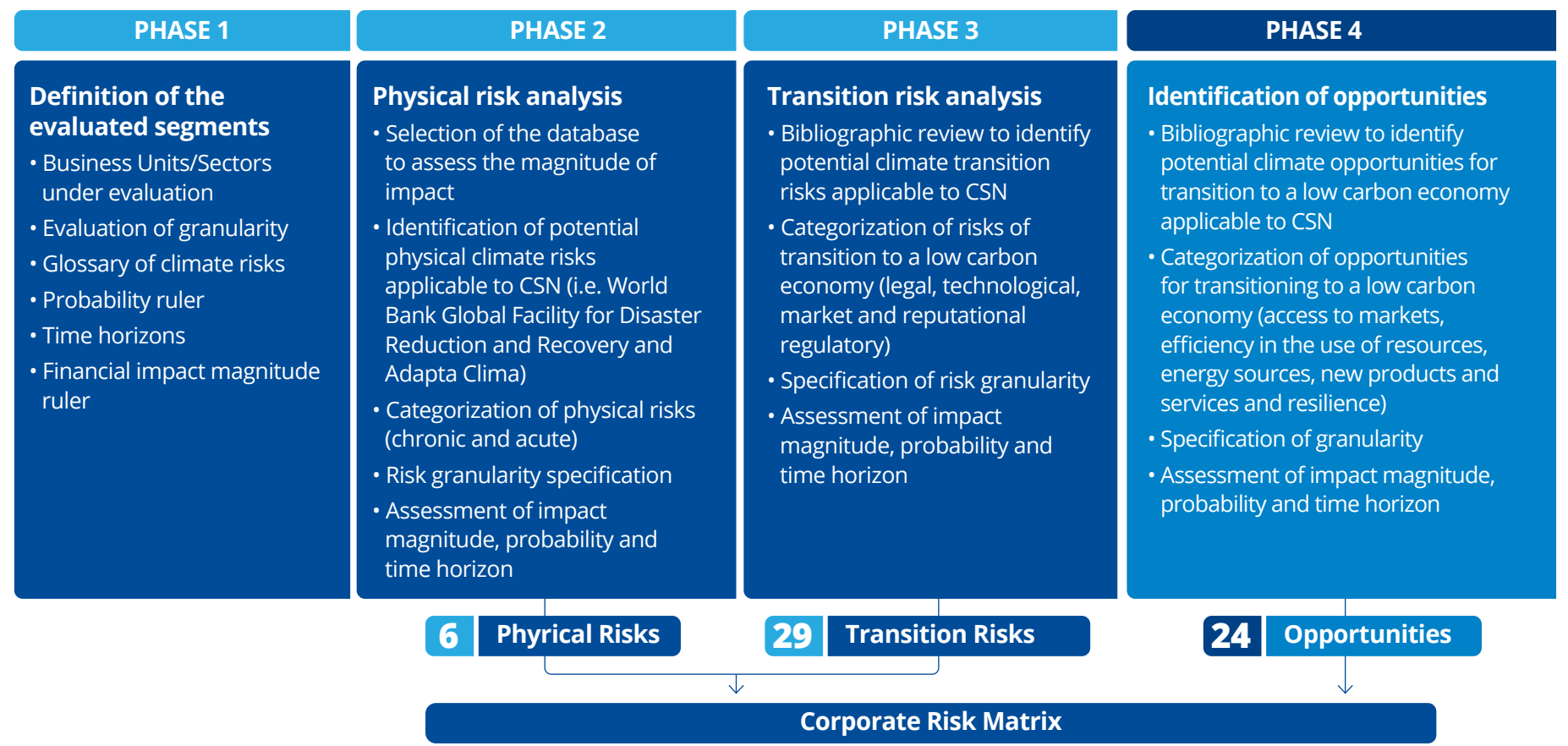


## Systemic assessment of climate risks and opportunities

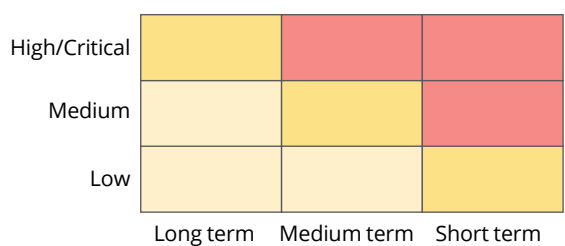
The CSN Group climate risk and opportunity assessment study was divided **4 phases** and considered **3 time horizons**

- 1** Short term (1 to 3 years)
- 2** Medium term (4 to 5 years)
- 3** Long term (more than 6 years)

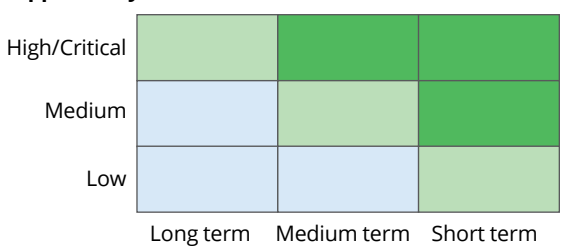
Based on this process, it has been possible to build a risks and opportunities matrix for Company in each sector it operates. Risks and opportunities have been categorized according to their relevance and time horizon and then placed in the matrix according to the structure presented below:



**Final Risk Matrix**  
Risk Relevance X Time horizon of occurrence





















































**Final Opportunity Matrix**  
Opportunity Relevance X Time horizon of occurrence



The red and dark green quadrants respectively represent the relevant/critical risks and opportunities for CSN Group. Relevance (Y axis) was calculated through the perception of impact magnitude and probability of occurrence. The assessment process (second part of the process) mapped 35 potential climate risks for the Company, being 6 physical risks and 29 risks of transition to a low carbon economy. In the process of evaluating the 35 risks, it was identified that 10 of these are located in the quadrants of high relevance for CSN Group (learn about them on the next page).

### Risks located in the quadrants of high relevance

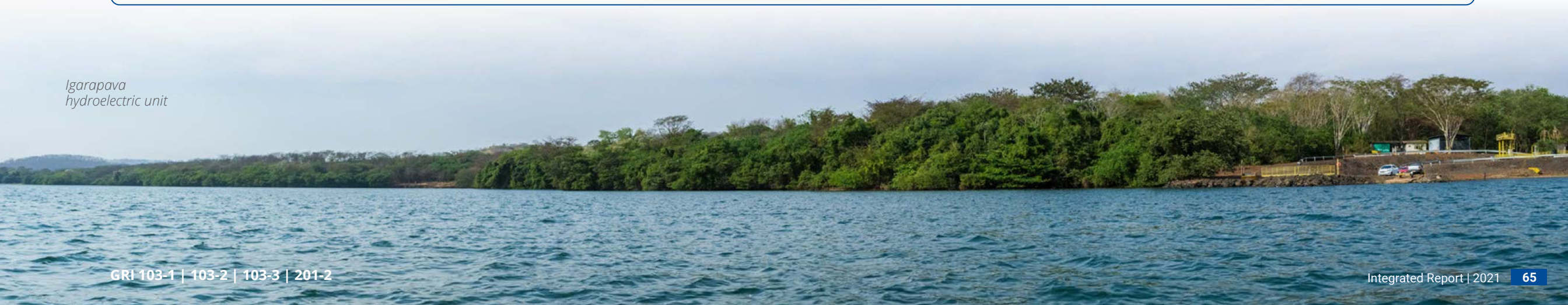
Climate risks	Actions and strategy to mitigate potential impact	Sector to which the risk is critical
1. Increase in cost due to the worsening of water scarcity associated with changes in weather patterns	1.a Conducting a water footprint study in Mining and Steel 1.b Investments in projects with a high rate of water recirculation 1.c Voluntary reduction of the grant by 38% at the Presidente Vargas Steelworks	    
2. Increased frequency and intensity of extreme precipitation	2.a Preventive rain preparedness plan at CSN Mineração 2.b Mining dam de-characterization schedule	    
3. Establishment of limits for use, storage and flow of hydroelectric plants and other measures to face the water crisis	3.a Diversification of the Company's energy matrix with a focus on self-generation 3.b Investments in new energy projects from renewable sources	    
4. Carbon taxation on steel, iron, aluminum, cement imports into the EU	4.a Establishment of greenhouse gas emission reduction targets 4.b Development of the MAC curve and decarbonization roadmap 4.c Internal study of carbon pricing impact	    
5. Landslides and flooding associated with increased incidence of greater frequency and intensity of storms	5.a Investments of around R\$ 400 million in systems for filtering tailings and magnetic recovery of iron ore 5.b De-characterization of dams 5.c New plants for reprocessing existing tailings in dams 5.d Implementation of the Preventive Plan for the Rainy Period in mining activities	    
6. Incidence of carbon pricing and taxation on industrial emissions and national and international road, rail, and maritime transport in Brazil	6.a Establishment of greenhouse gas emission reduction targets 6.b Development of the MAC curve and decarbonization roadmap 6.c Internal study of carbon pricing impact	    
7. Negative perception of the sector due to the intensity of emissions and non-compensation of GHG	7.a Institutional participation in sector forums, such as the MPP – Mission Possible Partnership 7.b Investments in new technologies to reduce CO <sub>2</sub> emissions and in projects to generate carbon credits and offsets	    
8. Investment loss due to restricted access to investors and banks with strict socio-environmental criteria	8.a Establishment of greenhouse gas emission reduction targets 8.b Establishment of socio-environmental goals 8.c Investment in technologies to mitigate environmental impact and de-characterization of dams 8.d Investments for the production of premium ore necessary for the production in EAF and DRI	    
9. Pressure from the market, institutions, governments, investors, and consumers to quickly structure a decarbonization strategy for the Company, its production and its products, and the delay in relation to the practices of national and international competitors	9.a Establishment of a strategic roadmap for decarbonization 9.b Diversification of the action production portfolio with less carbon intensive routes	    
10. Increased frequency and intensity of extreme temperatures	10.a Diversification of the Company's energy matrix with a focus on self-generation 10.b Investments in new energy projects from renewable sources	    



In addition to the risks, the study enabled to identify opportunities for the Company in the transition to a low-carbon economy. Out of the 24 opportunities identified for CSN Group, 4 have high relevance according to the analysis, listed below.

Climate opportunities	Opportunity internalization strategy	Sector to which the opportunity is highly relevant
1. Circular economy of steel	1.a Corporate area dedicated to the management of all the Company's recyclable materials 1.b Investments in new scrap receiving centers 1.c Use of blast furnace slag to replace clinker in cement production 1.d Pillar of investment aimed at circular economy with CSN Inova's goal	 Steel    Mining    Cements    Logistics    Energy
2. Reuse of tailings in mining	2.a Tailings filtering systems and investments in new projects for the reprocessing of tailings contained in dams 2.b Investments through CSN Inova in new technologies for the reuse of tailings currently piled dry	 Steel    Mining    Cements    Logistics    Energy
3. Issuance of green bonds	3.a Setting robust and ambitious goals 3.b Mapping of potential partners to build frameworks and second-party opinion	 Steel    Mining    Cements    Logistics    Energy
4. Use of green H <sub>2</sub> as an energy transition instrument	4.a CSN Inova's investment in new technologies for green hydrogen production 4.b Use of green H <sub>2</sub> in cement kilns to gain efficiency and reduce GHG emissions 4.c Development and expansion of the application of new technologies such as (UTIS) - Ultimate Technology to Industrial Savings	 Steel    Mining    Cements    Logistics    Energy

Igarapava hydroelectric unit



# Ethics and compliance management

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The performance of all employees, directors, and members of the Board of Directors and Fiscal Council of the CSN Group, in Brazil and abroad, is guided by the principles and guidelines formalized in the Company's Code of Ethics.

The Code of Ethics ([click here](#) and access the document), in addition to gathering the standards of personal and professional conduct expected in the relationships maintained with employees, customers, shareholders, suppliers, communities, competitors and the environment, is also a statement of the corporate conduct and the commitments of all CSN Group employees.

### Fighting discrimination

It is strictly prohibited, in all units, any mention or manifestation of discrimination by origin, religion, ethnicity, race, gender, sexual orientation, unionization status, social class, age, marital status, political-party, ideological positions, physical appearance and disability of any kind. The Company also establishes "zero tolerance" for any type of harassment, which includes any act or attitude, verbal or physical, that implies humiliation, embarrassment or threat to employees, suppliers, and customers.

To ensure integrity, transparency and alignment with best practices, the Company has structured a Compliance Program, which encompasses awareness-raising, training, communication, and monitoring initiatives in all corporate activities.

Its execution is the responsibility of each employee and the rules and guidelines are established by the Audit, Risk and Compliance Board with support from the legal, Staff & Management Departments. Within the scope of corporate governance, the application of the Code of Ethics avoids situations of conflict of interest, explicitly providing for the prohibition of acts of liberality, receipt of personal advantage or intervention in an operation in which it has a conflicting interest. In the event of any conflict of interest, the director or administrator must abstain from deliberation.



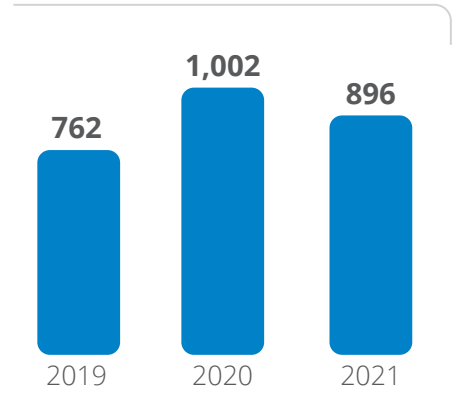
*Employee of Port of Tecon*

Conducting the Compliance Program is also aimed at ensuring the effectiveness of anti-corruption and anti-bribery controls in all of CSN's units and businesses. The mechanisms and tools have been developed and are continuously improved, in accordance with the parameters of the Anti-Corruption Law (Law nº 12.846/13) of Brazil and international legislation, such as the Foreign Corrupt Practices Act (FCPA) and UK Bribery Act. The Compliance Program also undergoes periodic evaluation by the external audit.

Within the Compliance Program, the Company makes available to all audiences a reporting channel, available 24 hours a day, 7 days a week by phone, website or via email, to receive reports and communications of acts and behaviors that are in violation of the Code of Ethics, legislation or corporate values. Not only employees, but also contractors or anyone who interacts with operations may report suspected misconduct or wrongdoing (such as corrupt practices, bribery, discrimination, harassment, etc.). The Compliance Program undergoes periodic evaluation by the external audit.

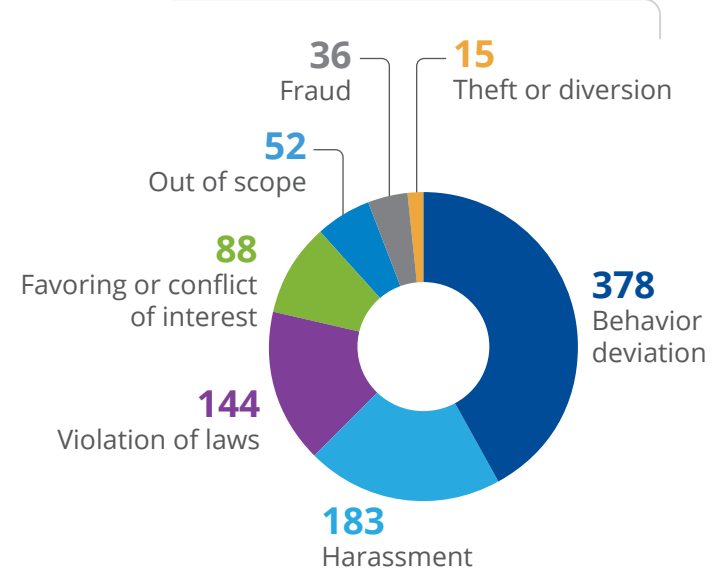
People can follow the case review status and add new information if they wish to do so. Monitoring of the case can be carried out via the website, e-mail or through the reporting channel's call center, all options are operated by an independent third-party company, thus guaranteeing the complainant's anonymity. All information is stored on an external server to ensure confidentiality and impartiality in dealing with issues. All complaints are investigated and retaliation against whistleblowers is not allowed.

### Claims received by the Reporting Channel\*

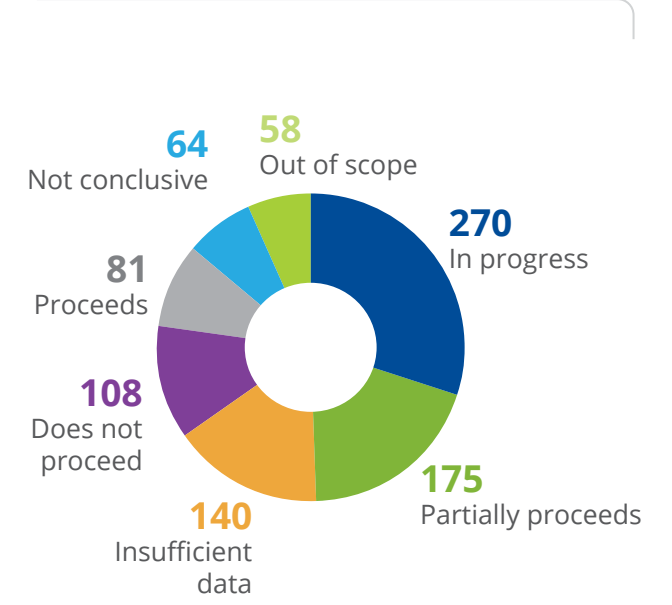


*\*Data for 2020 and 2019 restated according to the alignment of the calculation assumption defined in this reporting cycle.*

### Claims received by the Reporting Channel in 2021 as per category



### Claims received by the Reporting Channel in 2021 as per treatment status





The result of this investigation and the channel statistics are presented every two months to the Audit Committee, ensuring the independence and impartiality of the process. For cases found to be valid, the appropriate disciplinary measures are applied. In 2021, 896 manifestations were received, of which 81 were considered valid and 175 partially valid. Of these, four cases were related to confirmed occurrences of discrimination: in two of them, those involved were terminated from the company; in the other two, the entire team received conduct guidelines. No cases of corruption have been confirmed.

Questions and requests for clarification can be sent via e-mail to the Audit, Risk and Compliance Board. In 2021, 791 requests were received, most of them (89%) related to due diligence processes in business partners.

**How to access the Compliance Program channel**



0800-884-2006  
 canal\_denuncia@csn.com.br  
 Internal E-mail: CANAL DENUNCIA  
 Web: <https://www.canalconfidencial.com.br/csn>  
<https://www.csn.com.br/fale-conosco/>

C/o Risk and Compliance Board  
 Estrada Casa de Pedra, s/ nº – Zona Rural –  
 C. P. 101 – Congonhas /MG – Zip Code 36415-000

In case you have any doubt or additional information about compliance  
[compliance@csn.com.br](mailto:compliance@csn.com.br)

### Measures taken in relation to the Reporting Channel cases investigated by the Audit, Risk and Compliance Board

	2020	2021
Written notice	11	9
Verbal warning	13	9
Resignation	49	45
Dismissal for just cause	8	17
Guidance	33	29
Suspension	3	3
Work transfer	2	7
<b>Total</b>	<b>119</b>	<b>119</b>

### Requests for clarification received by email

	2021	2020	2019
Business partner due diligence response	705	514	999
Contract clause review	53	0	36
Conflict of interest	13	0	93
Questions related to the Compliance area	8	0	35
Compliance with Standards	6	0	9
Documentation request	3	0	6
Information leak	2	0	4
Gifts / Presents	1	0	5
Outside the Compliance scope	0	0	43
Donation	0	0	4
Various	0	0	3
<b>Total</b>	<b>791</b>	<b>514</b>	<b>1.237</b>
<b>Percentage of requests answered</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

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## Compliance Day

For the sixth consecutive year, CSN Goup held the Compliance Day, which for the second time was held in conjunction with the ESG Week schedule (learn more about this event on page 75). The event was attended by employees from all areas of activity.

Through lectures, theoretical and practical activities, the event allowed important reflections and reinforced how compliance is part of the daily lives of employees. The events were held remotely and broadcast live on the Company's internal social networks and communication channels.

The lectures included the participation of invited experts, who dealt with topics such as moral and sexual harassment in labor relations; impacts and control tools from a prevention perspective; compliance and ESG: An important connection for corporate responsibility; Diversity and Inclusion: what do you have to do with it?

The Company also has a compliance ambassadors program, which has around 160 volunteer employees to help spread ethical values.

# Management structure

The Audit, Risk and Compliance Board is responsible for carrying out activities related to CSN's Compliance Program. Based on best practices and in order to preserve its independence, this board reports directly to the chairman of the Board of Directors and the Audit Committee, with the task of developing actions and initiatives for training, awareness and communication related to the topics to which it refers.

The area also applies procedures and tools for assessing the integrity of suppliers and detecting conflicts of interest. One of the focuses of the Compliance Program, in CSN's supply chain, is the guarantee of full respect for Human Rights and good labor practices, fighting child or forced or slave-like labor.

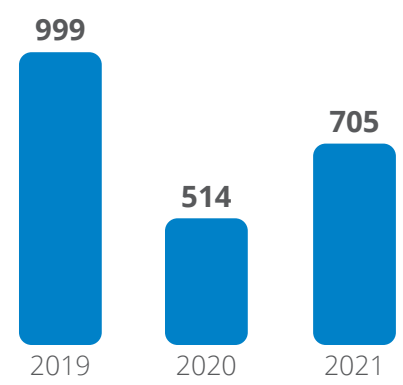
To define which are the critical suppliers and which must be screened by the Company's Compliance area, a prior assessment is carried out through the Compliance Form, based on its National Classification of Economic Activities (CNAE). In addition, their data is verified against several public sources of information in order to identify impediments to business continuity.

All suppliers are required to complete a Compliance form and accept CSN's Anti-Corruption Policy. This procedure is essential to ensure that all of the Company's business partners, acting on its behalf, comply with the Brazilian and international laws to which we are subject.

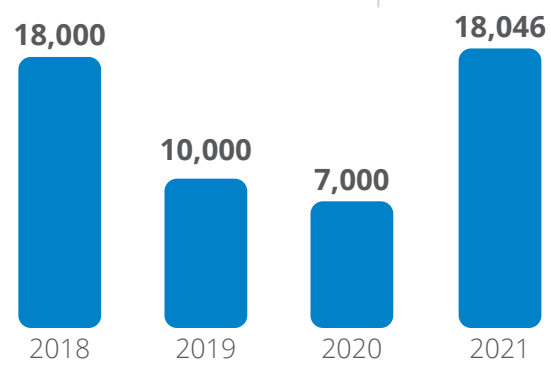
The contracts signed between the Company and its suppliers also include sanctions and anti-corruption clauses, in order to mitigate any risk to the CSN Group's operations.



**Suppliers that have undergone an evaluation process (due diligence)**



**Employees trained in ethics and compliance**



**18,000 employees were trained in compliance in 2021, totaling 36 thousand hours of training**



## Policies

Anti-corruption, unfair competition and conflicts of interest topics have specific chapters in the Code of Ethics, as well as are dealt with in the Policy for Detection, Prevention and Fight against Fraud and Corruption. In addition to legal obligations, these topics are pillars of the Compliance Program.

The Compliance Program and Code of Ethics include clear guidelines on topics such as discrimination or harassment, gifts, bribery or corruption, conflict of interest, among others.

[Click here](#) to access the Code of Ethics



The Company's **Integrated Sustainability, Environment, Health, and Safety Policy**, approved in 2021 by the Board of Directors, defines as one of its fundamental pillars that the Company, its employees, and suppliers must follow the precepts of good governance, ethics, and integrity, respecting human rights and proactively combating the practices of child, forced or slave-like labor, harassment and discrimination in all its forms throughout the company's entire value chain.

[Click here](#) to access the Anti-Corruption Policy



This policy also determines that the Company and its employees must align their practices with commitments to the Sustainable Development Goals (SDGs) and the Human Rights Guiding Principles (POs), as well as encouraging a safe, diverse, and inclusive work environment, with respect to free trade union association and the right to collective bargaining, keeping permanently open and internalizing the demands of communication channels with internal and external audiences.

[Click here](#) and access the Sustainability, Environment, Health, and Safety Policy



# Integrated ESG and innovation management

CSN's governance structure has policies, instances, and innovation tools to integrate socio-environmental aspects and the sustainability agenda in strategic decision-making. In the search for leadership in innovation in the governance of material issues, the Company has evolved in the definition of corporate structures to identify risks and opportunities, support the definition of ESG goals and monitor the evolution of all businesses towards these objectives.

To this end, in February 2021, CSN's Board of Directors approved the creation of the CSN Group's ESG Committee, reaffirming the commitment to material socio-environmental and governance issues recognized by the Company's leaders as of great relevance and essential for the perpetuity of its activities, in line with the UN Global Compact Principles and the Sustainable Development Goals.

The ESG Committee, which advises the Company's Board of Directors, according to its internal regulations, is composed of at least nine members, executives of the Company, with the possibility of external technical-scientific convening when relevant.

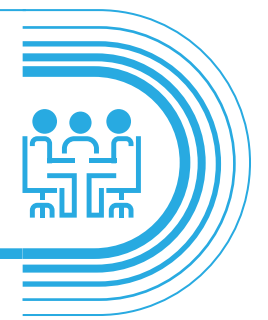
In 2021, the ESG Committee held its first meeting and approved the creation of the Integrated ESG Management Commission, made up of 26 ESG ambassadors (managers, coordinators, and specialists of the Company) to promote a model of innovation, culture and sustainability integrated into the Company.



CSN Faria Lima office



**The ESG Committee, made up of Company executives, advises the Board of Directors in the discussion of environmental, social and governance issues**

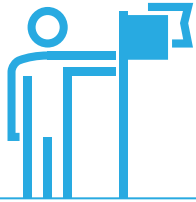




## Competencies of the ESG Committee

- i. advise the Board of Directors on the integration of ESG Factors in the business strategy of the Company and the CSN Group, through the elaboration of a strategy for the evolution of material themes;
- ii. follow and monitor the progress of the Company and the CSN Group in indicators and metrics related to the environmental, climate, social and governance scope;
- iii. advise the Board of Directors in the analysis of initiatives related to research on innovation and new technologies in the different sectors in which the Company and the CSN Group operate, ensuring the identification of ESG opportunities;
- iv. evaluate the conduct and policies of the Company related to or that have an impact on their material issues;
- v. propose actions, concrete measures, and practical projects, in the most different operational and administrative areas of the Company and the CSN Group, with the objective of generating improvements in the sustainability and innovation indicators and metrics, which are evaluated in an annual review and presented by the Annual Plan of the ESG Committee;
- vi. encourage communication, dialogue, and engagement of the Company in matters related to sustainability and their application in the activities of the CSN Group, either by the ESG Committee's own initiative or provoked by an organizational component of the Company;
- vii. contribute to ensuring that risk factors and ESG metrics are considered in the decision-making process of the Company and other companies comprising the CSN Group;
- viii. evaluate, propose, and support the adherence or permanence of the the CSN Group in initiatives, projects, investment proposals, technical standards or agreements at the national or international level related to socio-environmental, innovation and governance issues, as well as monitoring the preparation and disclosure of the report of this information to the Company's Board of Directors;
- ix. report to the Board of Directors, or on the performance of the Company and the CSN Group in terms of ESG indicators;
- x. create an access channel for Company employees to propose innovation suggestions to the ESG Committee, which, when analyzed, can generate concrete actions, to be monitored and mediated by the respective ESG Coordinators;
- xi. prepare and inform the Board of Directors of the ESG Committee's Annual Plan.





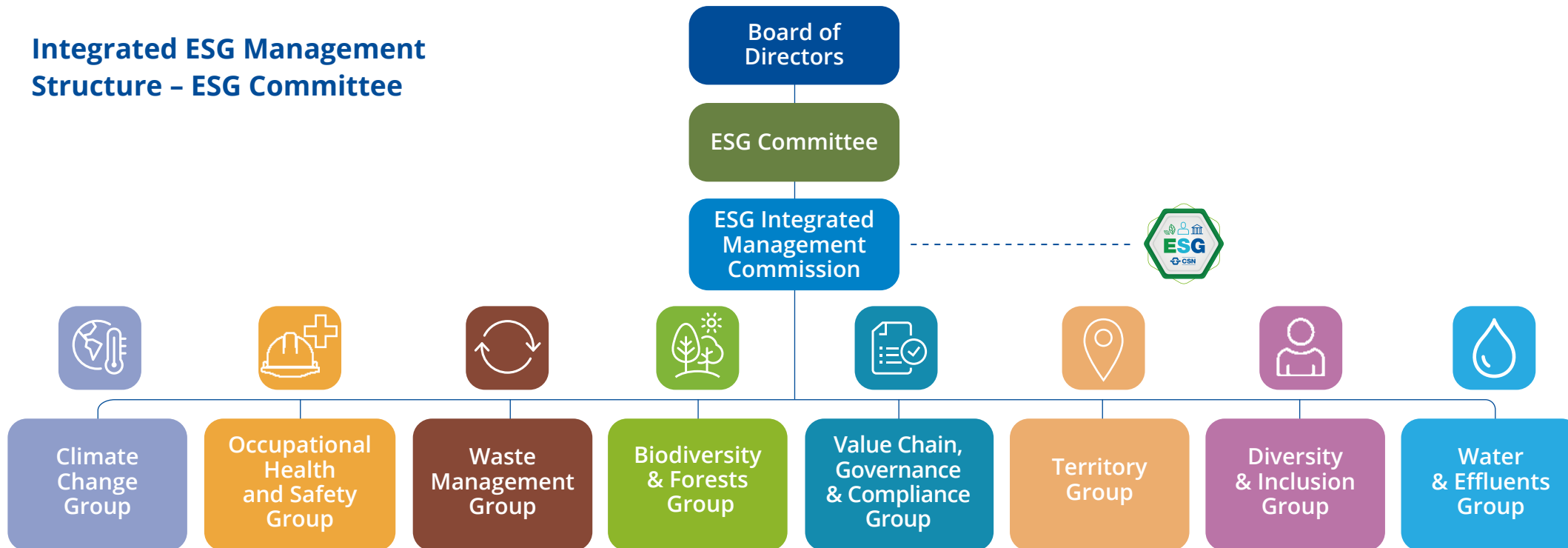
**26 ESG Ambassadors have been appointed to the Integrated ESG Management Committee**

The ESG Integrated Management Committee works by coordinating eight action groups, dedicated to ESG themes. These groups have their themes connected to the CSN Group's Materiality Matrix and are composed, on average, by three representatives from all operating units or related areas. The main function of the Integrated Management Committee is to standardize concepts and disseminate good practices in all operating segments, with a focus on achieving the established ESG goals.

The eight thematic groups are responsible for ensuring the quality, robustness, and accuracy of the Company's ESG indicators, as well as training and creating an internal culture with its employees and the value chain as a whole.

CSN Inova, through Inova Bridge, accelerates ESG innovation projects related to increasing efficiency and the positive impact of these Company themes (read more about CSN Inova on page 80). In this model, CSN's ESG Committee is one of the only ESG integrated management bodies of a publicly held company that has innovation tools to carry out the current diagnosis of indicators linked to the CSN Group's materiality matrix. These are: open innovation, corporate venture capital, ESG innovation and the connection with centers of excellence in research & development that help the CSN Group in its transition strategy.

**Integrated ESG Management Structure – ESG Committee**



## ESG Week 2021

In 2021, the second ESG Week was held by CSN Group, with a 100% virtual and diversified program for employees, the community and investors. The event had more than 4 thousand spectators and five days of lectures and meetings focused on different subjects – all related to the ESG theme. External guests enriched the week, which also included the participation of the robust internal team. Employees had the opportunity to lead certain meetings on the agenda.

The week began with a roundtable on climate change and COP26 and continued with the approach of several key issues for sustainable development at CSN. During the week, the CSN Foundation addressed

the impact made on culture and social relationships in the territories where it operates, Diversity and Inclusion was also addressed, with a lecture on the responsibility of each pillar within companies and the applicability of ESG in Procurement was also the subject of one of the event's chats.

Also within the ESG Week, two events were held: the CSN Day, aimed especially at the external public and investors with the presentation of the main results of the year, and the Compliance Day, focused on employees and discussed in detail in the chapter on "Management of Ethics and Compliance" on page 69.



# Sustainability Policy

The performance and development of the Company's business are guided by the principles of the Sustainability Integrated Policy, approved by the Board of Directors in 2021. The Policy reinforces the commitment to generating value for stakeholders and is in line with regulatory guidelines and global best practices. Through it, the Company and its direct, indirect employees and suppliers, through the proactive incorporation of the best socio-environmental, competition, ethical and governance practices in their decisions and the strengthening of the culture of prevention and control of health and safety risks, respect for the environment and ethical and safe behavior undertake **S.E.M.P.R.E/A.L.W.A.Y.S** to follow the Policy's pillars..

## Pillars of CSN's Sustainability Policy

- S** Business sustainability
- E** Ethical, transparent, and inclusive company
- M** Continuous improvement
- P** Protection of the environment, prevention of pollution and occupational accidents/diseases
- R** Respect for legislation
- E** Educate and train

The implementation of the Sustainability Policy in all businesses is conducted by the Sustainability, Environment, Occupational Health, and Safety Department, which reports directly to the Company's CEO. Acting in an integrated manner, the regional and local managements of this corporate structure are responsible for standardizing the processes and good practices to be disseminated among all businesses, supporting the increase in operational efficiency and the strengthening of the commitment to sustainable development.

[Click here](#) to see the full Sustainability Policy



Employee of UPV unit

## Management systems

The materialization of the Sustainability Policy takes place through the processes, procedures and tools created and monitored by the Environmental Management System (EMS) and the Health and Safety Management System (SGSS).

The EMS was developed based on the highest standards, in particular the NBR ISO 14001:2015 standard. It covers the Company's main operations in all its areas of activity and is certified by an external body in its main production units. In 2021, ISO 14001:2015 certification for the Port of Tecar (Rio de Janeiro) and for CSN Cimentos in Arcos (Minas Gerais) was obtained. In 2022, the goal is to certify two other production units: CSN Cimentos Volta Redonda (RJ) and CSN Cimentos Alhandra (PB).

Through the EMS, CSN works to ensure full compliance with environmental legislation in all operations and to direct the execution of projects that improve the Company's environmental performance. The management of water, energy, emissions, and waste is geared towards promoting maximum efficiency in the use of natural resources, protecting biodiversity, and raising employee awareness.


As an important tool of the EMS in the company, an open and free channel of communication with the internal and external public is maintained in the main units of the CSN Group in Brazil, the "Green Line."




The Green Line is an open channel for all stakeholders that can be used to make denouncements, complaints, suggestions, and other matters related to environmental and social issues. With a team specialized in each unit, through the "Green Line" the Company receives internal and external demands related to events that are evaluated in a private, confidential way and with a commitment to respond to the demands received, with the presentation of solutions or justifications within 15 business days. The volume and content of calls, as well as the internal directions resulting from each call, are periodically reported to the Company's senior management.

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- 7

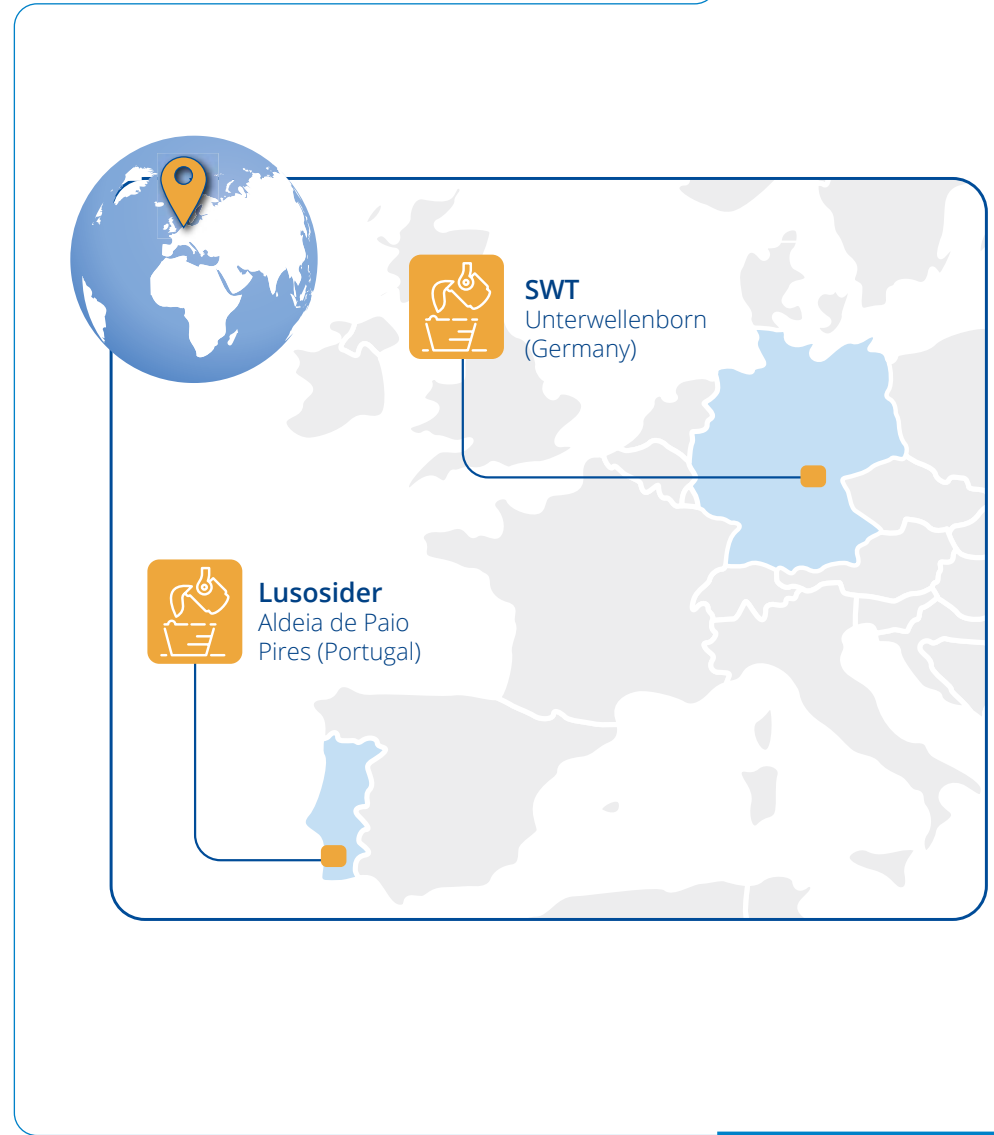
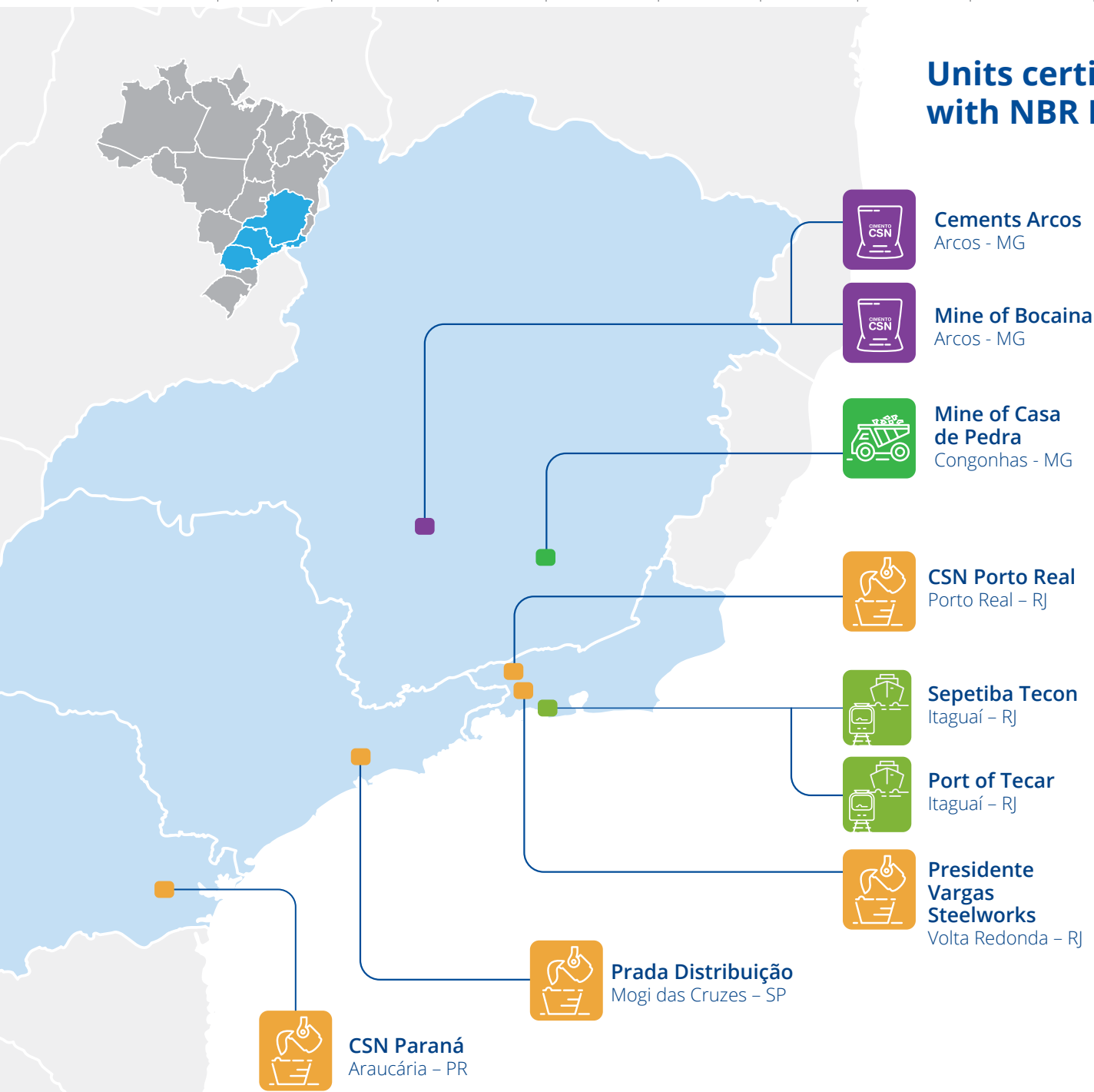
**Green Line**  
CSN  
0800 282 4440



**E-mail:**  
meio.ambiente@  
csn.com.br



## Units certified in accordance with NBR ISO 14.001:2015



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This integrated action also guides actions to promote safety and mitigate accident risks. The Health and Safety Management System (SGSS) is structured in accordance with the guidelines of the Corporate Sustainability Policy and has its procedures and structures described in the Occupational Health and Safety Management Manual, developed based on good market practices, regulatory standards, and national and international standards. The OSH Management Manual is based on 10 management elements, which support the preparation of all procedures related to the topic through concepts aligned with the Corporate Policy:

- [Commitment and Leadership](#)
- [Communication](#)
- [Standards and Procedures](#)
- [Behavioral Management](#)
- [Risk Management](#)
- [Change Management](#)
- [Legal Requirements](#)
- [Planning](#)
- [Management of Suppliers and Services](#)
- [Management of Competencies and Abilities](#)

The Manual establishes procedures to ensure the safety of employees, third parties and communities in all activities, a priority for the conduct of CSN's business. In addition, the company works to promote and strengthen a safety culture among all professionals, highlighting the role of leaders in building and maintaining a safe environment.

In 2021, CSN Cimentos, the Arcos unit, began its preparation to comply with the ISO 45001:2018 standard and plans to achieve certification in 2022. Currently, only the units in Portugal (Lusosider) and Germany (SWT) are ISO 45001:2018 certified.

Also in terms of quality management, the company has a Quality Management System certified to ISO 9001:2015 in the following Brazilian units – Arcos, CSN Tecon, Fundação ERSA (RO), Port of TECAR (RJ), CSN Mineração (Casa de Pedra e Pires – MG), CSN Usina Presidente Vargas, CSN Porto Real, Prada Resende, Prada Camaçari, Prada Uberlândia, CSN Paraná, Prada Santo Amaro, Prada Valença and Prada Mogi – and abroad, in Lusosider and SWT units. Among them, three achieved their certification in 2021: CSN Mineração (Casa de Pedra e Pires – MG), Port of TECAR (RJ) and Fundação ERSA (RO).

[Click here](#) to access the Occupational Health and Safety Management Manual



*Graphene application development in industry*

# Innovation management

For CSN, innovation is one of the levers that accelerate efficiency, growth, and business sustainability. Based on the diagnosis of the most strategic business challenges, new technologies and solutions are prospected and evaluated in an integrated manner through CSN Inova, the corporate innovation platform created in 2018 to position the company strategically and actively in the innovation ecosystem. For an 80-year-old company, CSN Inova's purpose is to ensure the continuity of the CSN Group's business, in order to offer transition tools that bring agility and concrete execution, considering the main technological and ESG risks and opportunities that the Company faces today and will face in the future.

CSN Inova is responsible for systematizing and leading the innovation process in an organized and comprehensive manner, in order to enable the execution of innovation projects. The platform is made up of four operating pillars: CSN Inova Open, CSN Inova Ventures, CSN Inova Bridge and CSN Inova Tech, covering different integrated innovation formats.







Employee of Casa de Pedra

At **CSN Inova Ventures**, to ensure access to the best investment opportunities, more than 100 connections were made with investment funds and startup accelerators in Brazil, Israel, the United States, Singapore, China, England, among other countries, in addition to partnerships with agents that are references in the innovation and Venture Capital market – such as Endeavor, ABVCAP and BR Angels.

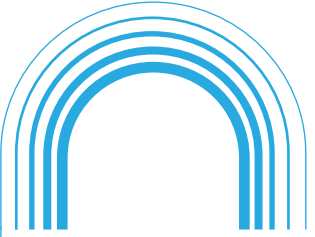
As a result of the connections and market studies carried out, the investment thesis was established, which today includes the verticals of Industry 4.0, Greentechs/ESG (e.g., energy, energy efficiency, technologies to assist in the decarbonization of processes), and adjacent themes (Healthtechs and Agtechs). The companies chosen to be part of the fund cover topics of extreme importance for the future of the CSN Group, such as advanced materials (2DM), decarbonization (1s1 Energy and H2Pro), energy (Clarke) and digital channels and process digitization (Oico and Traive).

Also in 2021, supported by an extensive survey of governance models in sustainability and innovation of publicly held companies carried out by **CSN Inova Bridge**, the ESG Committee (Learn more on page 72) was created as an advisory body to the Board of Directors at CSN. The ESG Committee was formatted as an agile laboratory model for socio-environmental innovation to manage the main opportunities related to material themes mapped by the CSN Group. CSN Inova Bridge also centralizes the Company's ESG communication activities, in an effort to gradually establish transparent communication with its stakeholders.

In 2021, there were more than 50 diagnostic sessions conducted in the steel, mining, logistics and cement segments, with the involvement of more than 20 different areas, which resulted in several challenges opened throughout the year. For each of these challenges, **CSN Inova Open** mapped its processes and indicators, in addition to measuring its economic and strategic potential. Conducting the innovation management process from start to finish, CSN Inova Open then prospected and implemented several assertive technological solutions for testing in pilot projects followed by implementation at scale, when applicable.

As it is fully focused on solving CSN's relevant challenges, CSN Inova Open's operations have generated a scalable impact, both strategically and financially. In 2021, 70% of the initiatives were carried out in industrial operations, with three new technological solutions implemented at scale and resulting in reduced logistics expenses and reduced consumption of fossil fuels. In a systemic and collaborative way, CSN Inova Open has contributed to the digital transformation, competitiveness and sustainability of the Company.

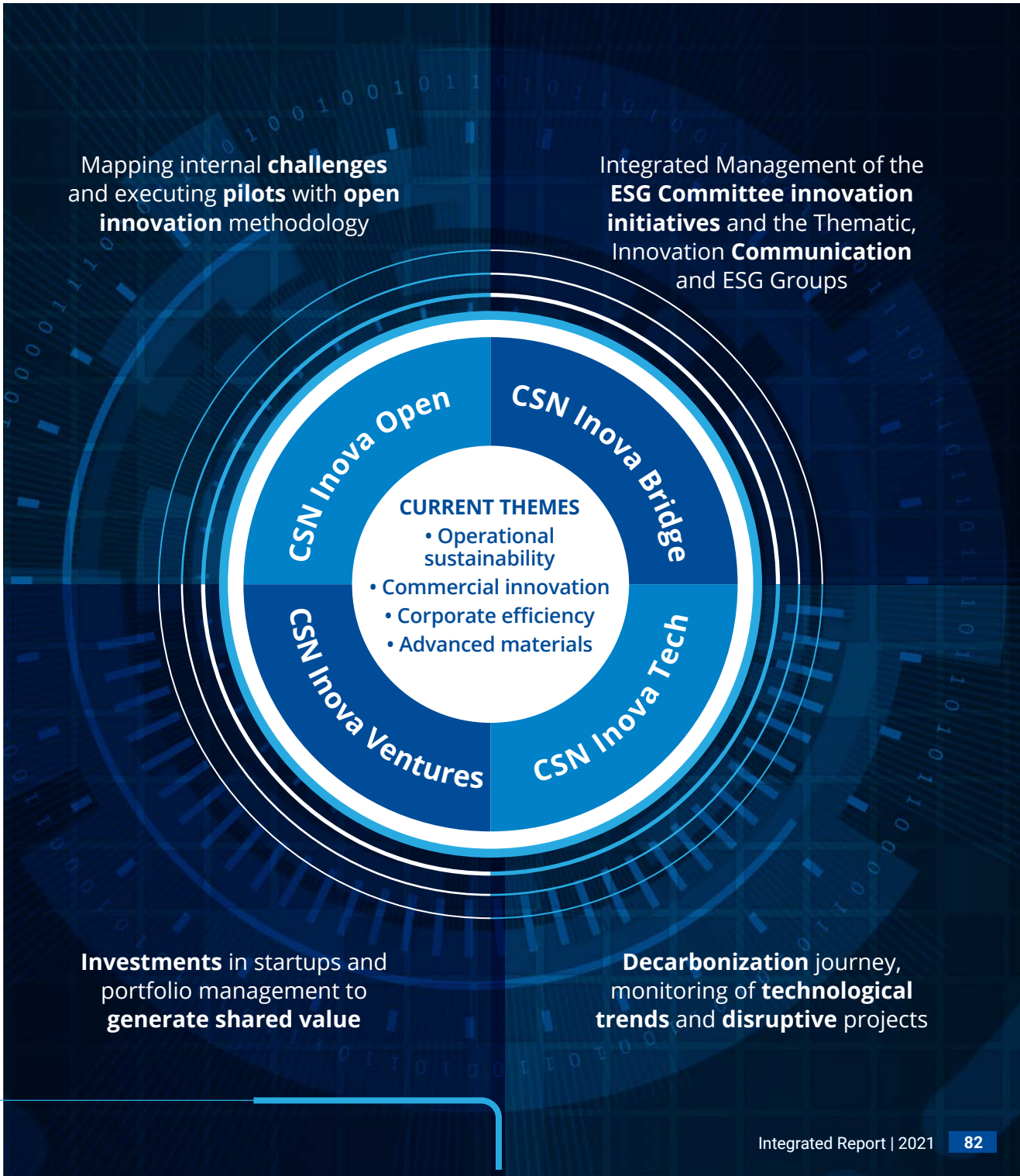




CSN's innovation strategy was recognized with a R\$ 45 million financing granted by Finep\* (Studies and Projects Financing Agency). Thus, the initiatives and projects developed in the years 2021 and 2022 use their own resources obtained through innovation financing lines, focusing on the financial self-sufficiency of innovation initiatives.

Finally, 2021 was also marked by the creation of CSN Inova Tech, the area that leads the technological front of CSN's decarbonization journey. For this, the Climate Change Group (GMC) was structured, a multidisciplinary team linked to the ESG Committee, responsible for leading the decarbonization journey. The work of the GMC resulted in the identification and technological analysis of more than 100 mitigation options and the construction of the decarbonization roadmap for operations. The CSN Inova Tech is also responsible for conducting disruptive projects and mapping strategic partners as relevant players in the sector, as well as universities and cutting-edge technology centers with the objective of establishing long-term relationships for the development of technological solutions associated with the Group's strategic agenda.

*\* Finep grants reimbursable and non-reimbursable resources to research institutions and Brazilian companies. Finep's support covers all stages and dimensions of the scientific and technological development cycle: basic research, applied research, innovations and the development of products, services, and processes. Learn more at: <http://www.finep.gov.br/>.*



## The hydrogen solution

The application of hydrogen in the production processes of the CSN Group is an example of how the innovation strategy organized by CSN Inova drives ESG benefits for the business. In 2021, one of the mapped partners presented a solution for the introduction of controlled amounts of green hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) in CSN Cimentos' ovens, which increases flame stability, reduces fuel consumption and emissions of greenhouse gases.

The UC3® (Ultimate Cell® Continuous Combustion) technology, developed by the Portuguese company UTIS, was installed in Oven 2 of CSN Cimentos Arcos unit. The results obtained between September 2020 and August 2021 showed improvements in the main indicators of the production process (see box below).

↓ REDUCTION OF	↑ INCREASE OF
<b>3%</b> in GHG emissions	<b>9.4%</b> of cement production
<b>0.8%</b> in thermal consumption	<b>10.4%</b> oven feed rate
<b>0.3%</b> in electricity	<b>1.5%</b> blast furnace slag consumption
<b>45%</b> low sulfur coke consumption	
<b>8.9%</b> in the electrical consumption of cement mills	
<b>69%</b> standard deviation of oven feed rate	
<b>5%</b> in CO <sub>2</sub> per ton of clinker produced	

**Hydrogen applied in small amounts in the ovens brings stability gains and reduces fuel consumption and GHG emissions**



*Application of green hydrogen in the cement production process*

In 2022, the solution will be scaled to CSN Alhandra, in the cement segment, and to Usina Presidente Vargas (UPV), being a pioneering application in the steel industry.

## Expansion of equipment availability

The opportunity to optimize the management of road and rail mobile equipment at the UPV went through the entire innovation process at CSN Inova. With the diagnosis, which included the mapping of the process, main operational pains and indicators and economic potential, this opportunity became part of the challenge of expanding the equipment availability throughout CSN.

The main pains mapped are related to manual (analog) processes, without digitalization or automation, which resulted

in a lack of structured data for real-time measurement of productivity and availability, making it difficult to optimally allocate owned and outsourced vehicles.

After benchmarking sessions with several companies in the sector and deepening the scope with Brazilian startups, the project team selected the startup Gauss, which has the GaussFleet solution, for a pilot project. The objective of the pilot was to test the integration between the tracking/telemetry tools with the application of

management by workstations, allowing data generation and visualization in a digital and centralized way.

The project lasted four months and made it possible to identify opportunities in relevant process KPIs, such as availability rate, utilization rate, speeding events and wasted fuel. Finally, it also substantially optimized the time needed to consolidate measurements. With the success of the pilot, the project was forwarded to scale implementation, starting with the UPV.



Ore loading at Casa de Pedra

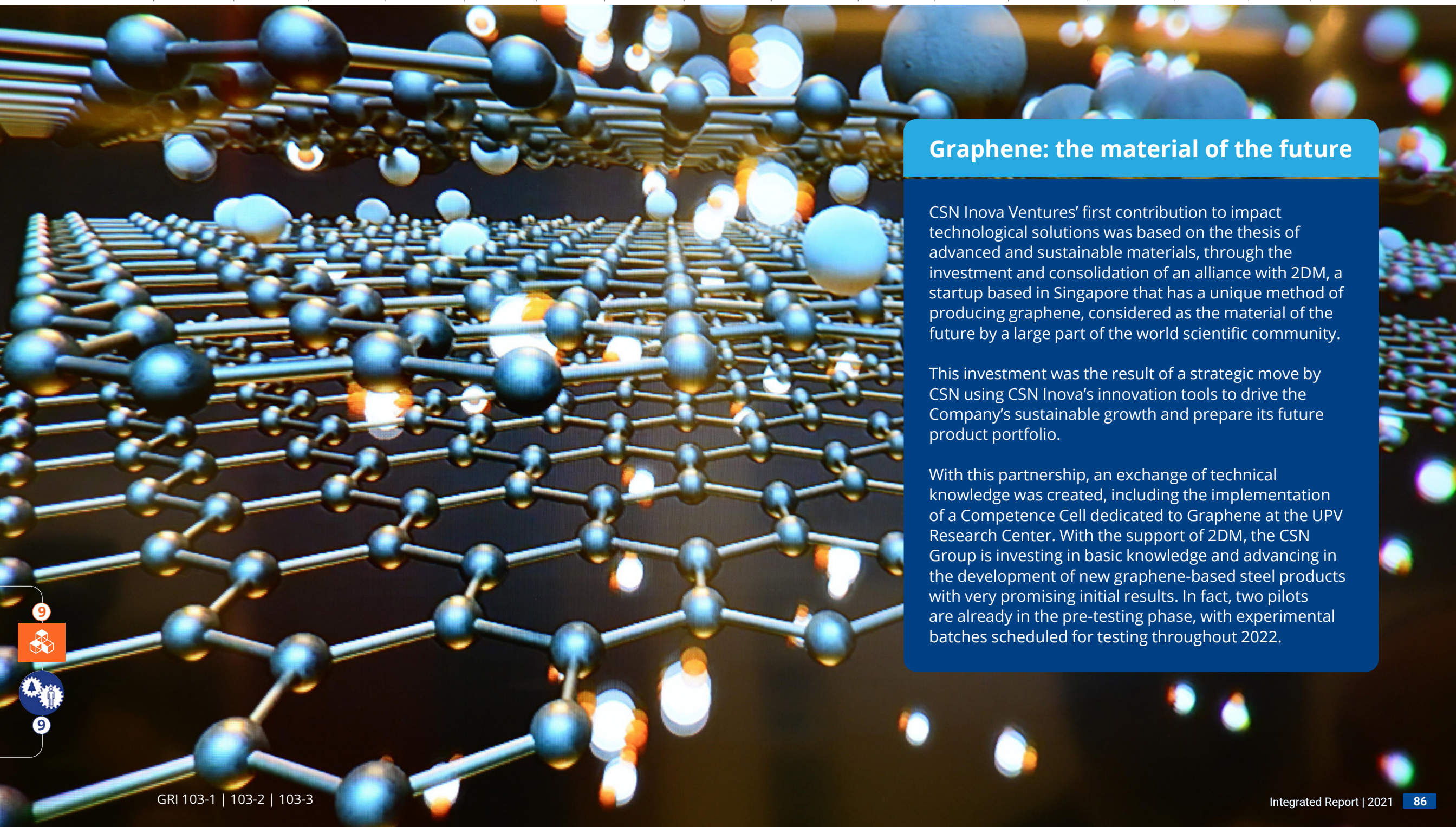
# Investment in startups

Through CSN Inova Ventures, CSN invests in startups with projects that promote value generation for all stakeholders and the development of Brazilian industry. The Company created one of the first investment vehicles in Brazil focused on Industry 4.0. With R\$ 100 million in committed capital, CVC (Corporate Venture Capital) already at the end of 2021 had a stake in six companies with solutions related to the three prioritized verticals.

The mapping of investment opportunities was carried out throughout 2021 and involved the connection of more than 500 startups. CSN's strategy consists of allocating resources with a minority interest in the companies, together with co-investors in the search for new products and solutions, aiming at shared generation.

## The investment theses of CSN Inova Ventures and its investees





## Graphene: the material of the future

CSN Inova Ventures' first contribution to impact technological solutions was based on the thesis of advanced and sustainable materials, through the investment and consolidation of an alliance with 2DM, a startup based in Singapore that has a unique method of producing graphene, considered as the material of the future by a large part of the world scientific community.

This investment was the result of a strategic move by CSN using CSN Inova's innovation tools to drive the Company's sustainable growth and prepare its future product portfolio.

With this partnership, an exchange of technical knowledge was created, including the implementation of a Competence Cell dedicated to Graphene at the UPV Research Center. With the support of 2DM, the CSN Group is investing in basic knowledge and advancing in the development of new graphene-based steel products with very promising initial results. In fact, two pilots are already in the pre-testing phase, with experimental batches scheduled for testing throughout 2022.



## Green hydrogen: investing in decarbonization

In 2021, CSN announced investments in two green hydrogen startups, 1S1 Energy and H2Pro.

U.S.-based 1S1 Energy is searching for a solution to produce green hydrogen on a large scale at a highly competitive cost. The startup's innovation focuses on new materials that promote a more efficient conversion of water into hydrogen and oxygen. The 1s1 Energy model presents significant advances over existing solutions, with greater sustainability, H<sub>2</sub> productivity per kW, and service life. With these combined advantages, the startup's expectation is to produce green hydrogen at a highly competitive cost, about five times lower than the market average, which makes the input attractive not only from an environmental standpoint, but also from an economic standpoint.

The second investment, in H2Pro, an Israel-based startup founded in 2019, has a different approach to 1S1. The innovation used by the company is called

E-TAC. The technology makes it possible for hydrogen and oxygen to be produced separately, in an electrochemical step and a thermally activated chemical step. In this way, without the need to apply a membrane between the hydrogen and the oxygen to prevent mixing, the production cost is lower. The startup's estimate is that, in 2023, it will already be producing green hydrogen on a large scale at a cost five times lower than the average cost on the market, as well as the estimate defined by 1S1.

For CSN, green hydrogen can replace part or all of fossil fuels in many crucial steps in the low-carbon steel and cement production process.

These investments are a key step for the CSN Group, which believes in the country's potential as a relevant agent in the production and promotion of green hydrogen, in order to reaffirm its leading role towards a low-carbon economy.



## Research and Development Center

The Research and Development Center is another front that drives and strengthens the innovation process at CSN. For over 70 years, the area has been responsible for the development of new products in the steel industry, maintaining a relevant portfolio of steel solutions for the segments served by the Company.

**20** new steel grades developed in 2021



**100** new types of steel in development



**More than 4 thousand** hours of research

**More than R\$ 25 million** in investments



### Structure



**17 laboratories,** including an Environment Laboratory certified by INEA – environmental agency of Rio de Janeiro



**Vacuum Furnace and Gleeble:** thermomechanical simulator of steelmaking processes (most complete in Latin America) and melting furnace capable of producing special alloys



**Augmented reality:** advanced framework for using numerical simulation in process optimization, product development and application

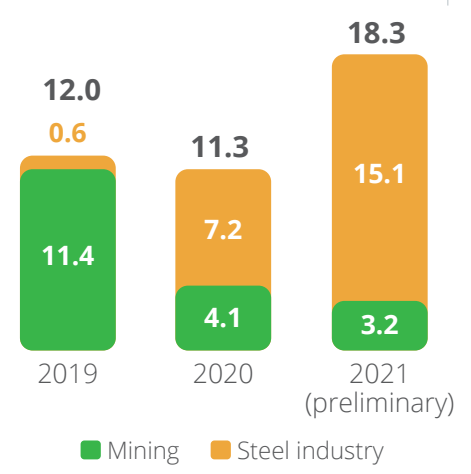


## Technology and Innovation

CSN also invests in innovation projects in the business segments, which are evaluated annually. The expenses associated with these projects are classified in accordance with the legal concept of technological innovation and deducted from the calculation basis of Income Tax and Social Contribution on Net Income, according to the rules and limits provided for in Law No. 11.196/2005, the so-called "Lei do Bem." Expenses benefited total the following amounts, with a focus on the mining and steel segments.



R&D expenses benefited by Lei do Bem (R\$ million)



GRI 103-1 | 103-2 | 103-3



Employee of the Volta Redonda Research Center



## Information Security

The Information Technology area provides innovative technological solutions with high added value to the business, while maintaining the availability and integrity of its systems, especially those that support the main business processes.

CSN Group always seeks collaboration between the internal IT areas and the business for an assertive and effective delivery of technological solutions and to ensure that internal processes are executed with quality. The Company adopts Design Thinking as a practice to solve problems and challenges; has several initiatives towards a digital journey; adopts Agile Frameworks in a hybrid way with other methodologies;

incorporates startup values in everyday life, MVP as practice, intrapreneurship, innovation, experimentation; adopts Lean for any internal IT process; is conducting RPA (Robotic Process Automation) projects for the business areas; is increasing the use of Cloud (private, public, hybrid) and consolidating architectures to meet business needs.

The Information Technology Department, a structure that reports directly to the CEO, has as its main function to ensure that the entire systemic operation of the Company acts responsibly and in accordance with the best practices and frameworks recognized worldwide: ITIL, COBIT and ISO 27001.

The Company has processes and infrastructure to mitigate risks related to cyber-attacks. Controls are performed in accordance with guidelines established in internal policies and procedures, which are based on market frameworks. In 2021, the maturity level in relation to the CIS (Critical Security Controls) framework was raised by 12.3%.

The Company's data centers are hosted by an external supplier, which uses 100% renewable energy in its operations in Brazil and is certified in ISO/IEC 20000, ISO/IEC 9001, ISO/IEC 27001 and ISAE 3402.

Still focusing on ensuring controls, the Company is annually audited in accordance with the Sarbanes-Oxley Act (SOX).

The CSN Group has invested in tools, processes, and people. A user awareness plan regarding information security is continuously applied, starting from the process of integrating new employees and extending to periodic campaigns that disseminate guidelines on the use and protection of personal and Company data in internal communication channels. Among other processes, frequent phishing simulations are performed to track metrics.

In 2019, CSN started the Journey to adapt to the General Data Protection Law (LGPD), the main objective of which was to map data in business processes and assess the maturity of the Company's privacy and data protection management.










# ESG Goals







Supported by its business strategy and innovation directed towards the application of new technologies and greater efficiency in its business, CSN has established goals connected to the ESG agenda. The achievement of these goals contributes to increased productivity and is also a contribution of all businesses to the development of society.



# Achieved goals







Topic	SDGs	Coverage	Base Year	Goal	2021 Performance Appraisal	Status
Occupational Health and Safety		CSN Group	2020	To reduce by 10%, in the year-on-year comparison, the accident frequency rate (LTI + NLT) of CSN Group's internal employees.	In 2021, a 20% reduction in the accident frequency rate (LTI + NLT) of internal employees was achieved.	Achieved ✓
		CSN Group	2020	To reduce by 10% the number of Lost Days by Accident with internal employees when compared to 2020.	Reduction of 35% in the number of lost days due to occupational accidents (internal) when compared to 2020.	Achieved ✓
	 	CSN Cimentos	2020	To implement and structure the Health and Safety Management System (HSMS) according to ISO 45001 certification at CSN Cimentos – Arcos.	In 2021, at CSN Cimentos Arcos, a preliminary audit was carried out on the ISO 45001:2018 standard (Health and Safety Management System).	Achieved ✓
Waste Management, Responsible Use and Circular Economy		CSN Mineração	2020	Reduction of 10% of waste (Class II) sent to landfills compared to the total sent in 2020.	Reduction of 10.6% in the sending of non-hazardous waste to landfills, using the alternative of referring wood to be used as energy in the production of ceramics.	Achieved ✓
	 	Steel industry - UPV	2020	In 2021, to reuse more than 60% of the Dedusting powder from the Electric Arc Furnace (EAF) (long steel melt shop – UPV) in the form of briquettes in the flat steel manufacturing process.	Reuse of 76% of the EAF powder generated by the Long Steel Melt Shop, for the internal production of metal briquettes.	Achieved ✓
	 	Steel industry - UPV	2020	In 2021, to reduce the destination of UPV process sludge referred to Class II Landfills by at least 10%.	Reduction of 34.7% in the referral of process sludge to class II landfills.	Achieved ✓

## Achieved goals (continued)







Topic	SDGs	Coverage	Base Year	Goal	2021 Performance Appraisal	Status
Innovation and Technology		CSN Inova	2020	By 2022, to implement, through CSN Inova, ten successful pilot projects on the topics of operational sustainability and commercial innovation.	In 2021, 12 successful pilot projects were implemented.	Achieved before deadline ✓
	 	CSN Inova	2020	By 2022, to carry out, by CSN Inova, six investments in new technologies among the following these: I) new materials and disruptive technologies; II) renewable energy sources and energy efficiency; and III) circular economy and sustainability.	In 2021, 6 investments were made related to the topics of I) new materials and disruptive technologies; II) renewable energy sources and energy efficiency; and III) circular economy and sustainability.	Achieved before deadline ✓
		Steel industry - UPV	2020	In 2021, at the Research Center, to expand the commercial portfolio with the development of at least 9 new specifications for steel products.	In 2021, 20 new specifications for steel products were developed by the Research Center.	Achieved ✓
Efficiency in Water Use and Effluent Management	 	CSN Mineração	2020	To prepare, in 2021, the Water Footprint of CSN Mineração.	CSN Mineração's water footprint was completed in 2021.	Achieved ✓
Diversity and Inclusion		CSN Group	2020	In 2021, to develop activities to value Afro-Brazilian culture and promote the fight against racism.	In 2021, masterclasses focusing on structural and institutional racism were held with employees of the CSN Group. With the communication and HR team, racial literacy was carried out with a focus on dissipating awareness and promote correct forms of communication.	Achieved ✓
		CSN Group	2020	To increase female participation in the governance bodies* of the CSN Group and its companies in 2021.	2 women on the CSN Group's supervisory board. 2 women on the Board of Directors of CSN Mineração. 2 women on the Board of Directors of CSN Cimentos.	Achieved ✓

\*Boards of Directors, Fiscal Councils and Executive Boards of CSN Group and its controlled companies.







## Achieved goals (continued)

Topic	SDGs	Coverage	Base Year	Goal	2021 Performance Appraisal	Status
Environmental Management - Certification		CSN Group	2020	To achieve the ISO 9001:2015 certification in the following units: ERSA, CSN Mineração (Mina Casa de Pedra), and Porto TECAR.	The ISO 9001:2015 certification was achieved in all units provided for in the target.	Achieved ✓
		CSN Group	2020	To obtain the ISO 14.001:2015 certification for the following units: CSN Mineração, Porto TECAR, CSN Cimentos de Arcos, and Volta Redonda.	The ISO 14001:2015 certification was achieved at the units: CSN Mineração, Porto TECAR, and CSN Cimentos de Arcos.	Partially achieved
Governance, Ethics and Transparency - Information Security	 	CSN Group	2020	For 2021, to establish more transparent communication in Information Security.	100% of the Company's areas received training and were involved in the process of evaluating the security of information shared internally and externally by all employees.	Achieved ✓
		CSN Group	2020	For 2021, to execute the General Data Protection Act journey at the CSN Group.	In 2021, the LGPD project was conducted with the diagnosis and mapping of all data flows of the CSN Group. With this work, gaps were identified with regard to the processing of personal data, with action plans developed to address each gap. Rules were revised to comply with the LGPD, and the Company's internal and external privacy policies were created.	Achieved ✓
Business Performance		CSN Group	2020	By 2021, to reduce the CSN Group's leverage to 1.0x.	Leverage level ended the year with a net debt/EBITDA ratio of 0.76x.	Achieved ✓
Local Communities Social Responsibility	 	CSN Foundation	2020	In 2021, to establish local development projects with a measurable social contribution.	In 2021, local impact actions were maintained, with studies conducted on local development indicators in the municipalities of Congonhas, in Minas Gerais (MG) and Volta Redonda, in Rio de Janeiro (RJ), in partnership with BRASA, an association of Brazilian students abroad. As from 2022, the Company will advance with the Theory of Change project, with the thesis of projects with a social and environmental impact.	Achieved ✓

## Short-term goals – to be achieved within 3 years

Topic	SDGs	Coverage	Base Year	Goal	2021 Performance Appraisal	Status
Local Communities Social Responsibility	 	CSN Foundation	2020	By 2022, to expand care for children and adolescents by 39% through the project Garoto Cidadão	In 2020, care was provided to 2,300 children and adolescents. In 2021, an 11% increase was achieved in the level of service provided by the Garoto Cidadão (“Citizen Child”) project.	Positive
		CSN Foundation	2020	By 2022, to train guardianship counselors from six metropolitan areas of the municipalities in which we are present, as well as offering a refresher course at the institutions of Congonhas, Arcos, Bonito, and Coxim.	In 2021, a course was held to update institutions on public policies, project design, and fundraising with the participation of 37 civil society organizations and representatives of the law councils of the city of Volta Redonda.	Positive
Environmental Management		CSN Group	2020	In 2022, to achieve ISO 14001:2015 certification in the following units: CSN Cimentos de Volta Redonda and CSN Cimentos Alhandra/ Paraíba.	CSN Cimentos Volta Redonda and CSN Cimentos Alhandra will be certified in 2022.	Neutral
Governance, Ethics and Transparency – Compliance		CSN Group	2020	In 2021, to conduct training with 90% of the active employees in the CSN Group in compliance, covering the Code of Ethics and the Anti-Corruption Policy.	Training conducted with 72% of employees in 2021. The 90% mark could not be reached due to the increase in employees in a short period of time. The target was maintained for 2022.	Negative
Innovation and Technology	 	CSN Inova	2020	By 2022, to develop two new products/services on the subject of ESG.	In 2021, a new product was developed, with the goal of achieving one more by 2022 being maintained.	Positive
		CSN Inova	2020	By 2022, CSN Inova will conduct six weeks of training on Innovation, ESG issues and Venture Capital at the units of the CSN Group.	In 2021, four weeks of training were conducted.	Positive




# Short-term goals – to be achieved within 3 years (continued)

Topic	SDGs	Coverage	Base Year	Goal	2021 Performance Appraisal	Status
Biodiversity	 	CSN Group	2021	In 2022, to carry out a diagnosis of the conservation areas and/or areas protected by the Company and the protection areas close to the operations of CSN, with a systematized database for structuring the strategic planning of biodiversity at CSN.	New target	Neutral
Efficiency in Water Use and Effluent Management	 	CSN Cimentos	2021	To conduct the Water Footprint study, according to the ISO 14.046:2017 standard at the Arcos and Volta Redonda units by 2022.	New target	Neutral
Local Communities Social Responsibility	 	CSN Foundation and CSN Inova	2021	In 2022, to develop a Theory of Change pilot project in the Company's main operating units.	New target	Neutral





















## Medium- and long-term goals

Topic	SDGs	Coverage	Base Year	Target Year	Goal	2021 Performance Appraisal	Status
Climate Change		Steel industry	2018	2030	Reduction of 10% in CO <sub>2</sub> e emissions per metric ton of crude steel by 2035 according to the methodology of the WSA (World Steel Association).	- Intensity in 2021: 1.98 tCO <sub>2</sub> e/t of steel produced - Performance compared to base year: 6% reduction	Positive
		Steel industry	2018	2035	Reduction of 20% in CO <sub>2</sub> e emissions per metric ton of crude steel by 2035 according to the methodology of the WSA (World Steel Association).	- Intensity in 2021: 1.98 tCO <sub>2</sub> e/t of steel produced - Performance compared to base year: 6% reduction	Positive
		CSN Cimentos	2020	2030	Reduction of 28% in CO <sub>2</sub> e emissions per metric ton of cement by 2030, reaching 375 kgCO <sub>2</sub> e/t cement, according to the CSI (Cement Sustainability Initiative) methodology, equivalent to the target defined in the Cement Sustainability Initiative roadmap for the industry in 2050.	In 2021, there was a 7% reduction in the emission intensity for the year 2020 (base year). - Intensity in 2021: 480 kgCO <sub>2</sub> e/t of cement	Positive
		CSN Mineração	2019	2035	Reduction of 30% in CO <sub>2</sub> e emissions per metric ton of ore produced by 2035 (Scopes 1 and 2).	In 2021, there was a 14% increase in emissions intensity for 2019 (base year). - Intensity in 2021: 6.6 kgCO <sub>2</sub> e/t of ore produced - Performance compared to 2020: 7% reduction	Negative
		CSN Mineração	2019	2044	Achieving Net Zero in CSN Mineração's Scope 1 and 2 emissions by 2044.	In 2021, a 3% reduction was achieved in absolute emissions (Scope 1 and 2) referring to 2019 (base year).	Positive
Atmospheric Emissions	 	Steel industry	2019	2030	40% reduction in particulate matter emissions per metric ton of crude steel produced at the UPV by 2030 according to the WSA (World Steel Association) methodology.	In 2021, an 8.1% reduction was achieved in the emission of particulate matter related to the 2019 emission (0.78 t of PM/t of steel produced). - Intensity in 2021: 0.72 tMP/t of steel produced	Positive

## Medium- and long-term goals (continued)

Topic	SDGs	Coverage	Base Year	Target Year	Goal	2021 Performance Appraisal	Status
Climate Change – Energy Efficiency	 	CSN Cimentos	2020	2030	To reduce electricity consumption by 5% (kWh/t of cement) in relation to the base year, surpassing by around 10% the target defined in the Cement Sustainability Initiative roadmap for the industry in 2050.	In 2021, a 5.6% reduction was achieved in specific energy consumption per metric ton of cement produced for the year 2020 (base year). This implies that the assumed goal has already been achieved, requiring the maintenance of this level for the next years. - Intensity in 2021: 81.12 kWh/t of cement	Positive
		CSN Cimentos	2020	2030	To reduce thermal energy consumption by 1% (GJ/t of clinker) by 2030, reaching 3.22 GJ/t produced, in compliance with the target defined for 2050 in the Cement Sustainability Initiative roadmap for the industry.	- Intensity in 2021: 3.29 GJ/t of cement - Performance compared to the base year: 0.5% increase	Neutral
	  	CSN Mineração	2020	-	Maintenance of electricity consumption from 100% renewable sources at CSN Mineração.	In 2021, consumption of 100% renewable electricity was maintained at CSN Mineração.	Positive
Operational Efficiency		CSN Cimentos	2020	2030	To reduce the clinker factor in cement by 16% by 2030, reaching 48.8%, equivalent to 7% less than the target defined for 2050 by the Cement Sustainability Initiative roadmap.	- Intensity in 2021: 55.6% - Performance compared to the base year: 4.5% reduction	Positive
Health and Safety		CSN Cimentos	2020	2025	In Cement production, to achieve a lost-time injury frequency rate (LTI – internal and outsourced/1 million hours worked) of 0.25 by 2025.	In 2021, an accident frequency rate of 0.47 was reached for internal and outsourced employees, an increase of 38% compared to the previous year.	Negative
		CSN Group	2020	-	To continuously achieve a zero fatality rate across the CSN Group (internal and outsourced).	In 2021, there were 2 fatal accidents involving outsourced employees who provided services to CSN.	Negative
		CSN Group	2020	2030	To reduce the accident frequency rate by 30% (LTI+NLTI – internal and outsourced) by 2030 in the CSN Group (base year 2020).	In 2021, a 2% reduction was achieved in the frequency rate (LTI+NLTI – internal + outsourced) in relation to the base year.	Positive
		CSN Group	2021	2030	To reduce by 30% the number of lost days due to accidents involving internal employees compared to 2021.	After the 35% reduction in the number of lost days per accident (internal) compared to 2020, achieved in 2021, the new target is an additional 30% by 2030.	Neutral

## Medium- and long-term goals (continued)

Topic	SDGs	Coverage	Base Year	Target Year	Goal	2021 Performance Appraisal	Status
<b>Management and De-Characterization of Dams</b>	  	CSN Mineração	2020	2033	To carry out the complete de-characterization of dams built upstream of CSN Mineração by 2030.	In 2021, the works to de-characterize the Vigia Dam and the start of works on the B4 Dam beltway (learn more on page 141).	Positive
<b>Biodiversity and Land Use</b>	 	CSN Group	2020	2030	To present a measurable contribution to the conservation and restoration of biodiversity by 2030 (base year 2020).	In 2021, an important intermediate target was defined for 2022, with the diagnosis of the conservation areas of CSN and the bank of systematized data that will be the basis for the strategic planning.	Positive
<b>Governance, Ethics and Compliance</b>		CSN Group	2019	-	To continuously increase our Compliance Index relating to the best governance practices provided for in CVM Resolution No. 80/2022 (considered Practical and Partially Practiced).	In 2021, 74% of the indications of best governance practices defined by CVM Resolution No. 80/2022 were fully and partially met.	Positive
<b>Diversity and Inclusion</b>		Cements	2020	2025	To achieve 30% female representation in the CSN Cimentos workforce by 2025.	In 2021, the rate of female representation at CSN Cimentos was 20.25%, a 9% increase compared to the base year of 2020.	Positive
		Cements	2020	2025	To achieve 26% female representation in management positions at CSN Cimentos by 2025.	In 2021, women's representation in management positions at CSN Cimentos remained the same as in 2020, at 10%.	Neutral
		CSN Mineração	2019	2025	To double the percentage of women at CSN Mineração by 2025.	In 2021, the rate of female representation at CSN Mineração was 17.8%, an increase of 36% compared to 2019 (13%).	Positive
		CSN Group	2020	2025	To achieve 28% female representation in the CSN Group by 2025 (base year 2020).	In 2021, a rate of 17.5% female representation was reached in the CSN Group, a growth of 27% compared to 2020.	Positive
<b>Efficiency in Water Use and Effluent Management</b>	 	CSN Mineração	2018	2030	To reduce new water consumption for iron ore production by at least 10% per metric ton of ore by 2030.	In 2021, a 27% reduction was achieved in the consumption of new water in the production of iron ore when compared to 2018 (0.22 m <sup>3</sup> /t of ore).	Positive

# CSN engagement

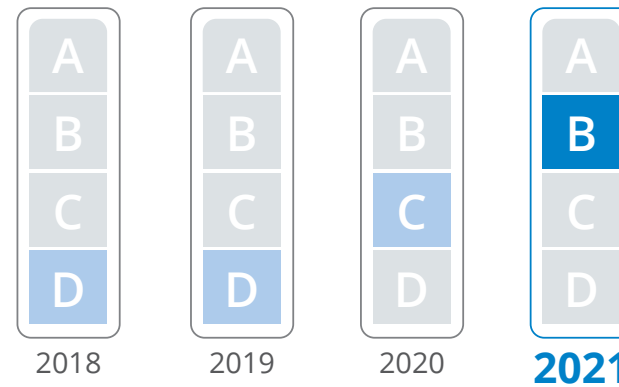
CSN's participation in sector and international initiatives related to the promotion of the sustainability agenda is strategic so that the Company can understand the ESG risks associated with its business and develop mechanisms to enhance the positive impacts of its activities and products. Through corporate engagement in different external platforms, CSN seeks to continuously improve its socio-environmental performance and governance platforms.

Since 2020, CSN has been a signatory to the Global Compact, a United Nations (UN) action aimed at integrating fundamental principles and the Sustainable Development Goals (SDGs) into corporate strategies. Within the Brazil Network of the Global Compact, the Company participates in the Climate Action platform, aimed at promoting the climate agenda in the participants' strategic objectives.

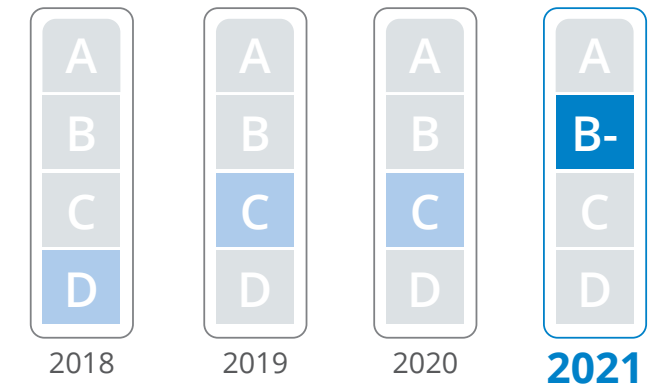
Committed to the transparency of its management, CSN also participates in CDP (Disclosure Insight Action) initiatives, an international organization dedicated to disclosing information on the governance of socio-environmental aspects of organizations to investors and analysts. The Company voluntarily responds to the climate change and water security questionnaires annually made available by the platform.

## In 2021, CSN evolved in all CDP categories

### Climate change



### Water security



*\*Since 2021, CSN Mineração has responded individually to CDP questionnaires. To learn more, [click here](#) and access the CSN Mineração Integrated Report.*



Since 2013, CSN has published its greenhouse gas emissions inventory, prepared annually in accordance with the parameters of the Brazilian GHG Protocol Program, and for 7 consecutive years it has been considered a Gold Seal. CSN Mineração has carried out its inventory independently from CSN since 2021.

*Learn more about emission inventories on page 103.*

## Engagement for the decarbonization of the sector



Also in 2021, a Memorandum of Understanding (MOU) was signed with Itochu Corporation, a Japanese multinational and minority partner of the Company.

CSN Mineração obtained financing of US\$ 350 million insured by the Japanese government for improvements and expansion of the operation and efficiency of the mine Casa de Pedra (MG). With the investment, the forecast is to expand production capacity by 3.2 times by 2033, including dry stacking of tailings. The agreement signed also provides for digital transformation with a focus on increasing operational efficiency and contributing to the advancement of decarbonization in mining and steel at the CSN Group.

In addition, Itochu also plans to undertake a broader collaboration, including current decarbonization initiatives in the field of metals and minerals, as a way to further contribute to the decarbonization of CSN Group operations through iron fabrication technology, low carbon, use of hydrogen and ammonia and CCUS (carbon capture, use and storage).



*Pile of iron ore in Casa de Pedra*

Itochu considers the case as a model for initiatives, along with the implementation of business partnerships with companies in Japan and other countries that have excellent technologies, with the aim of promoting decarbonization and digital transformation in the area of mineral and metal resources.

As a result, in early 2022, CSN became a key member of the Net Zero Steel Initiative (NZSI), a zero GHG sectoral platform launched in 2019 at the UNSG's Climate Action Summit. NZSI is part of the Mission Possible Partnership (MPP), a coalition of climate leaders focused on decarbonizing heavy industries globally over the next 10 years.

## ESG Indexes



FTSE4Good

Índice Carbono Eficiente **ICO2**

CSN's actions to integrate ESG aspects into its business strategy have been continuously recognized by the market, through classification and participation in indexes that assess the performance of organizations.

In Brazil, the Company is part of B3's Carbon Efficient Index (ICO2). The adherence demonstrates the company's commitment to transparency regarding GHG emissions and the structuring of a vision for the transition to a low carbon economy.

CSN is also selected to compose the FTSE4Good, one of the most relevant international indexes for evaluating and ranking corporate sustainability governance. The company is part of the index, which is linked to the London Stock Exchange and which, in addition to aspects of environmental and climate management, assesses policies and practices for relationships with communities and other ESG initiatives.

CSN's transparency in the disclosure of its practices, results, and governance on ESG topics also contributes to the assessment of rating agencies. Since 2020, the Company has been developing the diagnosis and internal analysis of ESG actions based on frameworks

### Performance in Rating Agencies and Sustainability Indexes

	2019	2020	2021	Comments
Sustainalytics	53.2	51.5	39.1	The higher the grade, the greater the risk
S&P	7	34	43	The higher the grade, the better
MSCI	CCC	CCC – 2.3	CCC – 2.5	AAA is the top grade
CDP Water CSN	C	C	B-	A is the top grade
CDP Climate CSN	D	C	B	A is the top grade
CDP Water CSN Mineração	-	-	C	A is the top grade
CDP Climate CSN Mineração	-	-	B-	A is the top grade
FTSE 4 Good	-	2.5	3.6	5 is the top grade
ICO2	-	-	We got in	-
ISS ESG	-	D	D+	A is the top grade

and methodologies used in the assessments of ESG rating agencies. This process presented gaps and opportunities, which were classified, prioritized, and internally delegated in order to continuously improve ESG practices. In 2021, the efficiency of this process could also be recognized through the significant improvement in the evaluation of the Company's performance measured by the main ESG

rating agencies in the world, among them: S&P Global, Sustainalytics, FTSE4Good Index, CDP, ISS ESG, which qualify the CSN Group, in many cases, above the industry average.

In addition to disclosing this Integrated Report, the Company makes information available on its ESG Portal: <https://esg.csn.com.br/>.

# Climate change and emission **management**



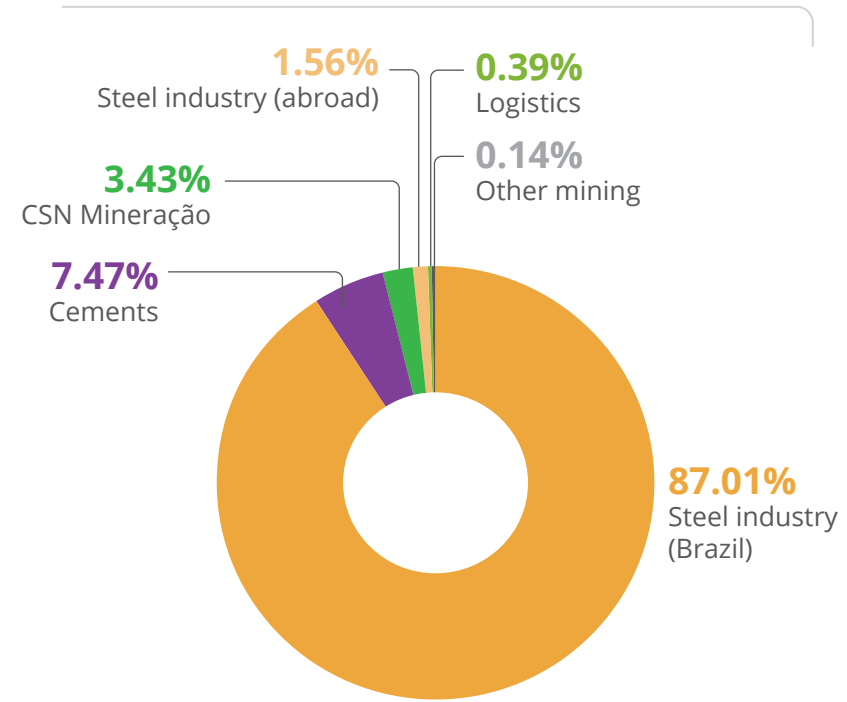
CSN's businesses are intensive in energy consumption and greenhouse gas (GHG) emissions, so the search for greater energy efficiency and flexibility in the use of alternative fuels and the management of CO<sub>2</sub>e emissions have always been strategic themes for growth, increased competitiveness, and business continuity.



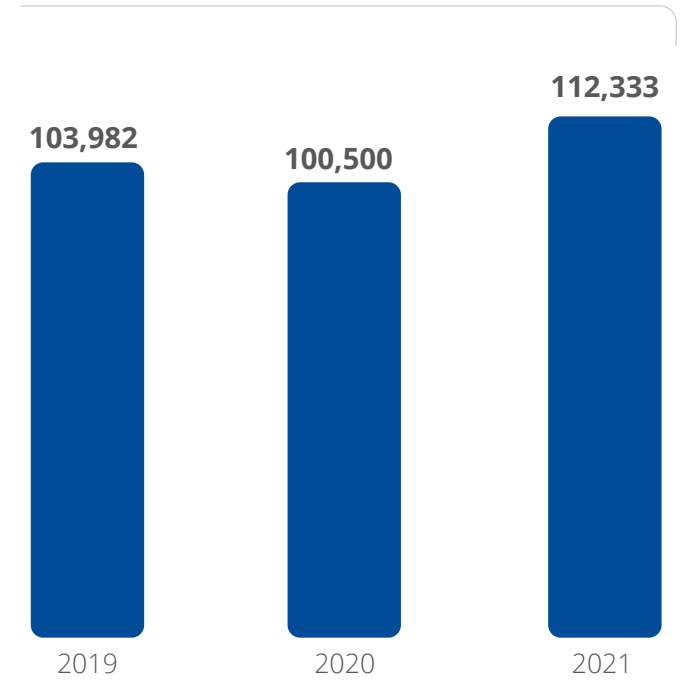
In 2021, total energy consumption within CSN companies was 112.3 million gigajoules (GJ), an increase of 12% over the previous year, as a result of increased production in all sectors of activity and consolidation reporting on the activities of the SWT and Lusosider units. In its ESG strategy, the company has sought to invest in new energy sources for self-production and increase the share of renewable sources in the energy matrix of all businesses, with a focus on reducing direct and indirect emissions.

Electricity consumption is guaranteed through CSN's own assets and through energy contracts (PPAs). In 2021, 92% of the electricity consumed came from renewable sources and self-generation– for example, hydroelectricity.

**Energy consumption by segment in 2021 (thousand GJ)**



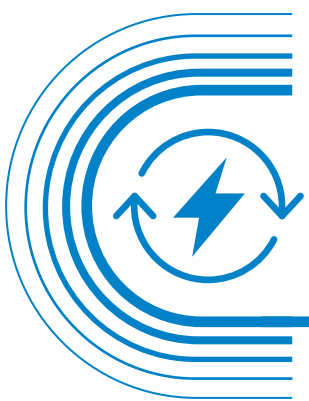
**CSN Group's energy consumption (thousand GJ)**



**Energy intensity <sup>1</sup>**

	2019	2020	2021
Energy consumption (GJ) divided by the added value distributed (R\$ thousand) <sup>2</sup>	13.26	8.30	4.16
Energy consumption (GJ) divided by ton of crude steel <sup>3</sup>	24.06	20.88	20.70
Energy consumption (kWh) divided by ton of cement <sup>4</sup>	86.61	85.96	81.12
Energy consumption (kWh) divided by ton of cementitious <sup>4</sup>	85.8	85.4	80.5
Energy consumption (MJ) divided by ton of clinker <sup>5</sup>	3,585	3,269	3,287
Energy consumption (GJ) divided by ton of ore produced	0.173	0.166	0.142

1. Considers all energy consumption within the organization (GRI 302-1, WSA Scope 1, GCCA Scope 1 and Scope 2).  
 2. Combustech Tool and B.5.2 indicator of Guidance on core indicators for entity reporting on contribution towards implementation of the Sustainable Development Goals of the UNCTAD United Nations Conference on Trade and Development.  
 3. According to the methodology of the World Steel Association (WSA) - Scope 1.  
 4. According to the methodology of the Global Cement and Concrete Association (GCCA) - Scope 2.  
 5. According to the methodology of the Global Cement and Concrete Association (GCCA) - Scope 1.



**92% of the electricity consumed in 2021 came from renewable sources, such as hydroelectricity**



**CSN's self-generation energy assets**

**Itá Hydroelectric Power Plant** (Santa Catarina)

**Igarapava Hydroelectric Power Plant** (Minas Gerais)

**Thermoelectric Power Plant – Presidente Vargas Steelworks** (Rio de Janeiro)

**Top Recovery Turbine (TRT) – Presidente Vargas Steelworks** (Rio de Janeiro)

CSN continually seeks to expand its installed capacity for self-production of electric energy, prospecting generation assets, the development or acquisition of which contributes to the competitiveness of the business and the increase in the share of renewable sources in its energy matrix. In April 2022, the Company announced the acquisition of Santa Ana Energética S.A. and Topázio, which directly and indirectly hold the operating concessions for the Santa Ana and Sacre II Small Hydroelectric Power Plants (SHPs), located respectively in Santa Catarina and Mato Grosso. The completion of the transaction was confirmed by competition and regulatory authorities, adding 32.8 MW to the installed capacity of CSN Group.



*Igarapava hydroelectric unit*



Employee at the air quality monitoring station in Volta Redonda

# Commitments to a low carbon economy

Within the ESG strategy, CSN is committed to transforming its business towards a low carbon economy. This means investing in new low-carbon technologies, process improvements and automation, and various innovations that result in reduced CO<sub>2</sub> emissions in steel, mining, and the cement sector.

[Click here to access CSN's emissions inventory](#)



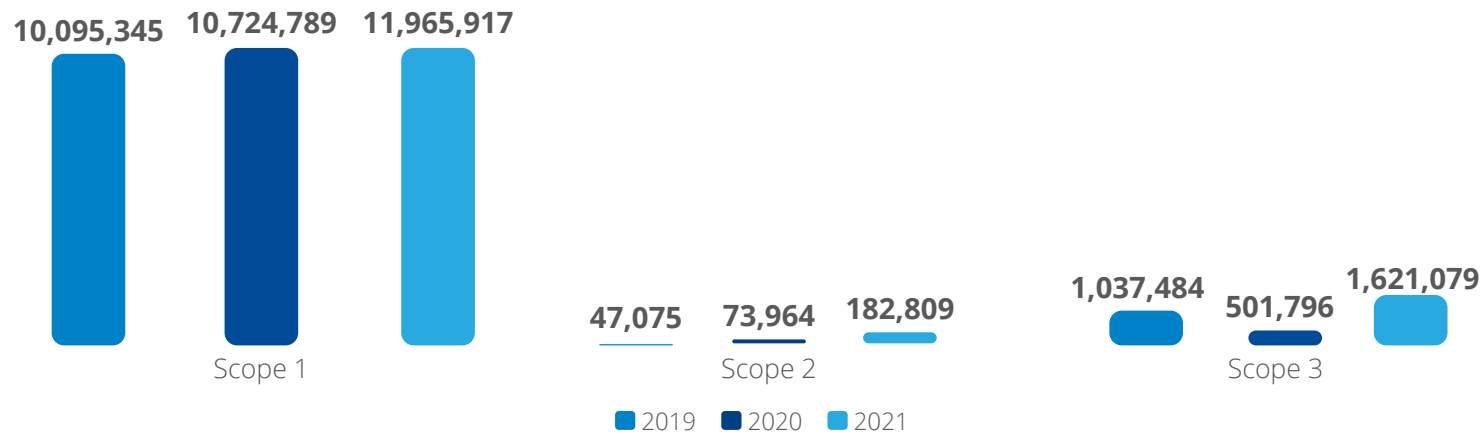
Ensuring support for its environmental management, since 2013, CSN annually publishes its greenhouse gas emissions inventory prepared in accordance with the parameters of the Brazilian GHG Protocol Program on the FGV Public Emissions Registry platform. The data is audited by a third party and, since 2014, the inventory has been classified as a Gold Seal in the Public Emissions Registry. Since 2021, CSN Mineração has been carrying out its emissions inventory independently from the CSN Group.

In 2021, CSN's total emissions (scope 1 and scope 2 market-based) amounted to 12.1 million tCO<sub>2</sub>e (tons of equivalent carbon). In comparison with the previous year, there was an increase of 13%, mainly driven by the higher production volume in all business units and by the inclusion of SWT and Lusosider units in the GHG inventory (SWT and Lusosider emissions add up to 138 thousand tCO<sub>2</sub>e, considering scopes 1 and 2). However, with the implementation of initiatives focused on increasing energy efficiency and optimizing production processes, in addition to a record added value distributed by the Company, the consolidated emission intensity index (scopes 1 and 2 divided by the added value distributed) improved by 62% in the annual comparison.

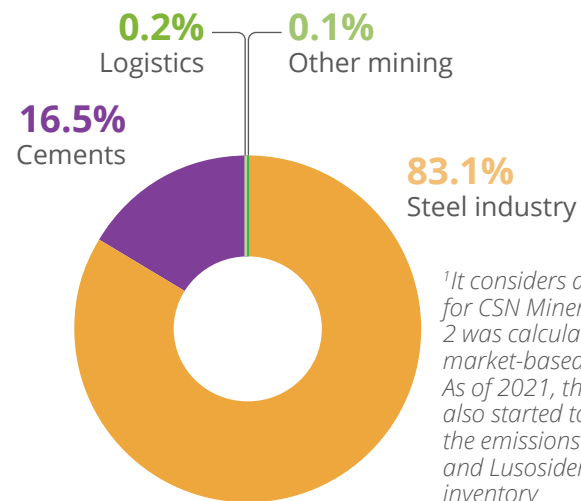
[Click here to access CSN Mineração's emissions inventory](#)



### GHG emissions by year and scope (tCO<sub>2</sub>e)<sup>1</sup>

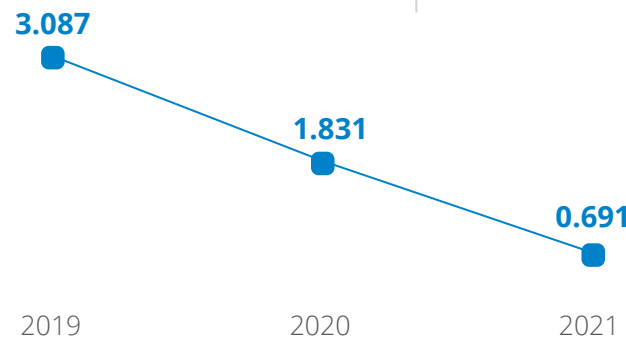


### Scopes 1 and 2 emissions by segment in 2021<sup>1</sup>



<sup>1</sup>It considers all units, except for CSN Mineração. Scope 2 was calculated using the market-based approach. As of 2021, the CSN Group also started to consolidate the emissions from the SWT and Lusosider units in its inventory

### CSN Group's emissions intensity (tCO<sub>2</sub>e/R\$ thousand)<sup>2</sup>



<sup>2</sup>It considers scope 1 and 2 emissions divided by the distributed value added (DVA). Scope 2 was calculated using the market-based approach. Data for 2020 and 2019 has been updated due to adjustment of historical DVA calculation. Due to the historical record in the Company's DVA value, a 62% reduction in the intensity of emissions per DVA was achieved.

## Climate Change Group

CSN remains committed to its decarbonization journey. Within the scope of the ESG Committee, the Climate Change Group was created, which led the development of a robust decarbonization roadmap, divided into 3 phases (Blue, Olive, and Green) and considering different technological alternatives.

For the construction of this roadmap, one of the main initiatives carried out last year was the use of a tool based on machine learning and artificial intelligence for the elaboration of the **Marginal Abatement Cost Curve (MAC Curve)**, a methodology that allows the evaluation of different low-carbon scenarios, through carbon pricing and abatement potential of different technological routes.

From the analysis and update of the emissions inventory and the desired target scenario, more than 100 possible options for mitigation of emissions were raised, then submitted to a technical and economic evaluation to be prioritized, which resulted in a roadmap of priority projects that will guide the decarbonization journey of CSN's productive businesses.

From this exercise, the targets for reducing atmospheric emissions could be revised with the definition of more ambitious commitments for the steel, mining and cement businesses and the definition of the journey to be traced to reach them.





# Steel industry

In the steel sector, CSN will reduce the intensity of its emission per ton of steel produced by 10% by the year 2030 and by 20% by the year 2035, in relation to the base year of 2018. By industry practice, the target is calculated based on the WSA methodology and considers the company's steel producing units: Usina Presidente Vargas (UPV) and CSN Aços Longos (Volta Redonda - RJ) and SWT (Germany).

Based on the defined roadmap, the segment's decarbonization journey was divided into three phases (Blue, Olive, and Green), ensuring the achievement of the goal with excellence in planning and the recognition of different levels of maturity of the necessary technologies (learn more in the diagram).



## Decarbonization of the steel industry journey



**Blue phase**

Investments in projects related to operational efficiency with direct impact on emissions, including: renovation of blast furnaces, new coke batteries, renovation of sintering plants, investments in the CTE of steel gases and use of raw materials with greater energy efficiency.

**Olive phase**

Introduction of the identified technological changes - metallization in the load, use of biomass, recovery of lost heat and others - that support the improvement in productive efficiency.

**Green phase**

Introduction of new disruptive technologies currently still under development, such as the use of green hydrogen and Carbon Capture Use (CCU).

<sup>1</sup>WSA methodology - Reduction of CO2 emission intensity per ton of steel produced.





Also in 2021, memoranda of understanding (MOUs) were signed with strategic partners for the development of decarbonization projects (learn more on page 101).

For 2022, it is scheduled the start of a pioneering pilot project to use Ultimate Technology to Industrial Savings (UTIS) at the Volta Redonda steel complex. Eleven potential areas were identified for application of the technology, which promotes the controlled injection of green hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) into the combustion system. If successful, a significant reduction in emissions and energy costs is expected. UTIS has already been successfully implemented in the Cement segment (learn more on page 83).

In Germany, SWT last year achieved ISO 50001 (energy management) certification for its operations. For this, the unit implemented improvements such as modernization of the air conditioning, ventilation and heating systems and the replacement of light bulbs with LED models. In addition, innovation opportunities were mapped to reduce the consumption of fossil fuels – in particular the replacement of natural gas, heating oil and propane gas –, such as the use of the calorific value of waste. The expected savings from the energy efficiency projects identified is 50 million kilowatt-hours.

In a parallel front of differentiation and reduction of the carbon footprint in the operations, SWT started to offer the alternative of zero GHG emissions associated with the transport of steel to customers in different regions of Europe. Through partnerships with logistics



SWT site view – Germany

providers, up to two-thirds of the unit's production can be transported directly by rail. The SWT emission intensity is 0.21 tCO<sub>2</sub>e/ton of steel, 90% lower than the global average, which is 1.89 tCO<sub>2</sub>e/ton of steel, reported by the World Steel Association.

**In 2021, the intensity of GHG emissions in the steel industry segment had a reduction of 6% compared to 2018, based on the WSA methodology\*.**

*\*For more information on the methodology used by CSN to account for the intensity of emissions from the steel industry, [click here](#).*

**UPV + SWT Intensity tCO<sub>2</sub> e/t crude steel - WSA Methodology**

	2018 (goal base-year)	2019	2020	2021
Crude steel production	5,023,578	3,851,011	4,628,372	5,199,945
Absolute emission	10,571,363	8,484,662	9,136,200	10,281,776
Emission intensity	2.10	2.20	1.97	1.98

## Life Cycle Assessment (LCA) and green steel

Alongside other German steel manufacturers, SWT has developed Product Category Rules (PCR) to define the requirements for building Environmental Product Declarations (EPDs) as required by ISO 14025:2010, in order to ensure an equal basis for comparison and a unique assessment methodology. Based on standardized criteria, steel can now be compared between competitors, but

also with other different materials used in construction, such as wood and concrete, allowing architects and investors to select the correct materials to ensure the sustainable construction of eco-friendly buildings. In 2021, through a life cycle assessment (LCA), it was possible to quantify the impacts from raw material extraction to SWT steel production and issue the company's EPD (see more in the table).



SWT's green steel (graphic representation)

### Description of system limits

Product stage	Raw material supply	A1	X
	Transport	A2	X
	Manufacturing	A3	X
Construction process stage	Transport from the gate to the site	A4	MND
	Assembly	A5	MND
Stage of use	Use	B1	MND
	Maintenance	B2	MND
	Repair	B3	MNR
	Replacement	B4	MNR
	Remodeling	B5	MNR
	Use of energy in the operation	B6	MND
	Use of water in the operation	B7	MND
End-of-life stage	Deconstruction / demolition	C1	MND
	Transport	C2	MND
	Waste processing	C3	MND
	Disposal	C4	MND
Benefits and loads beyond the system limit	Potential for reuse, recovery and recycling	D	MND

*X = Included in the LCA*  
*MND = module not declared*  
*MNR = module not relevant*

[Click here for more information about the study](#)





A point of environmental advantage to be highlighted is the concern regarding the electricity sourcing for an electro-intensive process. Thanks to the use of “green electricity” – produced from Scandinavian hydropower – it is possible to offer steel products with low CO<sub>2</sub> emissions. With the purchase of Guarantees of Origin, it is ensured that the electricity required to manufacture Green Steel products at SWT is 100% renewable.

The use of “green electricity,” combined with CO<sub>2</sub>-neutral logistics and the reuse/recycling of intermediate and residual materials, brings SWT closer to its climate neutrality goals. In 2022, a milestone was reached with the first line of sustainable products, with low CO<sub>2</sub> emissions – less than 400 kg CO<sub>2</sub> per metric ton of steel produced. This intensity fits into a value considered prime in the approach of Klöckner & Co., which uses the environmental product declaration (EPD), audited according to the principles of ISO 14025:2010 and EN 15804+A1.

To enable customers to carry out an easy, reliable and transparent rating, Klöckner & Co has developed a rating scale for green steel in cooperation with the Boston Consulting Group. The scale is supported by science-based international standards and categorizes CO<sub>2</sub>-reducing steel from certified emissions across the value chain, from raw material extraction to production.

### LCA results

Parameter	Unit	A1-A3
Potential for global warming	kgCO <sub>2</sub> e	3,85E+2
Potential for stratospheric ozone layer depletion	kgCFC11	1,21E-12
Potential for acidification of land and water	kgSO <sub>2</sub> e	7,80E-1
Potential for eutrophication	kg(PO <sub>4</sub> ) <sup>3</sup> e	8,12E-2
Potential for the formation of tropospheric ozone photochemical oxidants	kg etano eq.	6,68E-2
Abiotic depletion potential for non-fossil resources	kgSb eq.	1,65E-4
Abiotic depletion potential for fossil resources	MJ	4,35E+3



SWT's production process



## Climate change at CSN Mineração

With the new commitments announced at the end of 2021, CSN Mineração will neutralize GHG emissions in its scopes 1 and 2, by 2044. Before that, by 2035, the company will achieve a 30% reduction in the intensity of these emissions (base year 2019). The company already has one of the lowest emission intensities in the sector. In 2021, CSN Mineração reached an index of 6.6 kgCO<sub>2</sub>e/ton of ore produced, which represents a reduction of 7% compared to 2020.

**Mining segment emissions intensity (kgCO<sub>2</sub>e/ton of ore produced)\***



\*It considers Scope 1 and 2 emissions divided by ton of iron ore produced at CSN Mineração, according to the methodology of the Brazilian GHG Protocol Program.



Employee operating off-road truck - Casa de Pedra Unit

In the activities of CSN Mineração S.A., 100% of the electricity used comes from renewable sources, so that opportunities for reducing emissions are directly linked to scope 1 emissions. According to the roadmap defined and equally divided into three phases (Blue, Olive, and Green), the strategy for reducing direct emissions involves increasing operational efficiency and implementing new technologies -

such as the electrification of vehicles used in the mine (reducing the use of fossil fuels) and the adoption of alternative fuels (such as the use of biodiesel or injection of hydrogen together with diesel) -, in addition to the use of already established technologies, such as conveyor belts, in pit crusher, use of Unmanned Trucks - Autonomous Mine.

The development of autonomous equipment began in 2021, with the implementation of 5 pieces of equipment (crawler tractor, drills, and other smaller equipment) operated remotely or semi-remotely. The plan foreseen for the next six years covers the development of the infrastructure for the application of these solutions on a large scale. One of the main advances was the partnership signed with an international supplier of mining trucks, through which new battery-powered electric cargo trucks will be tested by CSN Mineração. The first two vehicles, with a capacity of 60 tons, will be tested from 2022 in operations at the Casa de Pedra Mine, eliminating the use of fossil fuels.





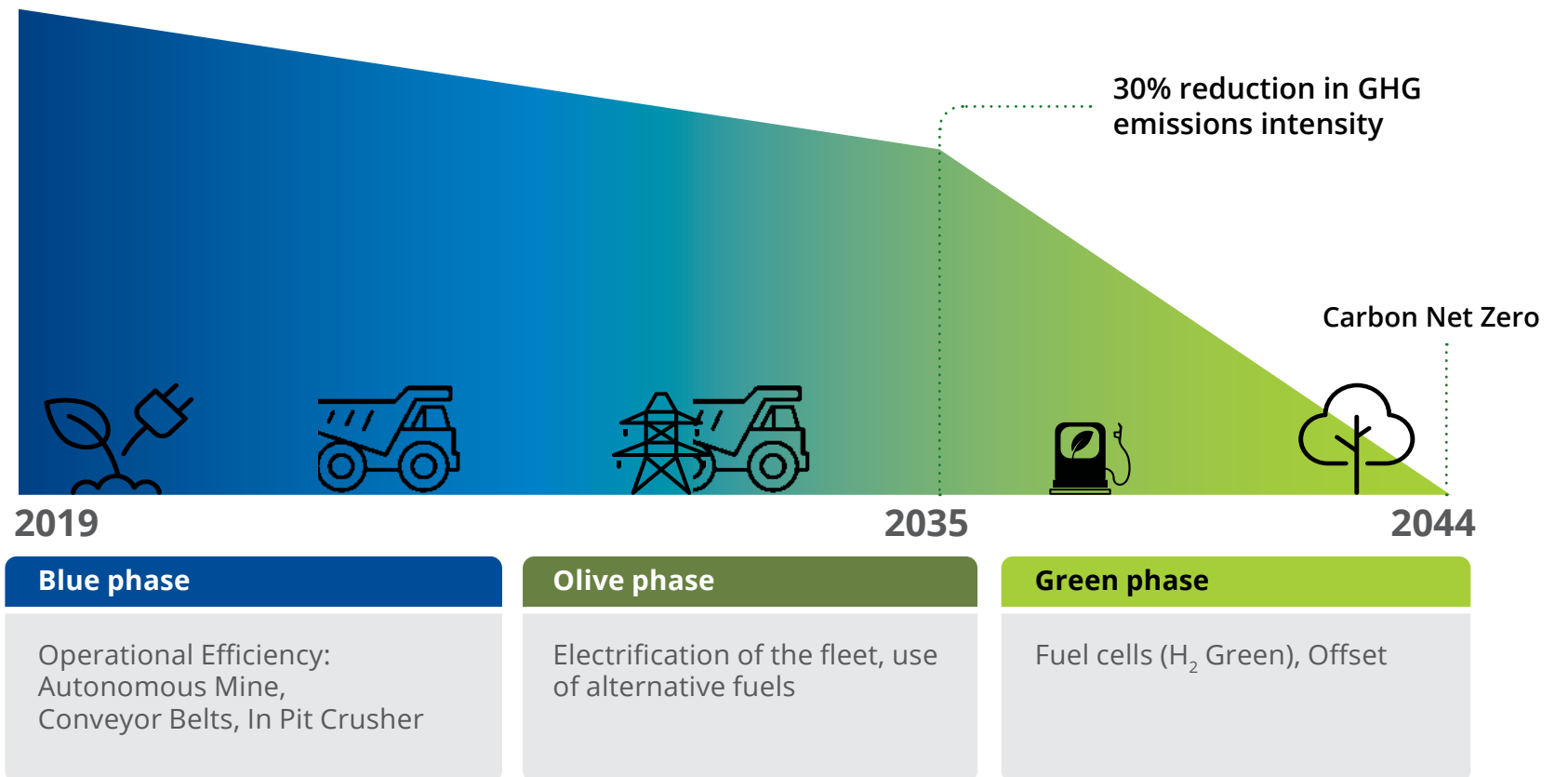
## Quality ore and less emissions

CSN Mineração's scope 3 emissions were of 42.9 million tCO<sub>2</sub>e in 2021, an increase of 7% when compared to 2020 - these emissions are calculated and verified annually by independent third parties. About 95% of these emissions derive from category 10 scope 3 (according to the GHG Protocol methodology), that is, they result from the processing of products sold in 2021. Thus, the increase in emissions in 2021 is directly associated with the increase production and sales of iron ore and improvement in the management and collection of customer data.

In order to manage the emissions of its value chain, map risks and opportunities, in 2021, CSN Mineração carried out a process of interaction with its main downstream customers. In 2022, the company will work on an engagement program with its main suppliers via CDP Supply Chain.

Regarding the challenges of reducing Scope 3 emissions, CSN Mineração will play a strategic role in the decarbonization plan for the global steel industry. The decarbonization of the steel industry must value products and solutions with high-quality, low-emissions iron ore. CSN Mineração's current strategy already foresees a high-quality product portfolio, representing 90% of its production by 2025.

With the investments foreseen in the expansion projects of CSN Mineração, the company will start to produce one of the products with the highest iron content and lowest percentage of impurities in the world. Using this ore to produce steel first in blast furnaces or direct reduction routes will result in lower energy consumption, higher product quality and lower specific emissions. With this, CSN Mineração's ore is positioned as a fundamental lever in the decarbonization strategies of steel mills, including those that bet on the use of hydrogen as a reducing agent.



100% of the electricity consumed in CSN Mineração's activities comes from renewable sources



# Cements

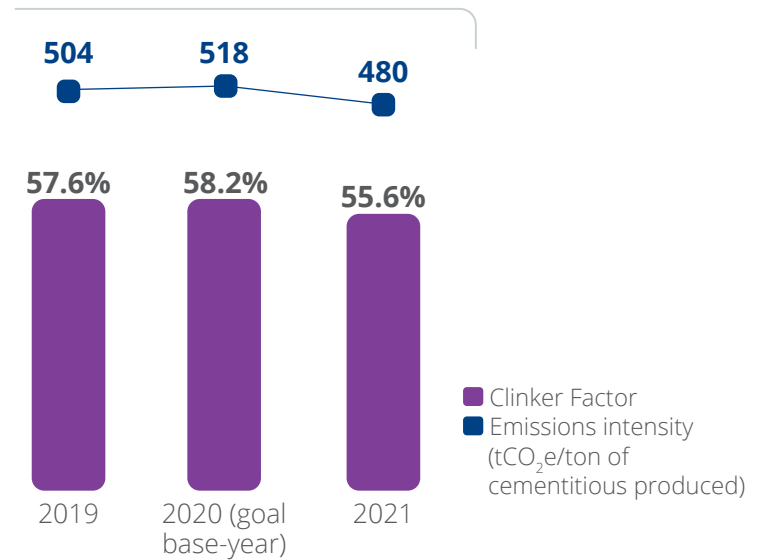
CSN Cimentos has one of the lowest CO<sub>2</sub>e emission intensity indexes in the sector in Brazil. In 2021, the company reached the reduction parameters indicated by the Brazilian Cement Technology Roadmap for the year 2030 and committed to bringing forward the sector goals established for 2050 in 20 years. To build this sector roadmap, SNIC and ABCP relied on the collaboration of renowned international bodies such as IFC (International Finance Corporation), IEA (International Energy Agency) and WBCSD (World Business Council for Sustainable Development). To meet the parameters proposed by the Brazilian Cement Technology Roadmap at the 2050 levels, CSN Cimentos will reduce specific emissions (scopes 1 and 2) by 28% and the clinker factor by 16% by 2030 (base year 2020). By sector practice, the target is calculated based on the Global Cement and Concrete Association (GCCA) methodology and considers the CSN Cimentos production units in Volta Redonda – RJ and Arcos – MG. In 2022, CSN Alhandra (operation acquired from Cimento Elizabeth) will be incorporated into the target.

Business integration and the circular economy are among the main advantages of CSN Cimentos in terms of its environmental performance. The company uses 100%

of the blast furnace slag generated at the Presidente Vargas Steelworks in the cement manufacturing process. The use of biomass and other innovative technologies also contributes to increasing energy efficiency and reducing the clinker factor. In 2021, the company started the implementation of the waste co-processing process, which will also support better efficiency and emissions reduction at the Arcos plant from the operational start-up scheduled for 2022.

In 2021, CSN Cimentos achieved a 7% reduction in emissions intensity (liquid tCO<sub>2</sub>e/ton of cement produced) and 4.5% in the clinker factor, one of the main emission factors in cement production, according to the CSI methodology/GCCA.

**Emissions intensity from the Cement segment (kgCO<sub>2</sub>e/ton of cementitious)**



## Emissions intensity

		2019	2020 (base-year)	2021
	Clinker factor	57.6%	58.2%	55.6%
	CSI Emission (tCO <sub>2</sub> e)	1,795,928	2,038,329	2,056,817
Cementitious base	CSI cementitious production (ton)	3,565,638	3,938,657	4,283,640
	CSI emissions intensity (kgCO <sub>2</sub> e/ton of cementitious produced)	504	518	480
Cement base	CSI cement production (ton)	3,546,466	3,924,179	4,261,905
	CSI emissions intensity (kgCO <sub>2</sub> e/ton of cement produced)	506	519	483





Limestone conveyor belt - Arcos Unit

The injection of green hydrogen to improve the burning of fuels in the Clinker Furnace 2 of the Arcos-MG Unit, through the Ultimate Technology to Industrial Savings (UTIS), is one of the technologies that contribute to the reduction of emissions in the production process. The solution promotes the injection of controlled amounts of green hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) into the combustion system, making the burning more stable, reducing thermal/electrical consumption, improving the quality of the clinker, and promoting the reduction of CO<sub>2</sub> emissions.

The solution was identified by CSN Inova in the process of mapping innovation startups and is part of the new technological routes identified to reduce the carbon footprint in business.

- 7
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**The use of green hydrogen is one of the technologies that can leverage the reduction of GHG emissions in cement production**

Emissions indicators (UPV and Arcos)			CSN Cimentos intends to achieve, by 2030, a performance superior to the sectoral reference of the Brazilian Cement Technology Roadmap defined for 2050
	2030 GOAL CSN CIMENTOS	2050 GOALS BRAZILIAN CEMENT TECHNOLOGY ROADMAP	
CO <sub>2</sub> emission (kgCO <sub>2</sub> e/ton of cement)	<b>375</b>	<b>375</b>	
Clinker factor (%)	<b>48.8%</b>	<b>51.0%</b>	
Electrical consumption (kWh/ton)	<b>81.3</b>	<b>91.0</b>	
Thermal consumption (GJ/ton)	<b>3.22</b>	<b>3.22</b>	

# TCFD

In 2021, the CSN Group completed the qualitative assessment of risks and opportunities related to climate change for all segments of CSN, based on the guidelines of the Task Force for Climate Related Financial Disclosures (TCFD).

## Pillar: Governance

Recommendation	Detail	Evidence
a) Describe the board's oversight of climate change-related risks and opportunities	The Board of Directors is responsible for establishing strategic guidelines and deliberating on economic, social and environmental issues that have an impact on the Company's business, including the issue of climate change. In order to support the Council's decisions, the ESG Committee is responsible for presenting to the Council the advances, challenges, risks and opportunities regarding the climate agenda.	CSN Day, CDP 1.1b, page 74 of this report
b) Describe management's role in assessing and managing climate change risks and opportunities	CSN has an ESG Committee, which supports the Board of Directors' deliberation on environmental, social and governance risks, including a specific commission to address the issue of climate change and possible related risks. The ESG Committee works together with the Sustainability Board, which reports directly to CSN's CEO, and is directly involved in managing indicators, assessing, and identifying climate risks and developing projects to leverage the low carbon agenda. In addition to these governance elements, CSN has the Climate Change Group, which aims to have operational management to address the issue of innovation and decarbonization in the company's different business units, meeting weekly.	Page 74 of this report

## Pillar: Strategy

Recommendation	Detail	Evidence
<p>a) Describe the risks and opportunities related to climate change that the organization has identified in the short, medium, and long term</p>	<p>In the assessment of climate risks and opportunities starting in 2021, three time horizons were considered, characterized as short, medium or long term, respectively 1 to 3 years, 4 to 5 years, and 6 years or more. Through the study, nine risks with potentially high relevance for CSN were identified:</p> <ul style="list-style-type: none"> <li>• <b>In the short term:</b> [1] risk of water scarcity; [2] European Union Emissions Trading System (EU ETS); capital loss due to restricted access to sustainable investors; [3] establishment of limits for the use, storage and flow of hydroelectric plants and other measures to face the water crisis; [4] extreme rainfall.</li> <li>• <b>In the medium term:</b> [5] landslides in dams due to the increase in extreme events; [6] pressure from stakeholders to structure a decarbonization strategy for the company; [7] investment loss due to restricted access to investors and banks with strict socio-environmental criteria; [8] negative perception of the sector due to the intensity of emissions and non-compensation of GHG; [9] incidence of carbon pricing and taxation on CSN's activities in Brazil; [10] increased intensity and frequency of extreme temperatures.</li> <li>• Long-term risks, as the risk matrix was constructed<sup>1</sup>, do not have critical risks. In any case, risks that may have high long-term relevance were identified, such as: [a] stranded assets due to carbon criteria; [b] loss of market due to non-adherence to more sustainable production technologies and products or more adapted to the climate change scenario.</li> </ul> <p>The 4 most relevant opportunities for the segments in which the Company operates are described below, as well as the time horizon in which the risk is most likely to materialize:</p> <ul style="list-style-type: none"> <li>• <b>Short term:</b> [1] issuance of green bonds and Sustainability Linked Bonds; [2] reuse of tailings in mining; [3] use of green H<sub>2</sub> as an energy transition instrument.</li> <li>• <b>Medium term:</b> [4] Circular economy of steel.</li> </ul> <p><i>Only those that are highly relevant and that occur in the short or medium term or those with medium relevance that may occur in the short term are considered critical risks and opportunities.</i></p>	<p>Page 63 of this report</p>
<p>b) Describe the impact of risks and opportunities related to climate change on the organization's business, strategy, and financial planning</p>	<p>In the assessment of climate risks, three of the critical risks for CSN were monetized in order to measure the magnitude of the financial impact. In this evaluation, the values were substantial based on CSN's valuation, showing the consistency of the prioritization carried out in the study. However, the results have not yet been used for decision making or financial planning.</p>	<p>Does not apply</p>
<p>c) Describe the resilience of the organization's strategy, taking into account different scenarios related to climate change, including a scenario of 2°C or lower</p>	<p>CSN used some climate scenario studies (RCP 4.5 and RCP 8.5) to build the company's climate risk matrix. However, a study of climate scenarios using specific variables and decarbonization scenarios below the limits established by the Paris agreement will be carried out in the next two years.</p>	<p>Does not apply</p>

## Pillar: Risk management

Recommendation	Detail	Evidence
<p>a) Describe the organization's processes to identify and assess risks related to climate change</p>	<p>The process of identifying, evaluating and prioritizing CSN's climate risks and opportunities is done through 4 steps:</p> <ol style="list-style-type: none"> <li>1. Initial definitions</li> <li>2. Physical risk analysis</li> <li>3. Transition risk analysis</li> <li>4. Identifying Opportunities</li> </ol> <p>More details on these steps and how the climate risk assessment study was carried out can be found in full in section Systemic assessment of climate risks and opportunities on page 63 of this report.</p>	<p>Page 63 of this report</p>
<p>b) Describe the organization's processes for managing climate change-related risks</p>	<p>In 2021, CSN took the first step towards structuring a climate risk management process: building a risk matrix. The climate risk assessment process is described in detail on page 63. The process includes the stages of identification, assessment, prioritization, construction of the climate risk and opportunity matrix and its incorporation into the Company's risk management process. The main climate risks are included in the corporate risk management process, through analyzes by the Audit Committee and the ESG Committee and reporting to the Board of Directors.</p> <p>Over the next two years, CSN will deepen the climate risk matrix, prepare a study of climate scenarios, and monetize the Company's main climate risks in order to verify the resilience of the business to the impacts of climate change.</p>	<p>Page 63 of this report</p>
<p>c) Describe how processes for identifying, assessing, and managing climate change-related risks are integrated into the organization's overall risk management</p>	<p>The Internal Audit, Risks and Compliance Board supports the business areas to identify, prioritize and take priority risks to senior management. The Company's periodic risk assessments, provided for in its Risk Manual, include the identification, assessment, reporting and mitigation of strategic, operational, financial, regulatory, and ESG risks.</p> <p>As in this process, the risk related to the incidence of carbon pricing and taxation has already been incorporated into the Environmental Risk category within the Regulatory Compliance pillar. If the mapped risks are identified as critical, they will be taken and evaluated by the Audit Committee on a quarterly basis.</p>	<p>Presentation to the Audit Committee and Reference Form</p>

## Pillar: Metrics and goals

Recommendation	Detail	Evidence
<p>a) Disclose the metrics used by the organization to assess risks and opportunities related to climate change in accordance with its risk management strategy and process</p>	<p>Page 97 presents the compilation of performance and targets associated with the ESG agenda that are directly or indirectly correlated with action to combat climate change.</p> <p>In addition to the points mentioned above, one of the important instruments for companies' climate management is the internal carbon price. In 2021, CSN developed a MAC (Marginal Abatement Curve) in order to identify projects to reduce greenhouse gas emission targets and assume consistent targets for each of its operating segments. (more details on pages 108, 113 and 115).</p> <p>The MAC created by CSN allows us to work on the shadow price approach to carbon pricing, in which the price varies as we assume/analyze more ambitious emission reduction targets. As a result, the internal carbon price will be integrated into the decision-making process to guide the Company's capital allocation, enabling, and accelerating the transition to a carbon neutral economy.</p>	<p>Pages 108, 113 and 115 of this report</p>
<p>b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and related risks</p>	<p>CSN uses sector methodologies to establish goals and correct sector comparison, while employing the GHG Protocol methodology to disseminate information in a comparative manner with other sectors and countries. Throughout this document, emission values and intensity by segment, performance against targets and historical series were presented:</p> <ul style="list-style-type: none"> <li>• Scope 1 emissions (page 107)</li> <li>• Scope 2 emissions (page 107)</li> <li>• Scope 3 emissions (page 107)</li> <li>• Mining emissions intensity (page 112)</li> <li>• Steel emissions intensity (page 109)</li> <li>• Cement emissions intensity (page 114)</li> </ul> <p>To calculate emissions and the intensity of emissions, as well as the company's goals, the following methodologies are used: Brazilian GHG Protocol Program; IPCC Guidelines for National Greenhouse Gas Inventories, 2006; ISO 14064-1; WBCSD: The Cement CO2 and Energy Protocol; World Steel Association CO2 Emissions Data Collection Guidelines.</p>	<p>Pages 103 to 115 of this report</p>
<p>c) Describe the goals used by the organization to manage risks and opportunities related to climate change and performance against the goals</p>	<p><b>CSN Mineração:</b> reduce by 30% the intensity of emissions (scopes 1 and 2) per ton of ore produced by 2035 and Net Zero by 2044 (base year, methodology and performance on page 113).</p> <p><b>Steel Segment:</b> reduce the intensity of emissions per ton of crude steel by 10% by 2030 and 20% by 2035 (base year, methodology and performance on page 108).</p> <p><b>Cement Segment:</b> reduce the intensity of emissions per ton of cement by 28% by 2030 (base year, methodology and performance on page 115).</p>	<p>Pages 108, 113 and 115 of this report</p>

# Atmospheric emissions

CSN has technologies and procedures to constantly mitigate and monitor atmospheric emissions from its production processes, aiming to ensure the compliance of its operations and the maintenance of air quality according to the parameters established by regulatory standards in the regions where the units are installed.

To control and mitigate emissions from fixed sources, such as particulate materials and other components inherent to steel production, the UPV has environmental control technologies such as Dedusting Systems, such as bag filters, electrostatic precipitators, and gas scrubbers. It also performs isokinetic measurements and continuous control with continuous particulate material meters and gas analyzers in its chimneys, periodically checked, which guarantee the reliability of the results. The same concept of environmental control in the steel industry is applied to the cement segment, at CSN Cimentos units in Volta Redonda and Arcos.



*Employees at the air quality monitoring station in Volta Redonda*

**18%** reduction in the emission of Particulate Material from CSN, in relation to 2020



**49%** reduction in CSN's SOX emissions, in relation to 2020







CSN has a robust air quality monitoring network in the city of Volta Redonda, with three automatic and five semi-automatic air quality monitoring stations, in addition to meteorological stations that contribute to the efficiency of environmental controls. The information is transmitted in real time to the state environmental agency of Rio de Janeiro, which consolidates the information and disseminates the Air Quality Index (IQA<sub>r</sub>) to the local community.

In the mining sector, CSN Mineração operates two weather stations and two air quality monitoring stations. This equipment is part of the Optimized Air Quality Monitoring Network of Congonhas and Region, which transmits data online and 24 hours a day to the Minas Gerais state secretariat.

The Optimized Network, which counts on the participation of other companies, makes it possible to verify compliance with the standards of concentration of particulates in the atmosphere, guaranteeing the quality of the air around the mining operations.




*Employee at the air quality monitoring station in Casa de Pedra*



### Parameters analyzed by the Network

- **PTS total**  
suspended particles
- **Inhalable PI particles**  
(MP10 and MP2.5)
- **Ozone**  
(O<sub>3</sub>)
- **Sulfur dioxide**  
(SO<sub>2</sub>)
- **Nitrogen oxide**  
(NO)
- **Nitrogen dioxide**  
(NO<sub>2</sub>)
- **Meteorological parameters**, such as wind direction and speed, atmospheric pressure, rainfall, global solar radiation, relative air humidity and temperature

# Water Management



Water is an essential natural resource in the steel and mining production processes and, therefore, the search for maximum water efficiency is part of the CSN Group's ESG strategy. At the operational units, water is collected from rivers, wells or as a result of the necessary lowering of the water table in mining operations, always in accordance with the grants authorized by environmental agencies, in addition to the use of rainwater. After collection and consumption, the effluents are primarily reused in the process, or after a rigorous monitoring system they are treated and disposed of properly.

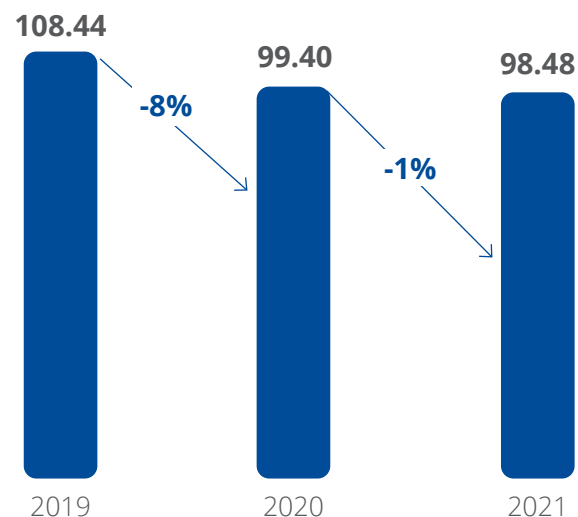


In the assets of the Energy segment, there is no funding for the generation of electricity. The Itá and Igarapava hydroelectric plants generate energy from the passage of water through the turbines, maintaining the regular flow of the rivers and managing the reservoir.

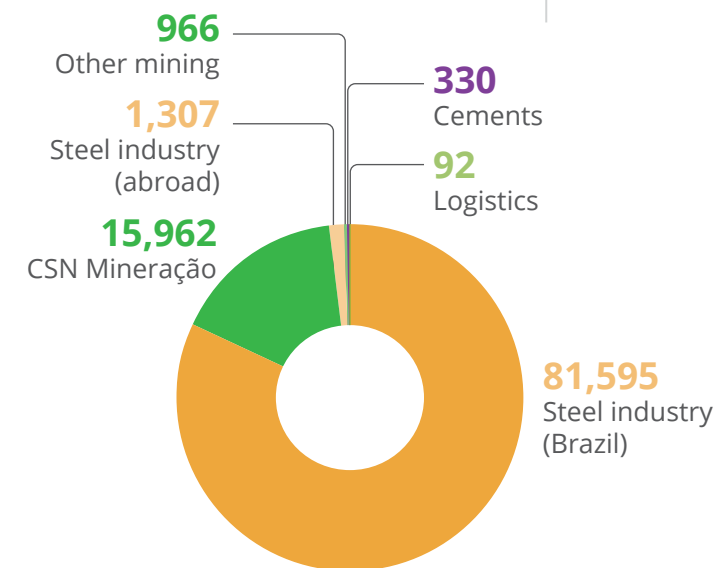
In 2021, CSN's total water abstraction dropped by 1% compared to 2020, equivalent to 920,512 m<sup>3</sup>, a volume sufficient to supply 12,600 people per year. In relation to 2019, CSN achieved a reduction of 9%, which represents a total of 9.9 million m<sup>3</sup>, enough to supply 136 thousand people per year.

Specific water abstraction decreased in the steel and mining sectors, which together represent 99% of the CSN Group's total water abstraction. The reductions presented were 16% in the UPV (from 22.1 m<sup>3</sup>/ton of steel to 18.5 m<sup>3</sup>/ton of steel) and 27% in Mining (from 0.226 m<sup>3</sup>/ton of ore to 0.165 m<sup>3</sup>/ton of ore) referring to 2020, reflecting efforts to reuse water.

**CSN's water collection (thousand megaliters)**



**Water collection by segment in 2021 (megaliters)**



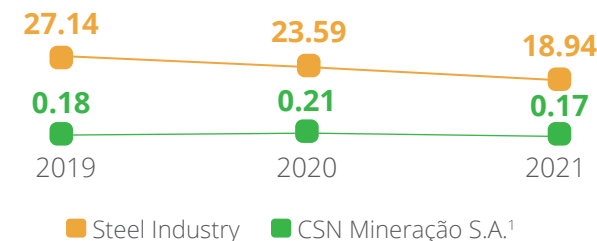
[Click here to access CSN's Water Resources Policy](#)



**CSN's water intensity**

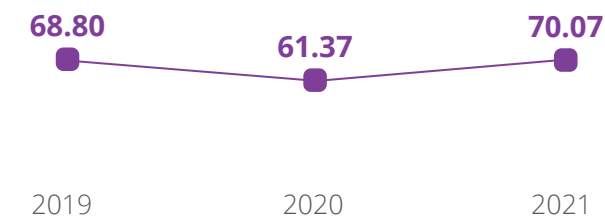
	2019	2020	2021
DVA	8,658,235	12,111,236	27,008,490
Collection (megaliters)	108,422.87	99,382.71	98,475.91
Intensity (water collection/DVA)	0.0125	0.0082	0.0036

**Water intensity (m<sup>3</sup> collected per ton produced)**



<sup>1</sup>In 2021, the water intensity in areas with water stress was 0.17 m<sup>3</sup>/ton of production.

**Water intensity (liters per ton produced)<sup>2</sup>**



<sup>2</sup>The water intensity per ton produced is calculated in liters in the Cement segment.

# Assessment of water stress

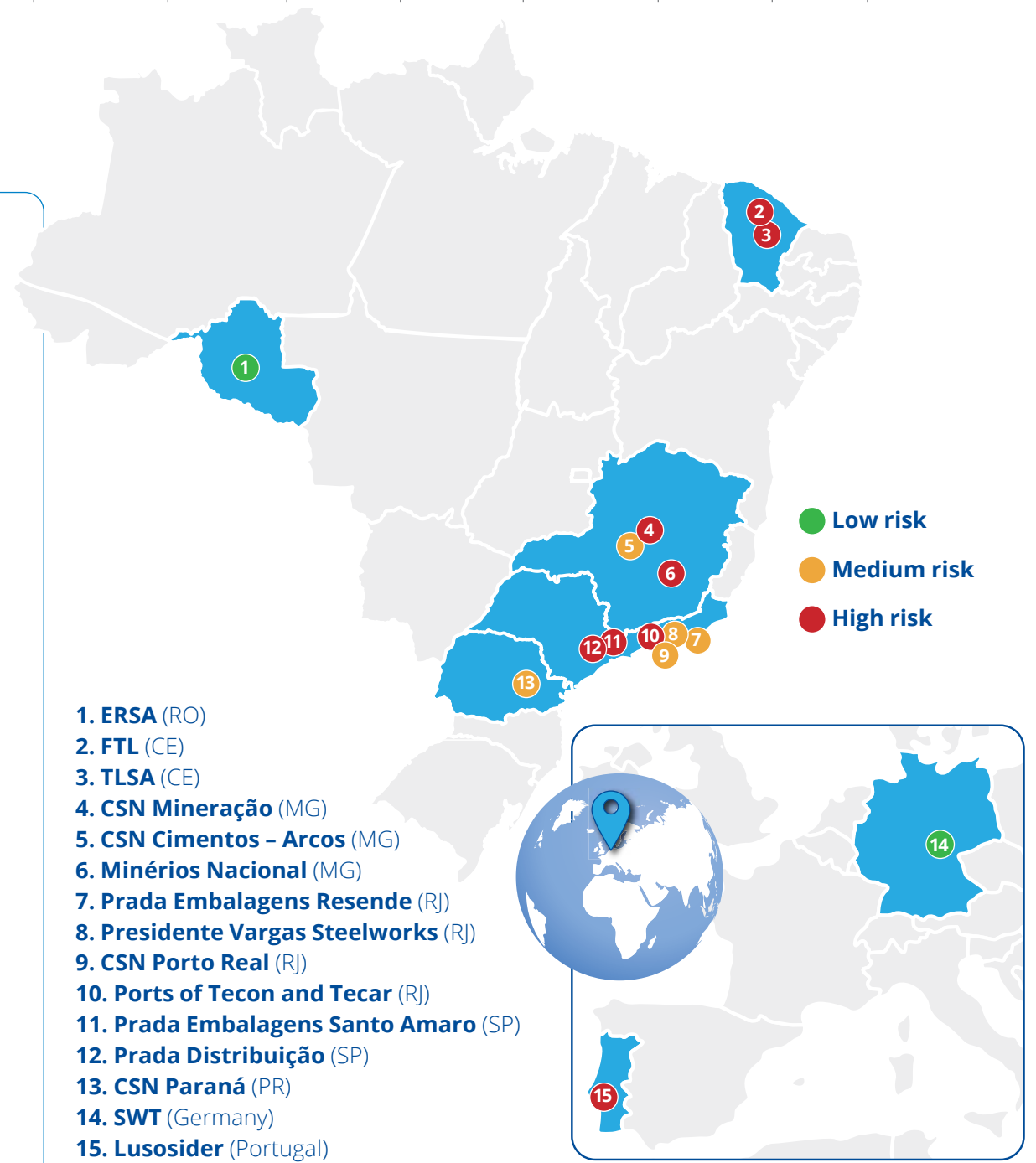
In 2021, the Company started a climate risk and opportunity assessment study to meet the TCFD recommendations and assess potential impacts for the business. In the analysis of physical climate risks, some risks that CSN may face related to water resources were mapped, in particular the risks associated with water scarcity. In this way, the Company assessed the vulnerability of water resources in the locations where it operates through the Aqueduct Water Risk Atlas platform, from the World Resources Institute (WRI) and the Water Risk Filter, from the World Wildlife Fund (WWF), considering all business segments.

Only CSN Group units in the Logistics (FTL and TLSA) and Steel (Prada Santo Amaro, Prada Mogi das Cruzes and Lusosider) segments have units in areas with significant water stress. In the first group, two regions and 30 municipalities with significant exposure were identified. The administrative units of FTL and TLSA, in Fortaleza (CE), are located in an area of high risk of water stress. The operations of Port of Tecon and Port of Tecar, in Rio de

Janeiro, are presented on the platforms as an area of medium risk in relation to the water stress of the basin, however, as they use water from the public utility, which may eventually suffer interruptions in its supply, the Company considers the units in areas of high water risk.

In Steel, the Prada Mogi das Cruzes and Prada Santo Amaro (SP) unit is in an area with high risk of water stress, as is Lusosider (Portugal). The Presidente Vargas Steelworks, the Group's largest consumer of water resources, is located in a region with moderate water risk (on a scale of: low, moderate, and high).

In Mining, the Casa de Pedra unit of CSN Mineração is presented on the platforms as an area of medium risk in relation to water stress in the basin, but as it is one of the segments that most uses water in the production process, CSN, in a preventive way, considers this unit as a priority in the management of water resources and defines its management in a strategic way so that the water resource is used with efficiency and high criticality.



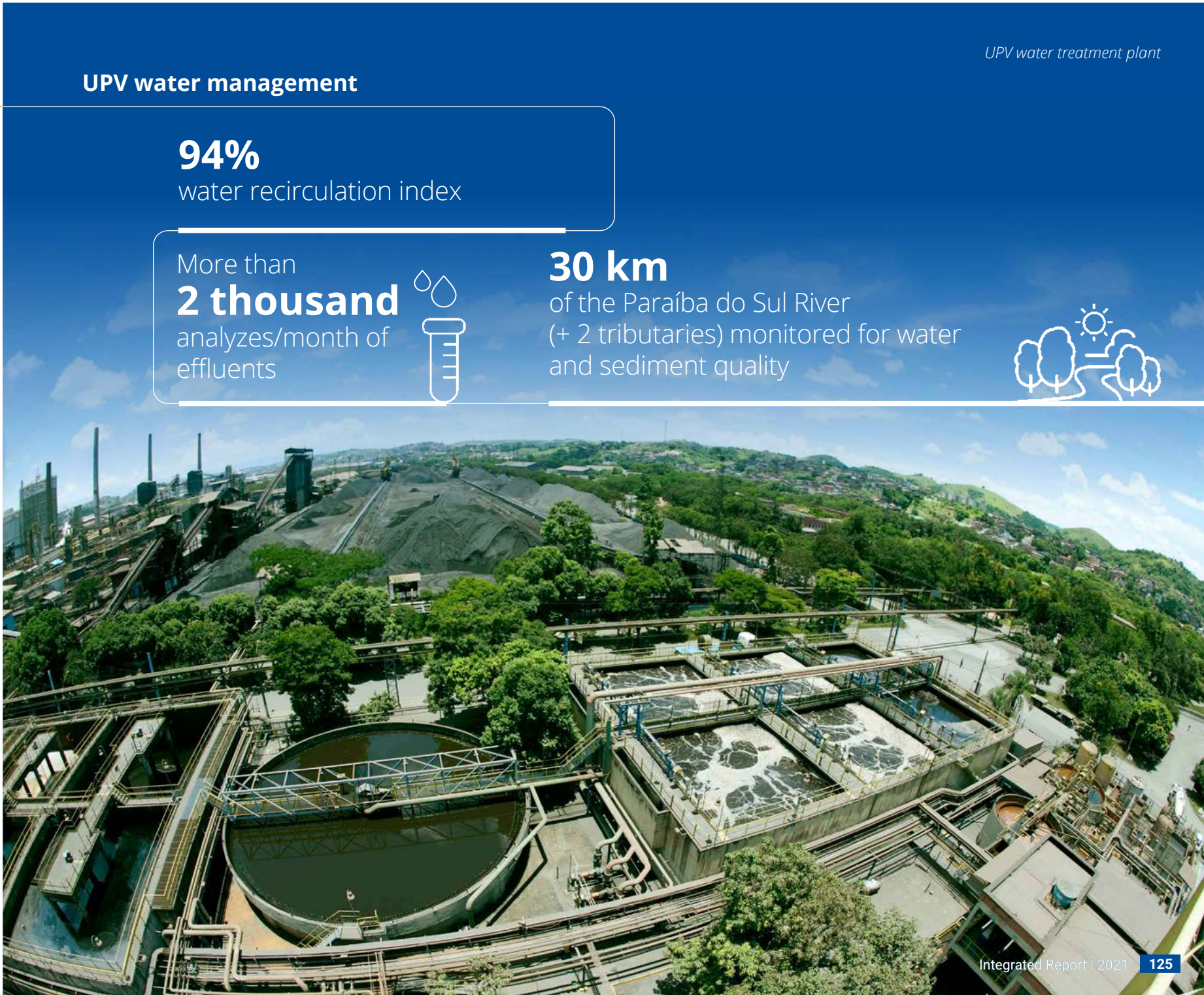


## Steel industry



The Presidente Vargas Steelworks (UPV) accounts for approximately 82% of the total water collected by CSN annually. The unit uses the resource mainly in the cooling processes of equipment for steel production and has been working with the purpose of continuously increasing the rates of recirculation and reuse of its effluents.

Since 2014, when the Company began to study the UPV's water footprint, initiatives in favor of water efficiency have gained increasing relevance. Improved in 2016, the study mapped the main reuse opportunities. Among them, we highlight the reuse of water from Carboquímico and the Raw Materials Yard. In the first case, a project implemented in 2017 allowed the reuse of 3 thousand cubic meters per hour (m<sup>3</sup>/h) in the process of heat exchangers in the production stages of Benzol, PHOSAM and the Alcatrão do Carboquímico Plant. In the second case, the adoption of a water reuse system allowed the reuse of around 200 m<sup>3</sup>/h of effluent in the clarified water station, for later return to the production processes of the UPV.



UPV water treatment plant

### UPV water management

**94%**  
water recirculation index

More than  
**2 thousand**  
analyzes/month of  
effluents



**30 km**  
of the Paraíba do Sul River  
(+ 2 tributaries) monitored for water  
and sediment quality





Sample collection from the Paraíba River by an employee of UPV

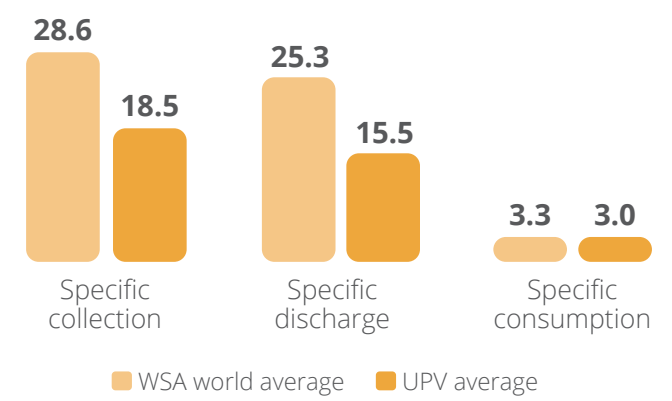
In 2020, CSN spontaneously reduced its grant for water abstraction from the Paraíba do Sul River at the UPV by 38%, a volume equivalent to 76,631,000 m<sup>3</sup>/year, enough to serve 1 million people per year. This proactive reduction was possible due to the significant decrease in water abstraction in the last 20 years, a period in which the unit reduced the capture of new water from 8.8 m<sup>3</sup>/s to 2.6 m<sup>3</sup>/s, even with the implementation of three other manufacturing units within the UPV plant: a new Thermoelectric Power Plant, the Cement Factory and the Aços Longos Factory.

Other initiatives were also promoted with a focus on improving the quality and reducing the amount of effluents discharged into the UPV. The automation of one of the pH neutralization stations, process improvements in the lime discharge area, renovation of the slag granulation tanks, renovation of the ETE in the Coal Yard and efficiency increase in one of the cooling towers are some examples.



**In the last 20 years, the UPV has reduced its intensity of fresh water collection from 8.8 m<sup>3</sup>/s to 2.6 m<sup>3</sup>/s (70% reduction)**

**Comparison of water intensity: UPV versus sector average (m<sup>3</sup> per ton of steel)**



In 2021, the UPV reached an index of 18.5 m<sup>3</sup> of water for each ton of steel produced. This intensity parameter is below the world average of 28.6 m<sup>3</sup>/t, according to data from the World Steel Association (WSA). This indicator considers all water captured, including currents for non-steel purposes, such as electricity generation in thermoelectric plants.

The water recirculation rate at the UPV grew by 1 percentage point compared to 2019. To give an idea of what the 1 percentage point increase in the water recirculation rate at the UPV represents, the volume that is no longer captured is equivalent to the consumption of 70% of the population of a municipality with 250 thousand inhabitants for a whole year.

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# Mining

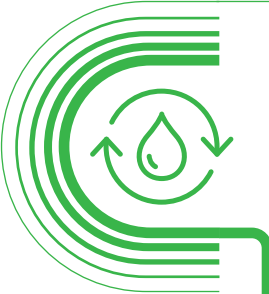
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In the Mining segment, water is an input used in the iron ore beneficiation process and in the wetting of accesses and piles in order to mitigate the emission of particulate matter. CSN Mineração S.A. has 71 systems for controlling the quality of effluents and drainage and 40 points for monitoring the quality of water courses located close to and within operational areas.

One of CSN Mineração's priorities is the expansion of projects for the recovery and reuse of water in its production processes. New investments in the Central Ore Beneficiation Plant aim to reduce, by 2024, the plant's specific consumption of fresh water by 45% - from 0.22m<sup>3</sup>/t to 0.12m<sup>3</sup>/t -, taking 2017 as a reference. Consequently, there will also be a reduction in the generation of tailings and an increase in the efficiency of the solid-liquid separation operations existing in the beneficiation plant. The goal is, by 2030, to reduce the consumption of new water for iron ore production by at least 10% per ton of ore, compared to 2018.



**In 2021, the water recirculation rate at the central plant of CSN Mineração was 87%**

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



*CMAI I - High Intensity Magnetic Concentration at Casa de Pedra*

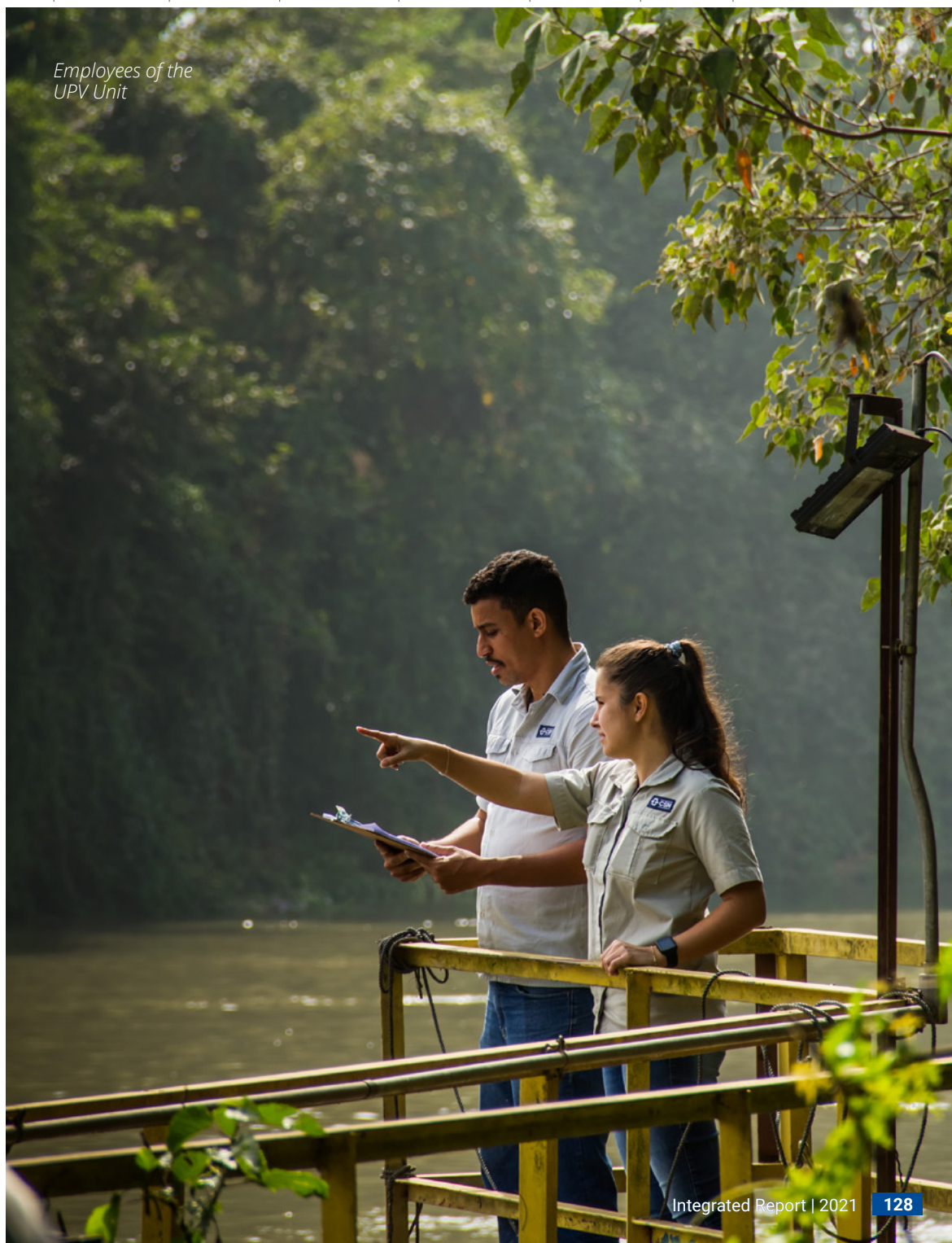


In 2021, the goal was achieved, however, with the entry of new Itabiritos beneficiation projects, an increase in the specific consumption of water is expected, since the production process - due to the characteristics of the ore - will demand more water than the current process, so maintaining a 10% reduction in specific consumption, after the entry of new projects, remains a challenge for CSN Mineração.

The CSN Mineração's progress in the plan to de-characterize the dams and filter the existing tailings in the dams for dry stacking also contributes to reducing the water footprint in the operations, as it generates the recovery of existing water in the material removed for use in the production processes. Since 2018, the adoption of water recovery processes from the tailings generated at the Central Plant allows the reuse of this volume in the ore beneficiation process. This is the case of the Magnetic

Separator Plant, CMAI LAMAS (learn more on page 139), which starts operating in 2024 and will allow the processing of all the fine tailings currently generated in the operation of the central plant, increasing the mass recovery of ore iron, and reducing the generation of tailings by 700 thousand tons/year, providing a reduction in the estimated consumption of 56.9 thousand m3 of new water per year. The lower destination of tailings for filtration has the benefit of better use of water resources.

In 2021, CSN Mineração S.A. carried out its first Water Footprint study, adhering to the parameters of the NBR ISO 14046:2017 standard. The project aims to expand the identification of risks and opportunities to improve water management throughout the iron ore production cycle. For the next two years, the company intends to invest in the optimization of effluent treatment systems, extending the useful life of the compact Effluent Treatment Stations (ETEs) by 8 years.



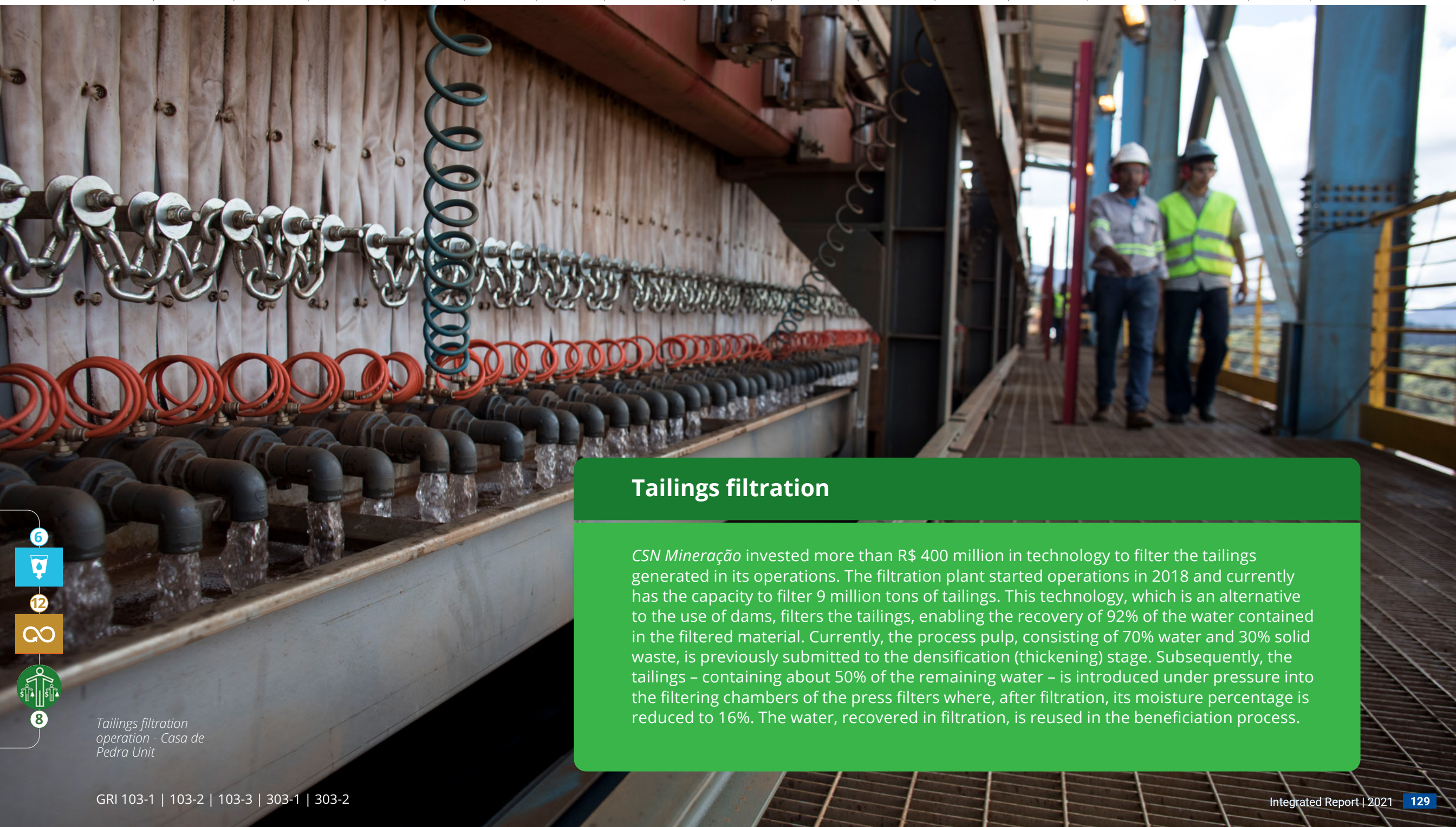
Employees of the UPV Unit

**Intensity of water collection/ton of ore produced<sup>1</sup>**

	2019 (goal base-year)	2020	2021
Ore production (ton)	32,089,836	21,891,493	27,239,253
Water collection (megaliters)	5,832.41	4,494.78	4,516.66
Intensity	0.182	0.205	0.166

<sup>1</sup>Production and collection related to the production process of CSN Mineração (Mines of Casa de Pedra and Pires).





## Tailings filtration

CSN Mineração invested more than R\$ 400 million in technology to filter the tailings generated in its operations. The filtration plant started operations in 2018 and currently has the capacity to filter 9 million tons of tailings. This technology, which is an alternative to the use of dams, filters the tailings, enabling the recovery of 92% of the water contained in the filtered material. Currently, the process pulp, consisting of 70% water and 30% solid waste, is previously submitted to the densification (thickening) stage. Subsequently, the tailings – containing about 50% of the remaining water – is introduced under pressure into the filtering chambers of the press filters where, after filtration, its moisture percentage is reduced to 16%. The water, recovered in filtration, is reused in the beneficiation process.

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Tailings filtration operation - Casa de Pedra Unit



# Cements

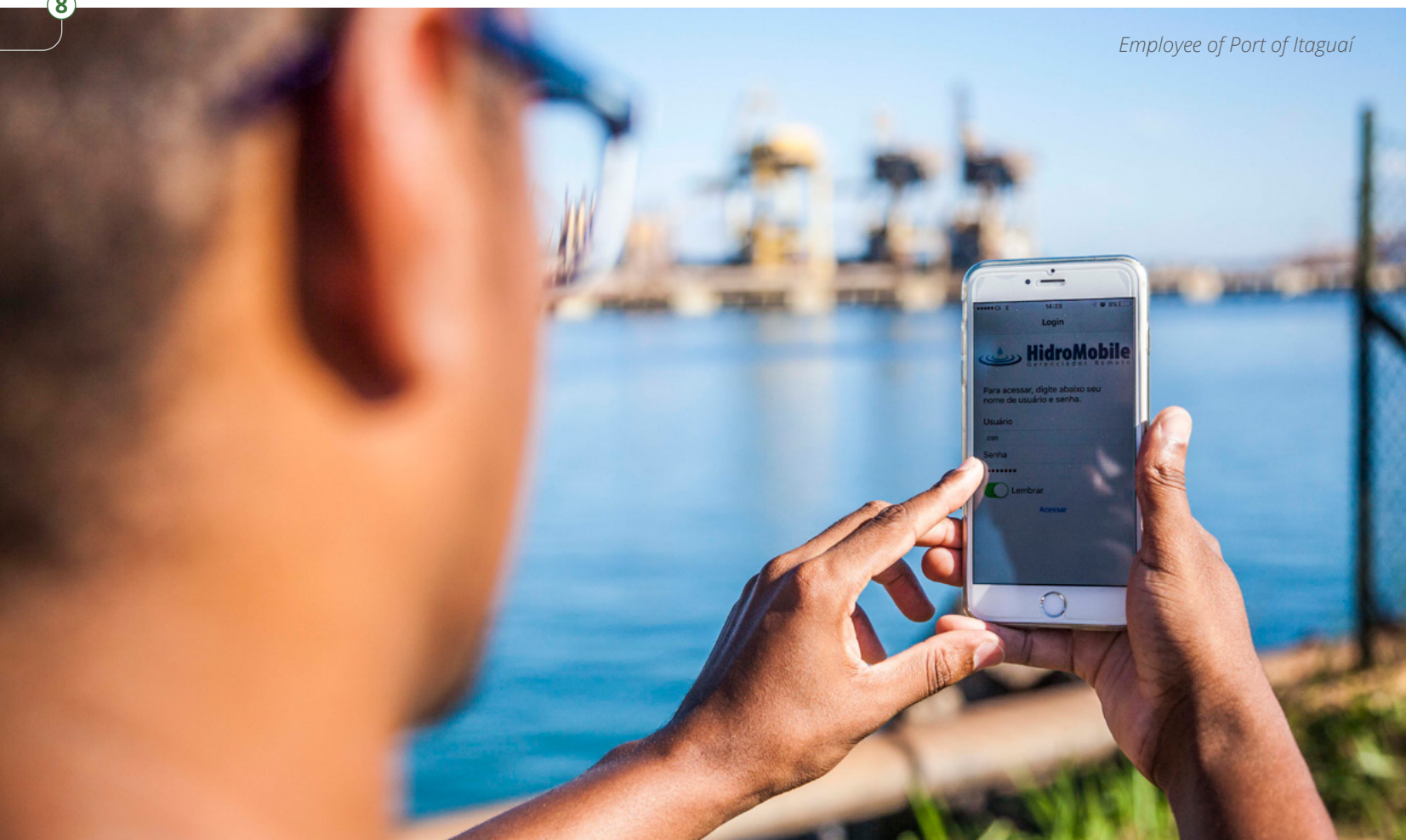
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The capture of new water in the cement production process is lower compared to the steel and mining businesses. In 2021, CSN Cimentos increased the volume of water abstraction by 34% as a result of increased productivity.

Specific water collection in 2021 also grew by 24% compared to the previous year, with a result of 76 liters per ton of cement produced at the Arcos and Volta Redonda plants. As a highlight, CSN Cimentos' specific water abstraction presents a positive performance in relation to the world average for the sector, of 100 liters per ton of cement.



Employee of Port of Itaguaí

In 2021, CSN Cimentos started the process of evaluating its **Water Footprint**, according to the criteria of **NBR ISO 14.046:2017**, with completion scheduled for 2022



- **Evaluate the water life cycle** in the mining and cement production process



- **Identify potential environmental impacts** related to water use



- **Promote water efficiency**



- **Identify opportunities** to optimize water management in the organization's processes



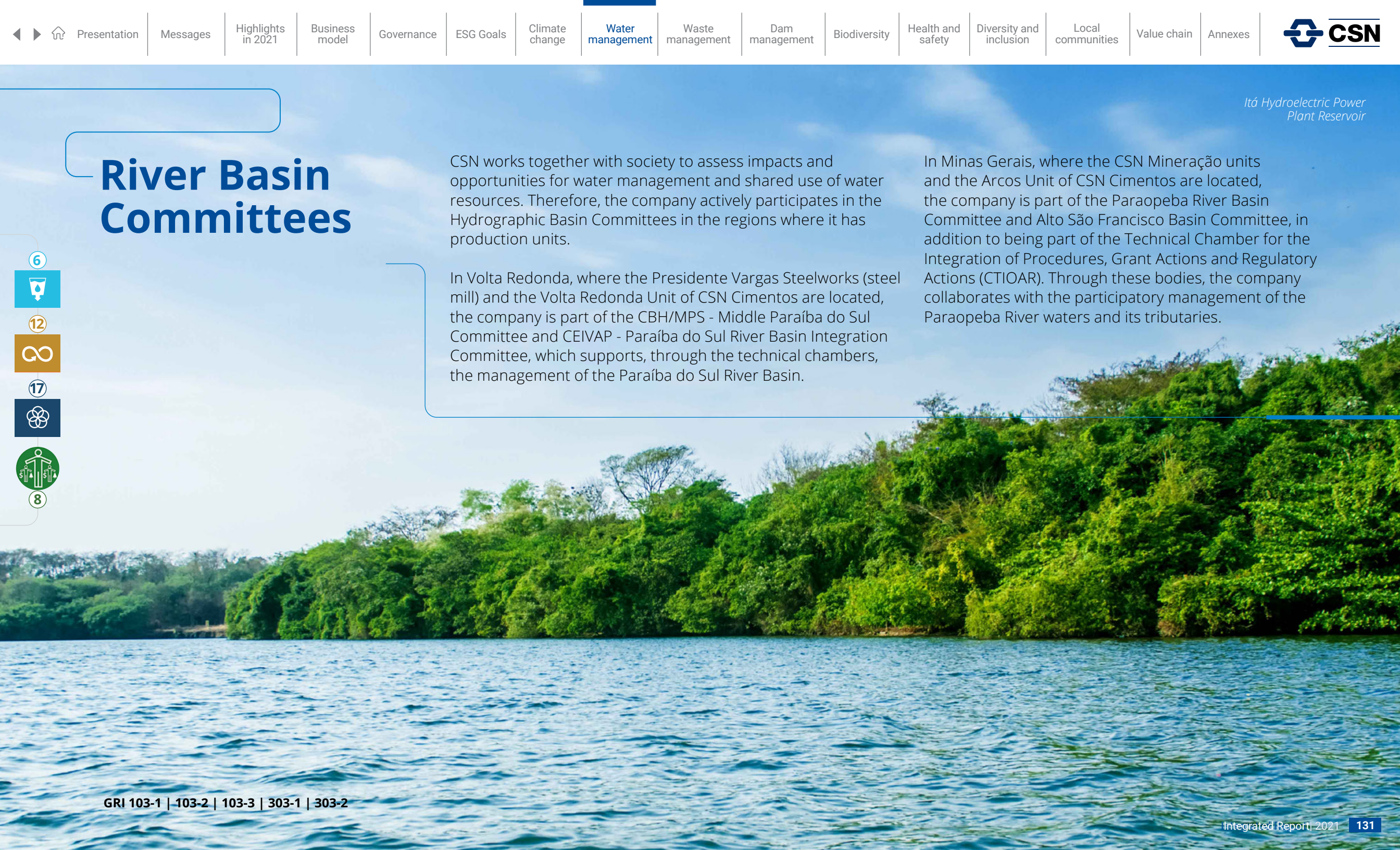
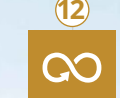
- **Present** potential environmental impacts and possible improvements to the **Company's decision makers**

# River Basin Committees

CSN works together with society to assess impacts and opportunities for water management and shared use of water resources. Therefore, the company actively participates in the Hydrographic Basin Committees in the regions where it has production units.

In Volta Redonda, where the Presidente Vargas Steelworks (steel mill) and the Volta Redonda Unit of CSN Cimentos are located, the company is part of the CBH/MPS - Middle Paraíba do Sul Committee and CEIVAP - Paraíba do Sul River Basin Integration Committee, which supports, through the technical chambers, the management of the Paraíba do Sul River Basin.

In Minas Gerais, where the CSN Mineração units and the Arcos Unit of CSN Cimentos are located, the company is part of the Paraopeba River Basin Committee and Alto São Francisco Basin Committee, in addition to being part of the Technical Chamber for the Integration of Procedures, Grant Actions and Regulatory Actions (CTIOAR). Through these bodies, the company collaborates with the participatory management of the Paraopeba River waters and its tributaries.





# Waste management and **circular economy**



CSN Group applies the concept of circular economy in all sectors and businesses in which it operates. Focused on generating value from the maximum use of natural resources, the company evaluates solutions and implements technologies for the reuse of materials in its own production processes or reuse in other production chains.

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- 8
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With an integrated and vertical production process in the steel chain, CSN generates different types of co-products that, instead of being sent to landfills, are marketed, and reinserted in different types of industries – fine chemicals, pharmaceuticals, agribusiness, among other sectors.

By integrating environmental responsibility with the search for value creation in all its businesses, CSN created the Special Sales area, which guarantees the proper destination for each type of co-product, with sales in Brazil and abroad. The handling unit is divided into six different segments (see diagram).



Volta Redonda recycling warehouse

**Special Sales Area Segments**

- 1
- 2
- 3
- 4
- 5
- 6

**Carbochemicals**

Sale of chemical products such as ammonia, tar, BTX and sulfur.

**By-products and waste**

Scale, zinc and galvalume sludge, oxides, and other generated by-products

**Alienated and useless**

Sale of unused materials, scrap paper, motors, pumps, other scrap without internal application and obsolete warehouse materials.

**Assets**

Sale of decommissioned assets – trucks, cars, and equipment.

**Opportunity steel**

Sale via auction of opportunity items such as coils, rolls, sheets, and tubes.

**Business development**

Fosters new opportunities for the value of co-products for the entire CSN Group and partnerships with universities and companies.

Each ton of steel produced generates between **500 and 600 kilos of waste and by-products**



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The Special Sales Area has increasingly sought opportunities to sell waste and unused materials, aiming not only at zero landfill but also at internal use. All units have a warehouse for receiving and proper segregation of materials for sale.

CSN Group uses its own sales platform (via competition) and is currently working on the creation of a Marketplace (Circula+), together with CSN Inova, as it believes in a sales solution that adds value to waste, with a transparent sales and in line with the Company's ESG culture – encouraging the economy of collectors, scrap dealers and raising recycling to expressive levels. With Circula+, the Company envisages serving other companies, in addition to CSN, with a focus on meeting 100% of the industry's needs.



GRI 103-1 | 103-2 | 103-3 | 306-1 | 306-2



*Employee of Volta Redonda*

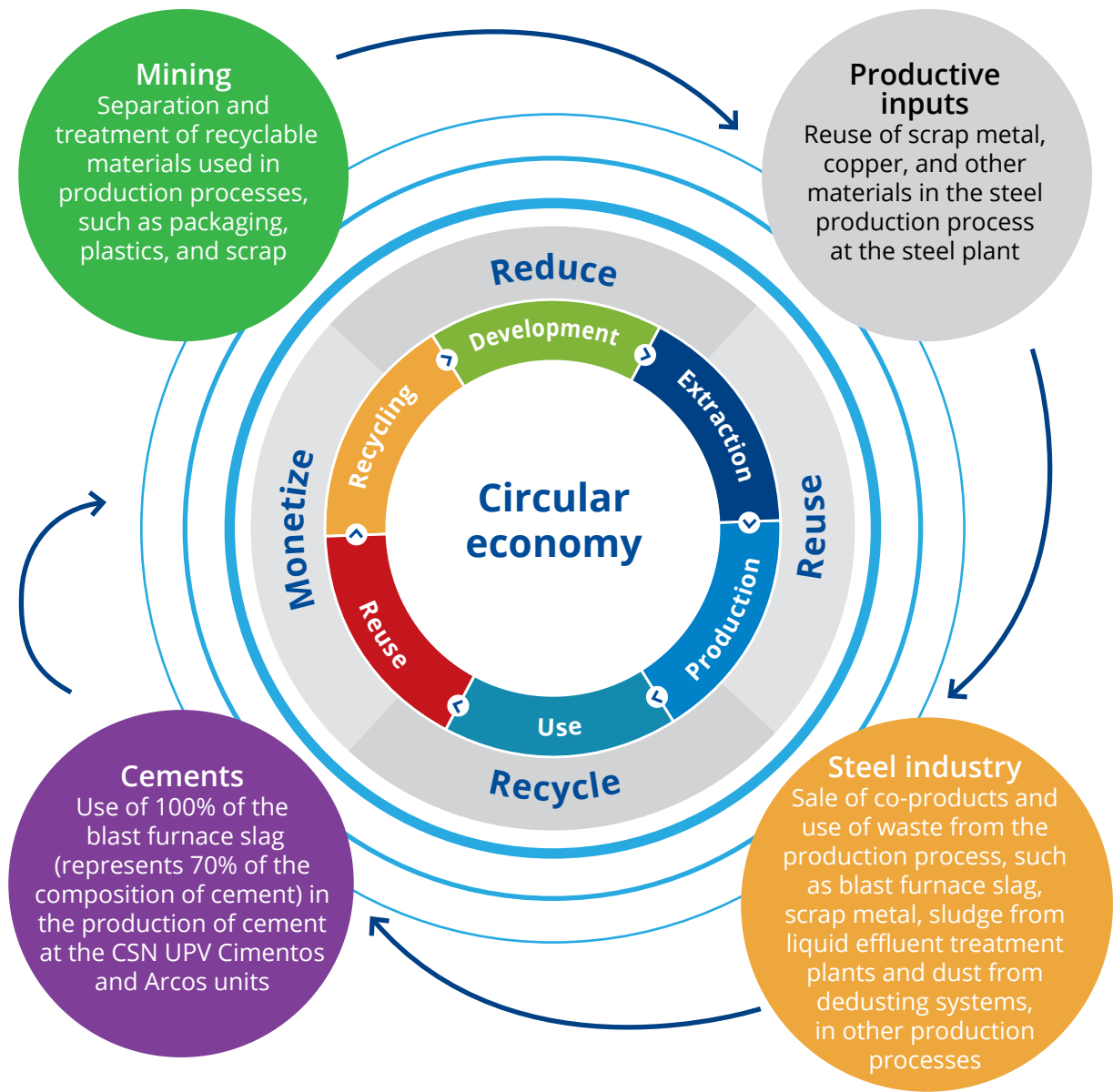


In the last 5 years, CSN's sales revenue of special sales items has tripled only with good management, a well-structured business model for segregation and the search for partners in the market. The proposal is to take internal success and expertise to other companies, in line with the belief in recycling and its benefits.



**Among the main initiatives developed are:**

- Segregation of incoming materials
- Press of recyclable materials
- Hygienization of PPE, allowing its reuse
- Processing of lamps in the lamp holder, transforming hazardous waste into non-hazardous
- Depressurization of spray cans, for internal recycling
- Stripping of electrical cables, taking advantage of the copper in the cables and making CSN self-sufficient in copper
- Cutting aluminum into wire to be used in the steelmaking process at the UPV
- Oil capture through ECO (Oil Collection Station)
- Segregation of scrap, equipment, and tires for sale
- Decontamination and cutting of ferrous scrap to supply the UPV
- Study of reuse of wood generated internally with the objective of supplying the production line of Cimentos VR

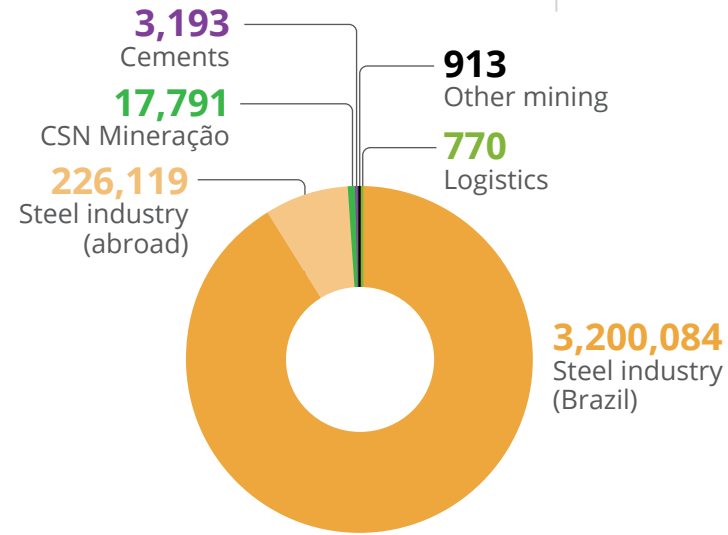




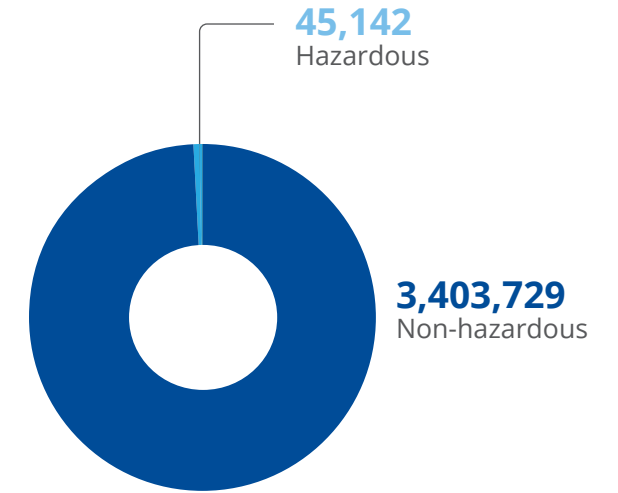
In 2021, the total volume of waste generated by CSN's businesses was 9% lower than in the previous year – excluding mining tailings. Most of the waste generated (99%) is classified as non-hazardous. Of these, 96% are reused, reprocessed, or sold as input to other production chains and only 4% are sent to duly licensed industrial landfills, incineration and effluents treatment.

Hazardous waste, in all businesses, is preferably co-processed or directed to reuse routes in the production process itself or in other production chains. When these alternatives are not possible, the waste is disposed of in licensed industrial landfills, through companies duly approved for this type of service.

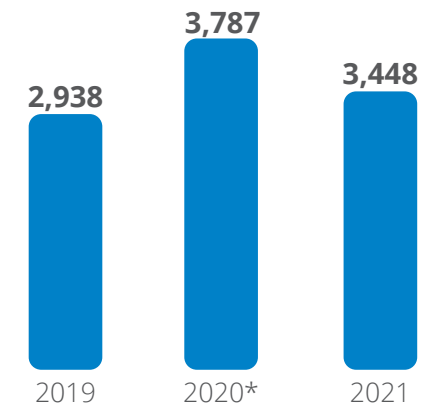
### Waste generated by segment in 2021 (tons)



### Waste generated by type in 2021 (tons)



### Waste generated by the CSN Group (thousand tons)



\*2020 data updated according to improved calculation assumptions.



Selective collection area at the UPV





## Steel industry

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The steel production process is, among CSN's businesses, the one with the greatest potential for generating industrial waste. On the other hand, it has a great potential for recycling and reuse of waste.

In 2021, at the Presidente Vargas Steelworks (UPV), 94.2% of the waste generated was destined for recovery and reuse in the production process itself or in external industrial chains, promoting the circular chain in the sector. In addition, the process sludge generated, which represented 1% of the total generated, was intended for use in the recovery of areas degraded by erosive processes, an option for sustainable disposal, no longer being sent to landfills. It is also noteworthy that only 4.8% of waste in 2021 was sent to landfills.

The UPV carried out the recovery and reuse of 593.4 thousand tons of metallic scrap in its 2021 production cycle, including part generated in the process itself, in routine activities, and part acquired from the foreign market, which contributes to the improvement of the intensity energy, including the reduction of CO<sub>2</sub> emissions per ton of steel produced.

In addition, the UPV carries out processes capable of recovering metallic fractions to also be reused as metallic scrap in the production of steel, such as the processing of steel slag through magnetic recovery and the processing of thick steel sludge, which allowed the reuse of more than 22 thousand tons of recovered material, and the manufacture of metallic briquettes.

In 2021, residues of FEA powder generated during the melting of ferrous scrap in the electric arc furnaces of the Aços Longos melt shop were reused in the internal manufacture of the metallic briquette, a process that made it possible to reuse 76% of the volume generated in 2021.

In 2021, the UPV reached the mark of 34.7% reduction in the sending of process sludge to class II landfills. The performance exceeded the target proposed for the period, which was a reduction of 10%. This result was achieved through complementary strategies for alternative disposal, such as market prospecting for new customers for sludge consumption and the use of waste to recover areas degraded by erosive processes.

**76%**

of FEA Powder waste was reused in 2021, exceeding the target set for the year



**35%**

was the reduction in the sending of sludge (non-hazardous waste) to landfills, compared to 2020

**The management of UPV waste is carried out through the Waste Management System (SGR), a platform that allows internal management of the materials generated and includes information regarding the management of Waste Manifests**





*Employees at the Volta Redonda recycling warehouse*

Another type of waste generated in the steelmaking process is blast furnace slag. This material generated in the UPV is 100% sent to the cement production of CSN Cimentos de Volta Redonda and Arcos, with an average representation of 70% of the composition of CSN cement.

CSN has been studying mechanisms to promote the reuse of steelmaking aggregate – the non-metallic and irrecoverable fraction of the steel slag. Through CSN Inova, together with the engineering and operational areas of all businesses, the Company seeks to form partnerships to develop new options for the use and destination of this type of waste.

In Germany, SWT also generates slag, which is fully managed and destined for recycling and reuse in other value chains, supporting the sector's circular economy and optimizing the consumption of resources. In 2021, 162 thousand tons of slag were generated, of which 99% were destined for external recycling.





# Mining

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- 8
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The waste generated in the mining process is mainly of two types: sterile (soil removed without economic use) and tailings (material discarded after ore processing). CSN Mineração disposes of these materials through stacking, continuously managed through a management and inspection system to ensure the safety and stability of these formations.

Since 2018, the Company has invested in equipment to filter waste and recover water. In this way, the residue has a higher concentration of solids and can be stacked, avoiding the use of dams. In 2020 and 2021, due to the projects already implemented, CSN Mineração did not send any tailings to the dams.

In addition to this initiative, CSN Mineração has invested in projects to increase the efficiency of the beneficiation processes and, as a consequence, reduce the generation of tailings. The High Intensity Magnetic Concentrator Plants (CMAI) are solutions that expand the recovery of processed ore from existing dams by around 700 thousand tons per year.

In addition to mining waste, operational activities also generate waste classified as hazardous, as they have the potential to contaminate soil and water bodies. In this category are, for example, materials contaminated with oils and grease resulting from washing and maintenance of equipment and vehicles used in the mine.



*Dry tailings pile at Casa de Pedra unit*

The company has protocols and mechanisms to treat, store and dispose of these wastes correctly and in an environmentally appropriate manner, in order to avoid any type of harmful impact on biodiversity.

**Since 2020, the Company does not use dams in its production, with 100% of the tailings disposed of using the dry method**



### Mining waste (tons)

	2019	2020	2021
Sterile	na	22,532,916	26,095,919
Tailings	na	5,870,789	4,486,492
<b>Total</b>	<b>33,877,703</b>	<b>28,403,705</b>	<b>30,582,411</b>



*Employee of the recycling warehouse in Volta Redonda*



## Cements

Operating in the cement segment strengthens the competitiveness and complementarity of CSN's business model, adding value in a sustainable manner to the production process.

The first CSN Cimentos factory, inaugurated in 2009, in Volta Redonda (Rio de Janeiro), makes use of blast furnace slag generated in the steel production process at the Presidente Vargas Steelworks (UPV), which is ground in vertical mills and added to the composition of the final product. The reuse of this by-product in the composition of cement avoids the emission of CO<sub>2</sub>, helping to reduce the carbon footprint of industries.

The cement sector is a production chain with great potential to contribute to waste management. Through the co-processing of hazardous and non-hazardous materials in the clinker kilns at the Arcos unit, which will start operations in 2022, the industry makes it possible to reuse a large part of the waste generated in the other units and obtains efficiency gains, with the reduction of the use of raw materials and fuels.

In addition to the cement operation at CSN in Arcos, the Federation of Industries of the State of Minas Gerais (FIEMG) mapped actions considered to be of circular economy, including:


- Implementation of the UTIS System;
- Acquisition of a press and shredder for paper and plastic;
- Depressurizer for spray cans (reuse of steel scrap);
- Use of dust-suppressing polymer in the wetting of unpaved roads;
- Use of alternative fuels such as charcoal mills.



**Waste co-processing reduces the use of fossil fuels in clinker kilns by up to 20% per year**



# Dam management



With investments of around R\$ 400 million in tailings filtering systems and iron ore magnetic concentration plants, CSN Mineração, in a pioneering way, became the first large mining company not to depend on the use of dams. All waste generated is filtered and dry piled, following the best safety practices and mitigation of environmental impacts. In addition to being a pioneer in the independence of the use of dams for tailing disposal, the Company has a history of no accidents in its dams.





Side view of the Casa de Pedra dam

CSN is also carrying out a program to de-characterize existing dams, which even exceeds the requirements established by government agencies, as it also provides for the de-characterization of dams regardless of the construction method. The conduction of de-characterization projects and the safety management of the structures follow the best national and international practices. Safety management is carried out by a dedicated technical team and monitored by the Dams Committee –

composed of Company technicians and executives and reporting to the Board of Directors, the National Mining Agency, and other competent authorities.

Between 2020 and 2021, CSN Mineração completed the de-characterization of the B5 Dam (Casa de Pedra) and the Auxiliar do Vigia Dam (Pires Complex). The Vigia Dam is in the phase of completion of the de-characterization works, with completion scheduled for the year 2022.



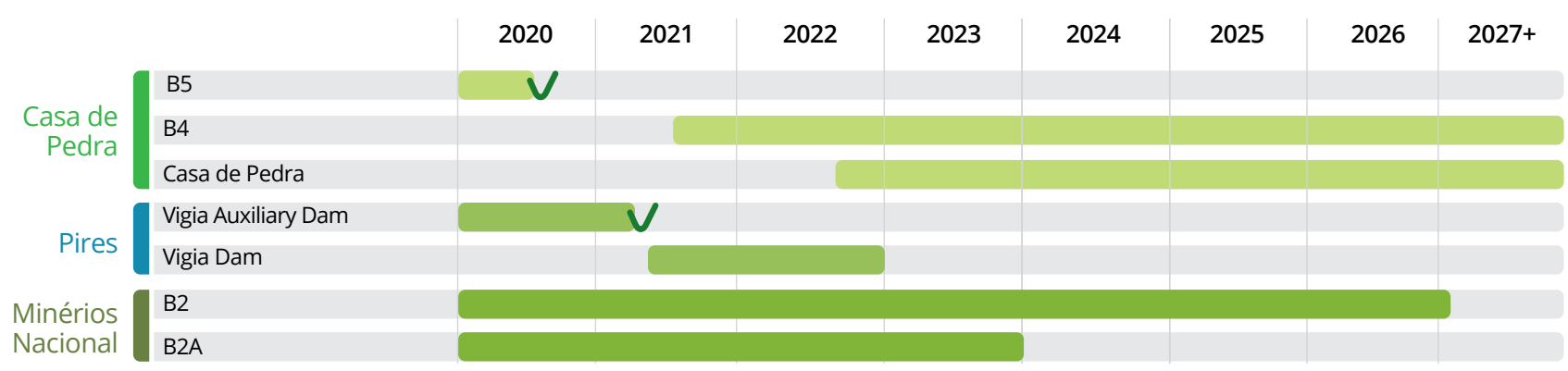


The B4 Dam started its process in December 2021, with the construction of the belt channel. The B2A dam, belonging to Minérios Nacional - MIPE, a company controlled by CSN, continues with stabilization works in progress, which soon after being completed – forecast for September 2022 – will allow the start of the de-characterization works with completion scheduled for December 2023. The B2 dam, also belonging to MIPE, which has a declaration of stability issued by an independent company, due to technical limitations, can only be de-characterized after the B2A dam works are concluded.

As part of CSN Mineração's strategy of reprocessing all the tailings contained in its dams, de-characterizing all its structures, the Casa de Pedra dam, built by the downstream method and which has no legal obligation to de-characterize, will have its de-characterization works completed by 2040.



### Dam de-characterization schedule



**In 2021, all CSN Mineração dams were evaluated by an independent auditing company, and the result was included in the National Mining Agency (ANM) and in the State Foundation for the Environment (FEAM), concluding that all dams were stable, i.e., with no emergency level**



Employees performing inspection at the Casa de Pedra dam

## Inspections and safety

The management of the safety conditions of tailing dams is conducted by CSN considering the best international practices and in line with the recommendations and parameters established by international organizations – such as the International Council on Mining and Metals (ICMM). In addition, the company complies with all requirements and determinations of ordinances and applicable legislation in Brazil.

In each of the structures, the company has the Dam Safety Plans and the Emergency Action Plans for Mining Dams (PAEBM) fully implemented in accordance with the regulation provided by the ANM.

In its operations, CSN's activities aimed at dam safety include:

- Visual inspection of dams and dikes every 15 days, with drones and georeferencing
- Semi-annual preparation of the Regular Safety Inspection Report (RISR)
- Online and real-time capture of data, through automated instruments
- Data analysis and reading, supported by software and data analytics to identify changes
- Endoscopic inspection for gauging pressure and water levels installed in dams

In 2021, CSN Mineração, together with other mining companies in the Quadrilátero Ferrífero, voluntarily adhered to the Municipal Dam Safety Plan (PMSB), in the city of Congonhas (Minas Gerais). The unprecedented initiative in Brazil is coordinated by the municipal government.

CSN Mineração invested **R\$ 6 milhões** to enable the execution of different actions proposed in the PMSB, including:

- **Unification** of mining company evacuation plans;
- **Overlaying** the flood maps prepared by each company;
- **Institution** of Community Centers for Civil Defense and Protection (Nudecs);
- **Construction** of a command center and civil defense operations;
- **Monitoring** of models of construction, operation, decommissioning, and de-characterization of dams;
- **Acquisition** of vehicles and equipment for Civil Defense;
- **Signage**, awareness campaigns and training of the Municipal Brigade.







# Biodiversity



CSN promotes the positive integration of all its businesses with Brazilian biodiversity. Through initiatives and management processes that range from the identification of potential impacts of operations to actions for the protection and recovery of fauna and flora in areas of native vegetation.



*Preserved area of CSN*

All issues related to biodiversity are evaluated during the entire Life Cycle of the projects, which initially considers the definition of a locational alternative with the lowest socio-environmental impact, the carrying out of an Environmental Impact Study (EIA) - before the installation of a project, analyzes are carried out of fauna, flora, water, soil, atmosphere and social resources together with the community through research and public hearings – and the implementation of control, monitoring, compensation and environmental mitigation programs throughout the project's useful life.

Activities and investments aimed at the preservation of biodiversity, in all businesses, are carried out in accordance with the guidelines and parameters established in the environmental impact studies and with the conditions of environmental licenses, aiming to minimize as much as possible any and all impacts arising from their activities. Through a partnership with society and the public authorities, CSN seeks to direct financial resources towards the development of initiatives with greater

positive impact for the protection and recovery of biodiversity, maintaining agreements with the public authorities and some associations of small farmers to investment in expansion works and improvements to nurseries that will be used to produce seedlings of native species used in the Company's own projects for the recovery of degraded areas and environmental compensation, benefiting the municipalities where they are located and ensuring the maintenance of local biodiversity, since the production takes place from seeds collected in the areas that are recovered.

In the regions where they are installed, CSN's business may cause the reduction or loss of natural habitats. This impact occurs at different levels, depending on the type of activity developed. The construction of logistical infrastructures (such as railways), the intensification of traffic and noise in the vicinity of industrial units and plant suppression can have negative effects on species from different biomes, being, therefore, an important aspect of the environmental management front.

Mining activities are those that have the greatest potential for impacting biodiversity, due to locational rigidity and the need for plant suppression and change in natural habitats, thus, measures are adopted to prevent, mitigate, recover, and compensate for the environmental impacts.

The Company owns approximately **81 thousand** hectares in protected areas



In 2021, the areas directly affected by the activities of CSN Mineração, duly licensed, totaled 226.9 hectares, of which 77.79 hectares had to be cleared of vegetation, the remainder being an area already anthropized.

In the year, seven more projects were approved, three for intervention in the Atlantic Forest biome, two for intervention in Permanent Preservation Areas (APP), one for mining activities and one for suppression of endangered species. These projects generated the following compensation obligations: (i) establishment of environmental easement on 89.41 hectares; (ii) land tenure regularization and donation to the Chico Mendes Institute (ICMbio) of 185.52 hectares located in the Semper Vivas National Park, both already carried out by CSN Mineração; and (iii) forest recovery through the planting of native seedlings on 96.07 hectares, of which 4.70 hectares have already been recovered through the planting and maintenance of tree seedlings and the remainder will be carried out in 2022.

CSN Mineração does not operate in UNESCO World Heritage Sites and does not have operations in protected areas, with the exception of eventual interventions in permanent preservation areas, which are duly compensated. However, all operations that generate impacts on biodiversity require management programs, which have been running for almost two decades and have been improved year by year (see some examples in the diagram at the side).



## Management programs for impacts on biodiversity

- Flora **rescue**
- Phenological **monitoring**
- Seed **collection**
- **Scaring away** and rescuing the fauna
- Environmental **compensation**
- **Revegetation** of exposed soil
- **Monitoring** of fauna and flora in the vicinity of operations with more than 500 species already identified
- **Prevention** of forest fires
- **Execution** of drainage projects
- **Implementation** of sediment containment devices
- **Signaling** of roads against trampling by fauna
- Environmental **education programs**



CSN Mineração also invests in the revitalization and recovery of topographic profiles of previously worked mining areas. Activities include soil reconstruction and implementation of plant cover with herbaceous species, preferably native, expanding areas for the expansion of fauna and flora biodiversity. In 2021, approximately 30 hectares were recovered.

The Company has the Jurema Private Natural Heritage Reserve (RPPN), with 436 hectares, and a Legal Reserve Area of the Casa de Pedra Complex, with 1,213.07 hectares, of which 736.61 hectares are located in the complex itself, 417.28 hectares in Serra do Ouro Branco State Park and 59.17 hectares in Itabirito (MG), all with fragments of Seasonal Semideciduous Forest with Atlantic Forest in a high degree of preservation.

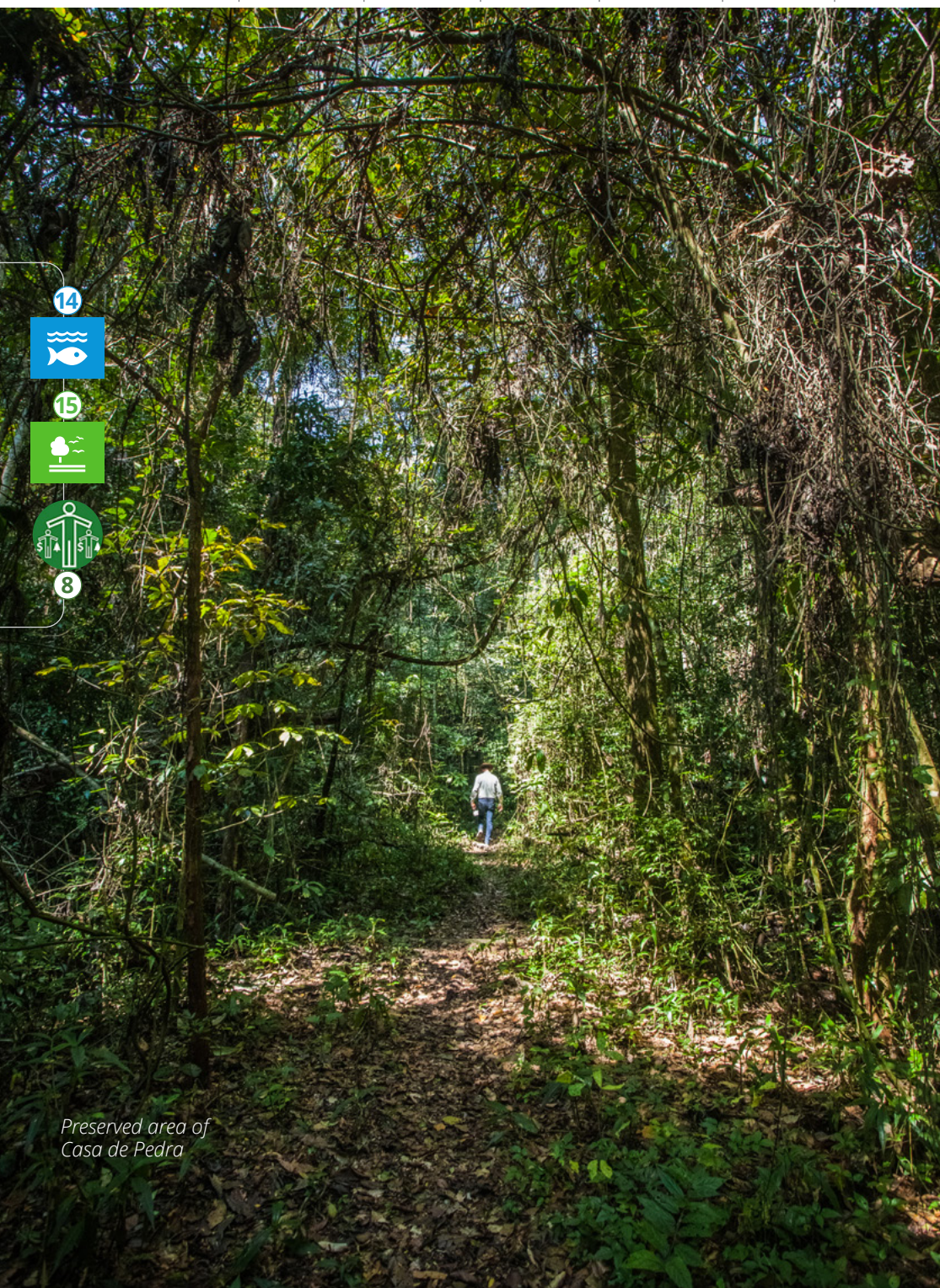
ERSA, a mining and tin producer company owned by the Company, operates its mining unit within the Jamari National Forest (Flona), municipality of Itapuã do Oeste (Rondônia). After the mining fronts are closed, all areas are recovered. In 2021, this recovery program was chosen as a national case and example of success to be presented at the “II Forum of Programs for the Recovery of Degraded Areas in the Federal Environmental Licensing”. The program covers an area of approximately 600 hectares and is in the final stretch of actions, with a proposal to hand over approximately 350 hectares to IBAMA. In 2021, cover fertilization was carried out on approximately 80 hectares and planting on another 5 hectares.



In Volta Redonda, CSN maintains the Cicuta Forest. With 131.28 hectares, the site is recognized as an Area of Relevant Ecological Interest (ARIE) for housing one of the last remaining fragments of Atlantic Forest of seasonal semideciduous forest in the state of Rio de Janeiro, in addition to animals and plants of great ecological value.

**R\$ 11.7 millin allocated to environmental compensation for the new Itabiritos Plant at CSN Mineração**





Preserved area of Casa de Pedra

In October 2020, through the Presidente Vargas Steelworks (UPV), CSN signed a cooperation agreement with ICMBio, with an investment of more than R\$7 million, covering six federal conservation units: ARIE Floresta da Cicuta; Itatiaia National Park; Tinguá Biological Reserve; Environmental Protection Area of the São João/ Mico-Leão Dourado River Basin and Poço das Antas Biological Reserve; Integrated Management Center (São José dos Campos); and APA Mananciais do Rio Paraíba do Sul.

Among the ongoing actions are the reforestation of 41.1 hectares at ARIE Floresta da Cicuta. In 2021, equipment and various materials were donated to implement the management and conservation plan for the conservation units. In addition to the supply of equipment and materials throughout the agreement, it is planned to hire specialized services for biodiversity research, environmental education and structural renovation works.

At CSN Cimentos' Arcos Unit (Minas Gerais), the preservation areas total 273 hectares. The areas are classified as Private Reserves (RPPN), Legal Reserve or Environmental Preservation Areas (APP) and contribute to the maintenance of wildlife around the operation. In Arcos, the fauna and flora monitoring programs carried out in the areas surrounding the project even identified the presence of species mentioned in the list of endangered species of the International Union

**R\$ 1.2 million** invested in renovations of municipal nurseries in Minas Gerais for the production of native seedlings

for Conservation of Nature (IUCN), such as the Golden-capped parakeet (*Aratinga auricapillus*), Barbudinho (*Phylloscartes eximius*), Puma (*Puma concolor*); Ocelot (*Leopardus pardalis*); Bush Dog (*Cercopithecus thous*), Raccoon (*Procyon cancrivorus*), Jaratataca (*Conepatus semistriatus*), Armadillos (*Dasypus novemcinctus*), Anteater (*Tamandua tetradactyla*), Brazilian cottontail (*Sylvilagus brasiliensis*), Capybara (*Hydrochoerus hydrochaeris*), Paca (*Cuniculus paca*), Giant Anteater (*Myrmecophaga tridactyla*) and Guigó Monkey (*Callicebus nigrifrons*). Over 4 years of monitoring, the Program has already identified, in the area covered by the Arcos Unit, 195 species of birds, 32 species of reptiles, 6 species of bats, 18 species of medium and large mammals and 15 species of small mammals.

[Click here to access CSN Group's Biodiversity Policy](#)



## Active management of the biodiversity of Transnordestina Logística S.A. (TLSA)

As a preventive measure, CSN, through its company in the logistics sector TLSA, developed a program for monitoring fauna based on a pilot methodology approved by IBAMA. In addition to inferring about the diversity and composition of native species, the methodology seeks to understand the composition and size of the faunal population adjacent to the project, allowing them to allocate more assertively to the fauna passages in the stretches that are yet to be built, and corroborating the location of those already implemented in the sections where the works are concluded or in the phase of conclusion, in a total that exceeds the 50 structures already implemented.

It will also allow, at the start of railway operations, the evaluation of strategies for the conservation of wild fauna and their effectiveness in the objective of preserving species from both the monitoring of wild fauna being run over and the monitoring of fauna passages itself, indicating the species that use these and the scope of their users in relation to the amount of species identified during fauna monitoring.

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*Transnordestina railroad track*

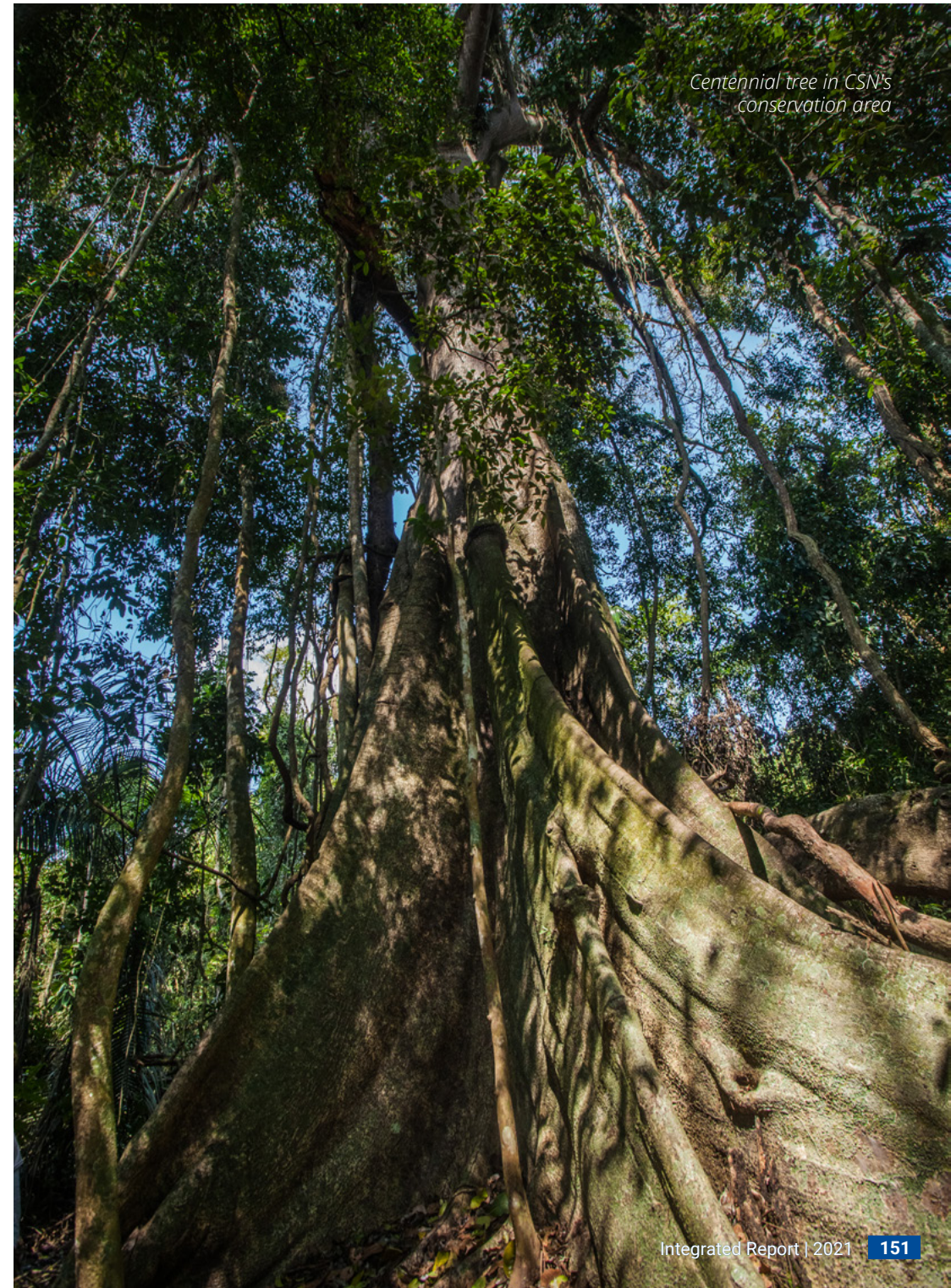
## Biodiversity management in the value chain

The Company has sought to integrate biodiversity management into its value chain. In this way, the Commercial and Supply areas have been adopting biodiversity protection requirements in their relationship with their customers and suppliers. For example, in the process of acquiring wooden sleepers for the rails of Ferrovias Transnordestina Logística (FTL) – the railway operating arm of CSN Group located in the states of Ceará, Piauí and Maranhão –, all forest origin and source documentation is required, as well as other documents that attest to the socio-environmental origin in relation to the supply of the supplier's production process. In addition, all transit of receipt and use of these sleepers takes place through registration in the Trading and Transport of Forest Products System (SISFLORA) with IBAMA.

In continuity, the Company will establish routine inspection and due diligence processes seeking to assess other requirements in addition to the issue of illegal deforestation in its value chain, including seeking alternatives to replace wooden sleepers with concrete sleepers, proposed in a current study.

### Environmental recovery of old coal mines is supported by CSN Inova

CSN owns approximately 1,210 hectares of areas related to former coal mining operations in Santa Catarina, deactivated since 1990, prior to the Company's privatization. About 50% of this territory, that is, more than 550 hectares, have already been the object of environmental recovery works. The recovery work allowed the return of species of fauna, such as teals, skunks, capybaras, and birds. The flora is also in the process of revitalization.



Centennial tree in CSN's conservation area

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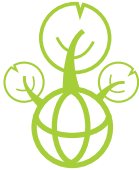
## Protected and preserved areas in 2021



Preserved areas inside conservation units

**CSN Total**

**716.09**  
hectares



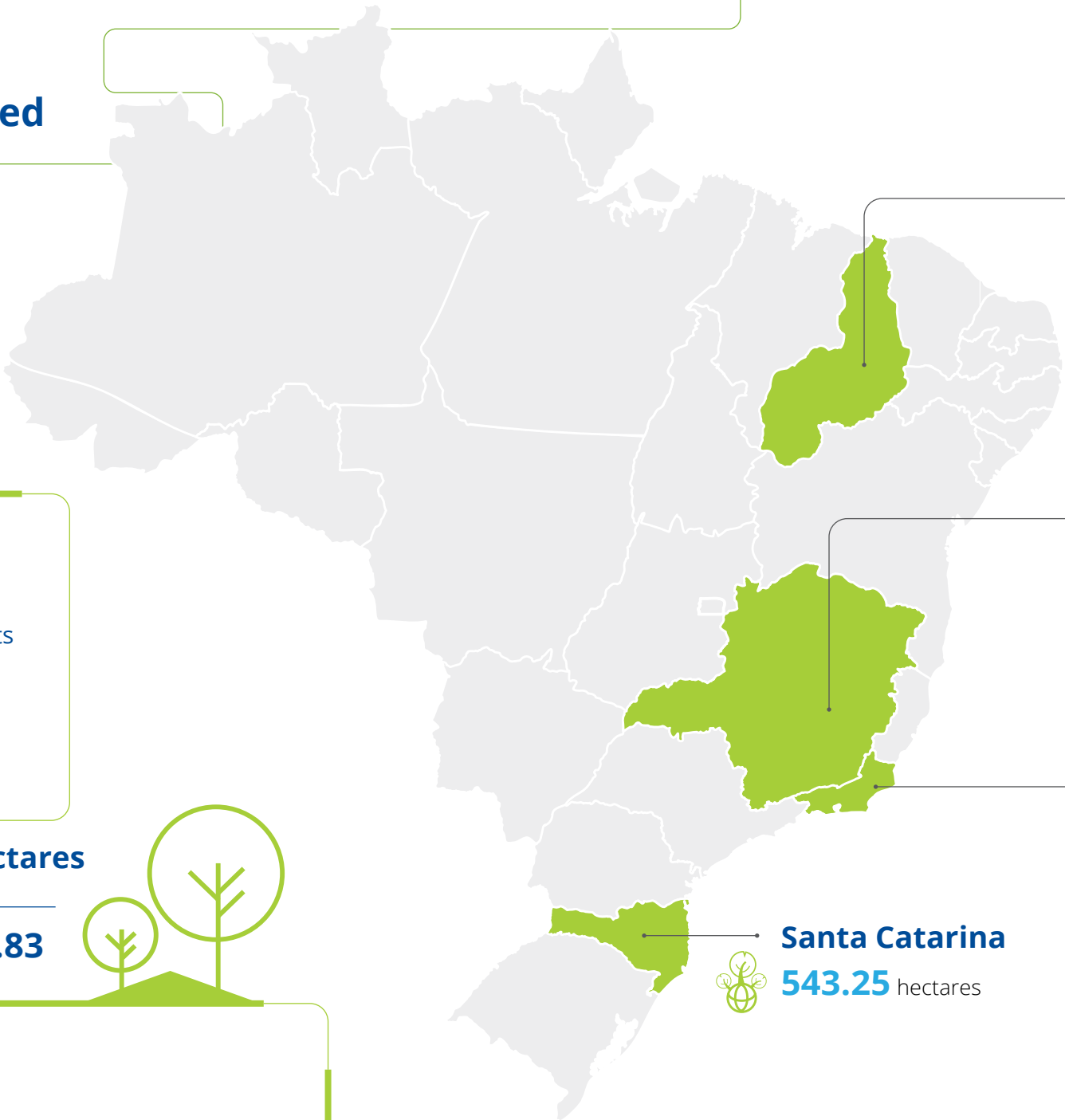
Preserved areas outside conservation units

**CSN Total**

**80,291.72**  
hectares

**CSN hectares in total**

**81,007.83**  
hectares



**Piauí**  
**69,433.92** hectares

**Minas Gerais**  
**584.81** hectares  
**9,688.47** hectares  
**10,273.28** hectares in total


**Rio de Janeiro**  
**131.28** hectares  
**626.08** hectares  
**757.36** hectares in total

**Santa Catarina**  
**543.25** hectares





# Health and safety



The safety of people, in all businesses and segments, is a CSN value. The Company holds, through its leadership, each employee of the organizational line responsible for the performance of occupational health and safety, which must be given the same priority as production, costs and deadlines, being a condition of employability for all employees and service providers. Through the Health and Safety Management System (SGSS), the company develops programs focused on accident prevention, risk mitigation and leadership training to strengthen the safety culture among all teams and employees.





The SGSS guidelines are established in the Sustainability, Environment, Occupational Health, and Safety Policy and in the Occupational Health and Safety Management Manual. These regulations reinforce the role of leaders in the management of security aspects and establish the mechanisms for monitoring performance and action plans by the Executive Board and the Board of Directors.

Accident prevention at CSN involves efforts in the area of management, forecasting, planning and efforts by the entire workforce, own employees and subcontracted, with a focus on assessing risks and implementing mitigation and control actions. This dynamic consists of:

- Sharing knowledge within each segment and between companies of the Group, especially related to risks and materialization of accidents
- Risk assessment and management, which include prevention and control tools complemented by strategies designed to anticipate and control the risks promoted by process changes
- Promotion of safety and health in the workplace, through strong action by all levels of leadership on the field fronts.

The formation of CSN's prevention culture and controls to mitigate the occurrence of deviations that can materialize in accidents cover a series of important tools, among which: behavioral approach, fatigue program, safety inspections by the leadership and cross audits between units, among others.



*Employees of the Casa de Pedra unit*

The SGSS covers 100% of own employees and subcontracted who work in all CSN units in Brazil. In Portugal, Lusosider has an Integrated Management System, certified by ISO 9001:2015 and ISO 45001:2018 standards. SWT, in Germany, has an Occupational Health and Safety Management System, certified by ISO 45001:2018 standard. In 2022, CSN Cimentos in Arcos will be the first cement plant in Brazil certified to ISO 45001:2018.

**The Health and Safety Management System (SGSS) coordinates all practices to maintain a safe work environment and accident prevention culture**

## The 10 Strategic Elements of the SGSS



### EL 01 Commitment and Leadership

To reinforce the engagement and commitment of all employees, own or subcontracted, to face the daily challenge of making our work environment increasingly safer and healthier.

### EL 02 Communication

It aims at reducing the Health and Safety risks through an efficient communication with all stakeholders.

### EL 03 Standards and Procedures

To standardize neat, safe and healthy work practices through standards and procedures, involving routine or non-routine works, in operational and administrative activities.

### EL 04 Behavioral Development

It aims at establishing requirements for the behavioral development of own and suppliers' employees, focused on prevention and on the continuous improvement of OHS practices.

### EL 05 Risk Management

It aims at establishing a systematic to identify, evaluate, control, minimize or eliminate the risks and impacts associated to processes, activities, facilities, services and products and their possible consequences to people's health and physical integrity.

### EL 06 Change Management

It aims at ensuring that every change made in the facilities, technologies, processes, work environments and staff are undertaken in a controlled fashion, so we are able to keep the risks or impacts at acceptable levels and improve our OHS performance.

### EL 07 Legal Requirements

It aims at ensuring the identification, analysis and adaptation to the legal requirements related to Labor Health and Safety.

### EL 08 Planning

It aims at establishing a systematic to ensure that the strategic, operational and routine actions are planned in order to minimize the impacts and keep the hazards and risks of our processes under control.

### EL 09 Management of Service Providers

It aims at ensuring that service providers are committed to the practices and procedures and have a performance in line with the Organization's values and principles.

### EL 10 Management of Competences and Skills

It aims at systematizing a continuous formation, qualification, habilitation, and onboarding process, so that own and subcontracted employees are able to perform their activities in a neat, safe, and healthy manner.

Employee of Casa de Pedra



Integrated into the Sustainability Department, the management of safety aspects at CSN has evolved in the evaluation of practices in all businesses and in the standardization of procedures for risk management, monitoring of indicators and investigation of accidents. These standards are customized for each type of business, ensuring full compliance with the activities and routines specified in the operating segments (steel, mining, cement, logistics and energy) and are applicable to all employees and suppliers at all levels and processes of CSN.

The analysis of risks in health and safety is carried out by a multidisciplinary team with qualitative and quantitative methodologies internationally recognized and adhering to NBR ISO 31000:2018. Formalized in the corporate OSH Risk Management procedure, these assessments consider the entire life cycle of the projects.



*Employee of the UPV unit*



**All employees are continuously trained to always carry out a preliminary risk assessment, report unsafe conditions and stop any activity in the face of a dangerous situation**

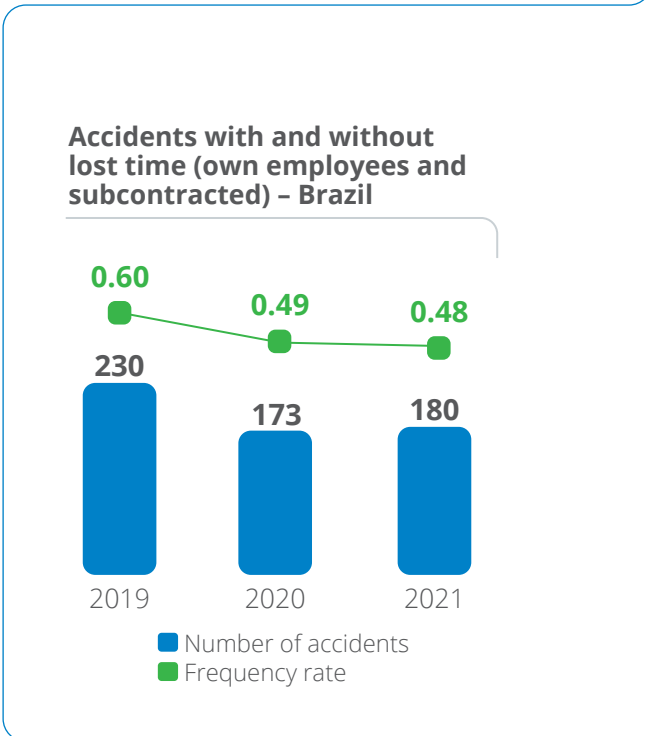
As one of the strategic elements of the SGSS, the behavioral development of workers promotes the prevention of risks in the day-to-day operations. All are continuously trained and communicated about the preliminary risk assessment procedures and encouraged to contribute with the indication of unsafe behavior or installations. In addition, the company ensures the right of refusal, in which the worker, own or subcontracted, may not start or stop an activity if he identifies the situation as dangerous.



Similar practices are adopted by units abroad. Considering the legal and regulatory particularities of each country, both Lusosider and SWT have structured and formalized mechanisms in procedures and policies to ensure systematic risk assessment.

In 2021, CSN recorded a 2.4% drop in the global accident frequency rate (with and without lost time for its own employees and third parties). In the period, 180 accidents were recorded, 12 of which required the removal of the injured professional from their duties for a period longer than 6 months and, unfortunately, 2 fatal occurrences involving third parties.

Accident indicators are now presented in this report considering the factor of 200,000 man-hours of exposure to risk, instead of 1 million man-hours. This change aims to facilitate the comparison of CSN's performance with other companies in the sector, in Brazil and abroad.



### Occupational health and safety indicators (employees and third parties) - Brazil

	2019	2020	2021
Total man-hours worked	76,533,445	70,382,735	75,024,175
Number of mandatory reporting work accidents (with and without leave)	230	173	180
Number of work accidents with serious consequences (except deaths) - absence from work for at least six months	14	8	12
Number of deaths resulting from work accidents	0	1	2
Total number of days lost and debited	11,371	11,391	17,174
Compulsory reporting occupational accident frequency rate (factor of 200 thousand HHT)	0.60	0.49	0.48
Frequency rate of work accidents with serious consequences (except deaths) (factor of 200 thousand HHT)	0.04	0.02	0.03
Frequency rate of deaths resulting from work accidents (factor of 200 thousand HHT)	0.00	0.00	0.01
Accident severity rate (factor of 200 thousand HHT)	30	32	46



*Employee of the Casa de Pedra unit*

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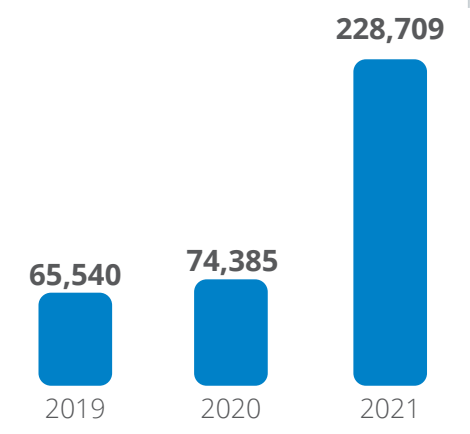


**In 2022, the Company provided more than 228,000 hours of health and safety training in Brazil and abroad**

One of the elements of the Health and Safety Management Manual establishes the principles and procedures that units must adopt to assess and investigate accidents in their operations. The guidelines address the implementation of minimum requirements for recording and investigating occurrences, adopting methodologies compatible with the severity of the cases, and mechanisms for sharing lessons learned, with a focus on preventing and protecting people. The results of investigations must be documented and kept on file for 30 years.

Health and safety training is one of the fundamental elements for promoting a safety culture and raising awareness among leaders and teams. In 2021, the total hours of training dedicated to the topic in Brazilian operations increased by more than 200% compared to 2020. Lusosider conducted 1,113 hours of training on the topic, and SWT approximately 13,000 hours of training.

**Hours of health and safety training\***



*\*The 2021 results include Lusosider and SWT.*

The participation of the Committees that represent employees and third parties in the management of safety aspects contributes to the improvement of practices and procedures adopted in each business unit and the engagement of all professionals. These committees cover 100% of the workforce (owned and third parties).

- Central Safety Committee - Business Unit
- Corporate and Directive Committee on Occupational Health and Safety
- Leadership Committee
- Contracts Committee
- Working groups for NRs (10, 12, 13, 20, 33 and 35)

## Health promotion



To promote the health of employees and contractors in the work environment, the CSN Group's businesses rely on the Medical Control and Occupational Health Program (PCMSO), developed in accordance with the Risk Management Program (PGR). The PCMSO establishes routines and periodicities for evaluating the health conditions of workers, according to the functions performed and occupational risks mapped.

In addition to this tool, employees have access to CSN 10+, a support and incentive program to improve their quality of life. CSN 10+ brings together a series of initiatives and subprograms aimed at preventing and reducing illness, increasing well-being, and preventing work-related accidents.

The CSN 10+ services are made available through the occupational medicine team and can occur on demand for medical evaluations or by the employees initiative.

Another highlight is Viva+, a quality of life program that contributes to the physical, mental and social health of employees. Carried out in partnership with a network of gyms, it benefits employees and their first-degree relatives, such as children, stepchildren, spouses, parents and siblings. The Personal Support Program (PAP) is a free service that provides assistance via telephone in situations involving personal and professional issues, with psychological, financial and legal guidance.



*Employee at the Casa de Pedra unit*

### CSN 10+ Initiatives

- 1** Viva+ Program
- 2** Alcohol and Narcotics Prevention Program
- 3** Awakening Program
- 4** Ergonomic Management Program
- 5** Workplace Gymnastics Program
- 6** Quality of Life Program
- 7** Itinerant Medicine
- 8** Hearing Conservation Program
- 9** Skin Health Program
- 10** Anti-smoking Program
- 11** Social Assistance and INSS

## Covid-19

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Employee health care and Covid-19 prevention were maintained throughout 2021, in all business units. The increase in the incidence of cases in the first half of the year demanded the continuity of efforts and protocols implemented in 2020 to protect people and ensure the continuity of essential operations.

The Crisis Committee continued to be installed throughout 2021. Through periodic meetings, the group was responsible for evaluating the scenarios for the evolution of the pandemic and directing measures to protect businesses and people.

The home office system for employees considered to be at risk in administrative areas and support services was adopted throughout the year. In the second half of the year, with the advancement of vaccination in Brazil, face-to-face activities in offices resumed, even more so with restrictions on travel, meetings, and face-to-face training.

The medical teams continued to monitor positive diagnoses and the health conditions of employees and their families. The company also reinforced campaigns to encourage immunization among its professionals.



*Employees at the tailings filtration plant - Casa de Pedra Unit*

**By the end of 2021, 75% of the workforce had complete vaccination coverage, with 94% of the workforce having had at least the first dose of the vaccine**





# Diversity and **inclusion**



Diversity among people is a lever for innovation and business growth at CSN. In addition to not tolerating and curbing cases of discrimination in its business, the company has sought to expand the presence of women, people with disabilities (PWDs) and underrepresented groups in operational and leadership positions, through the evolution of recruitment processes, evaluation, and recognition of professionals.



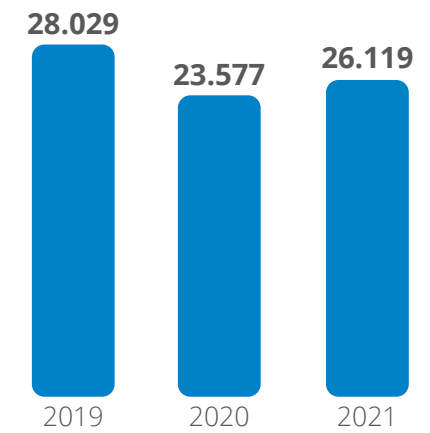


In 2021, the governance of the topic was strengthened with the creation of the Diversity and Inclusion Management, responsible for the development of engagement and training actions and projects in all businesses. One of the first actions of the new area was to accelerate actions to meet the goals related to diversity in the workforce established in 2020. In the year, 85% of leaders were trained in Diversity & Inclusion, which supported the result of 17.5%\* of representation of women in the CSN Group, an increase of 21% compared to 2020.

In conjunction with this mapping of opportunities to increase diversity among people, the company started a series of meetings and discussions with the administrative and operational leaders of all businesses. The objective was to promote awareness and knowledge of leaders about the importance of an even more inclusive and diverse work environment, as an inducer of innovation and business growth.

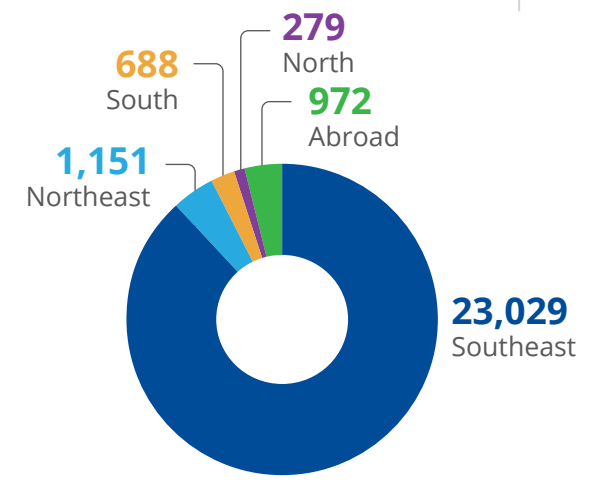
\*Data considers employees in Brazil, CLT, Apprentice, Internship and Program – Capacitar.

### Total number of employees<sup>1</sup>

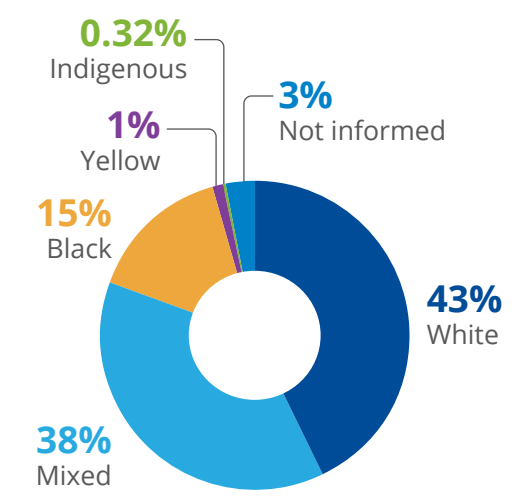


<sup>1</sup>Data for 2019 and 2020 only consider employees located in Brazil. As of 2021, Grupo CSN started to consider SWT and Lusosider data in its indicators.

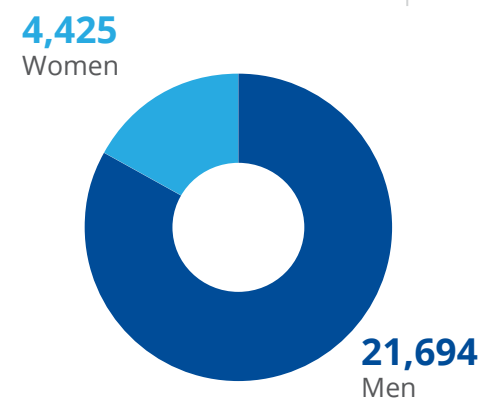
### Employees as per region in 2021



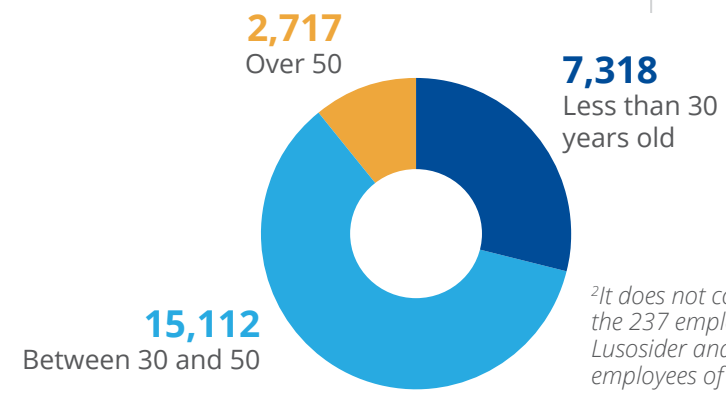
### Employees as per race in Brazil in 2021<sup>2</sup>



### Employees as per gender in 2021



### Employees as per age group in Brazil in 2021<sup>2</sup>



<sup>2</sup>It does not consider the 237 employees of Lusosider and the 735 employees of SWT



**53%**  
representation of the black race in 2021

**31%**  
representation of the black race in leadership positions in 2021

**15%**  
growth of people with disabilities at CSN Group in 2021

### Diversity Program

CSN's Diversity Program was recognized in 2021 with the Faz Diferença Award, organized by the Federation of Industries of Rio de Janeiro (Firjan) and the O Globo newspaper. The initiative won in the Rio Development category, highlighting the initiatives to promote the inclusion of women in operational activities and leadership positions at the Presidente Vargas Steelworks (UPV), strengthening gender equity in the steel sector.

CSN's goal is to have at least **28%** of women among its employees by 2025

*Employee of CSN  
Porto Real*

## Capacitar Program

The Capacitar Program is developed by CSN in partnership with Senai and CSN Foundation, focusing on the professional education of people from communities close to the operational units. In 2021, the initiative carried out modules exclusively for women and people with disabilities, aimed at offering new opportunities and promoting equity.

**10 people with disabilities**

were hired and trained by the Capacitar PCD Program in 2021

**333 women**

were hired and trained by the Capacitar Mulheres Program in 2021



*Collaborator of the Volta Redonda Research Center*

## Mentoria Cidadã

One of the first projects created in 2021, focused on promoting diversity, was Mentoria Cidadã. The initiative promotes the integration of CSN leaders with young people participating in the Garoto Cidadão program, developed by CSN Foundation to promote the sociocultural development of young people in vulnerable situations.

During the training, participants receive professional mentoring sessions from CSN leaders, developing behavioral skills and new skills so that they can develop more quickly at the beginning of their professional careers. The first group of the program had 51 participants – 68% joined CSN's Young Apprentice program.

In addition, CSN Leaders, Mentoring, receive specific training, offered by specialists in Human Resources from the CSN Group, in four themes: Self-knowledge, Labor Market and Career, Professions, Skills and Competencies and Recruitment and Selection.

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## MasterClass

Training is offered to 100% of employees on various topics aligned with Diversity and Inclusion, namely: Inclusion of Persons with Disabilities, Debate on Gender Equity, and the way forward, Anti-Racist Fight and our role in this journey. In 2021, more than 4 thousand employees were able to follow the lives with the transmission of the themes.

## MOVER

CSN was one of the founding companies of MOVER – Movement for Racial Equity, created in 2021, The coalition of business organizations aims to expand opportunities and promote the inclusion of the black population in leadership positions.

The companies engaged in MOVER are committed to three objectives outlined:

1. Create 10,000 leadership roles for people of color by 2030.
2. Employ and empower through opportunities that balance the visibility of black professionals.
3. Make the population aware of the topic, bringing diverse and relevant content.



## Young Apprentice Class

First group of apprentices formed entirely by 15 women on the Transnordestina Railway, aged between 18 and 21. The students of the Railway Maintenance Electricians course were received in September 2021 for the inaugural class taught by the SENAI team. After the first month of the theoretical course, the group started a routine of practical classes in Fortaleza (CE). Divided into three groups, the participants will take turns in the different processes of locomotive maintenance: heavy, light and component repair. The idea is that, after this immersion, they will be directed to the process with which they most identify in the Company.

## We are Diversity. We are CSN.

The series was launched in 2021, as we have always believed that naturally the CSN Group was built with countless singularities. The series was designed precisely so that some of the collaborators could share their real stories, personal life, and career, so that a more inclusive environment is formed. In the year 2022, 5 more videos will be released.



Employee of Volta Redonda – UPV

Employee of Prada Santo Amaro



**6 women** are part of the **Boards of Directors** of CSN Mineração, CSN Cimentos and TLSA

**28%** of the CSN Mineração Board is made up of women

**Women** represent **17,5%<sup>1</sup>** of CSN Group's workforce in Brazil

**31%** of CSN's **leadership positions** are held by **black people**

Black men and women make up **53% of the total** number of CSN's employees

**15%** growth in the number of **people with disabilities** employed (2021 x 2020)

**21%** growth in female representation (2021 x 2020)<sup>1</sup>

<sup>1</sup>Considers CLT employees, Apprentice, Internship and Program – Capacitar.



# Staff management



CSN Group's "People & Management" model is based on five pillars: Attract; Align and Engage; Evaluate; Develop; Recognize and Reward. The Company believes that its competitive edge is its human capital. Through this model, knowledge is transformed into a successful trajectory, based on passion, dedication and competence that generate opportunities, achievements, and recognition.

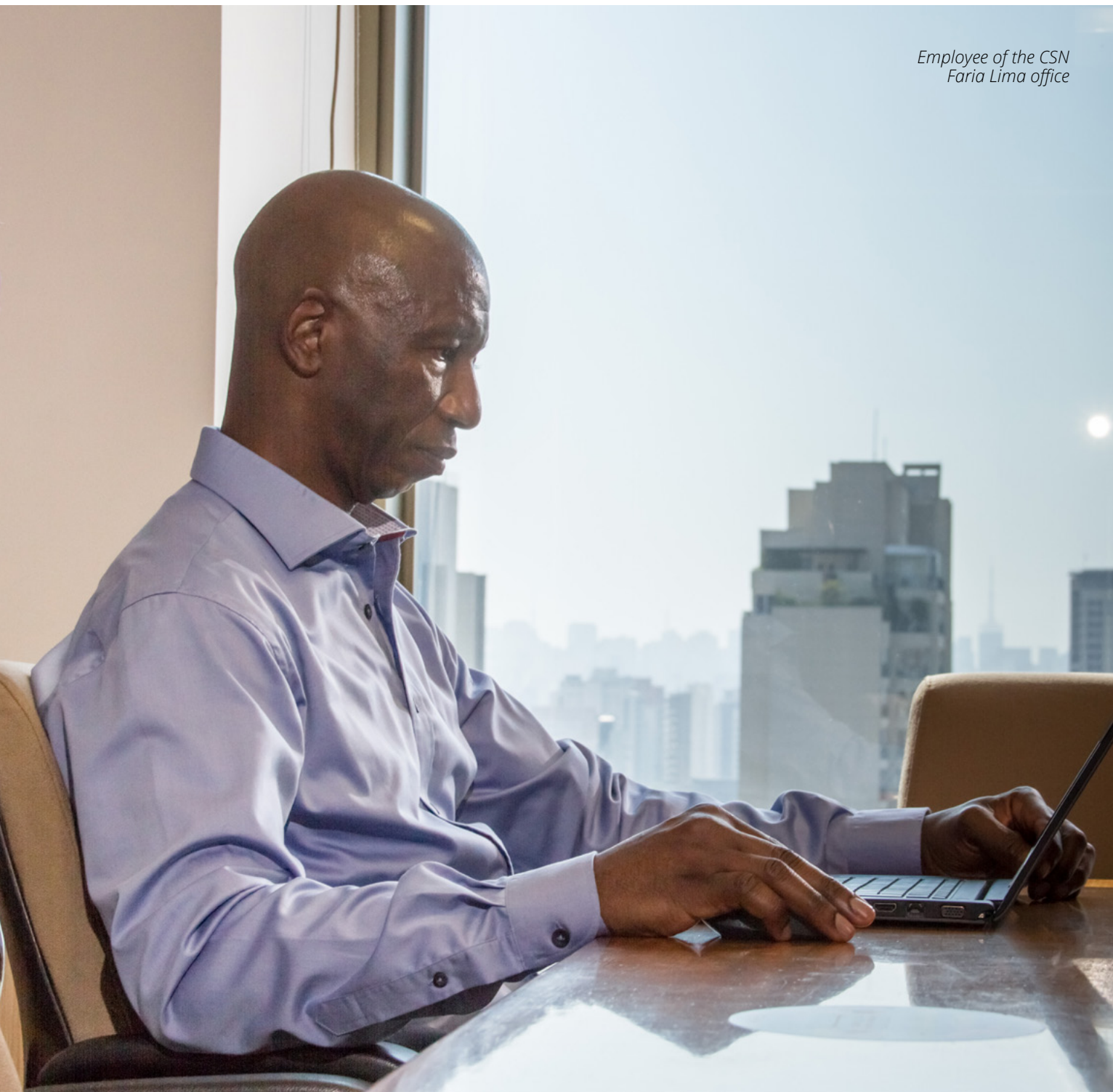
Faced with the Covid19 pandemic, several measures were taken in relation to People & Management practices, aiming to make the employee experience even more effective. A digital platform was implemented to send admission documents, with the aim of optimizing and streamlining the process. The Internship Program was renewed with the implementation of Blind Recruitment, carried out completely online, including group dynamics, candidate assessments for behavioral assessment and logical reasoning tests. Candidates were able to follow each step of the process through QR Code. A satisfaction survey was carried out regarding the adherence to the new process with the interns and with the applicants, with an experience score of 95% and 90% respectively.

## 5 pillars of the "People & Management" model

- 1 Attract**
- 2 Align and Engage**
- 3 Evaluate**
- 4 Develop**
- 5 Recognize and Reward**



Employee of FTL



*Employee of the CSN  
Faria Lima office*

## Employee compensation and benefits

The pension plans granted cover substantially the employees of CSN Group. The plans are managed by Caixa Beneficente dos Empregados da CSN ("CBS"), a private, non-profit pension fund established in July 1960, whose members are employees (and former employees) who have joined the fund through an adhesion agreement, in addition to the CBS employees themselves. The Program supports employees in their planning for retirement with topics related to this change, such as developing a new life project, transferring knowledge, and preparing leadership to guide and support people. Currently, the retirement plans provided by CBS have more than 33,000 participants.



**In addition to the private pension plan, CSN offers all employees hired for a fixed and indefinite period of time superior benefits in accordance with the legislation, as per agreements signed with their respective unions, such as day care assistance, meal vouchers, health care plan and dental plan**





# Staff development

CSN's employees are the cornerstone of the strategy for growth and increased efficiency in all businesses. The company employs a total of over 26,000 people in different segments, in Brazil and abroad. Within this context, management mechanisms for the assessment, development and recognition of professionals are of fundamental importance.

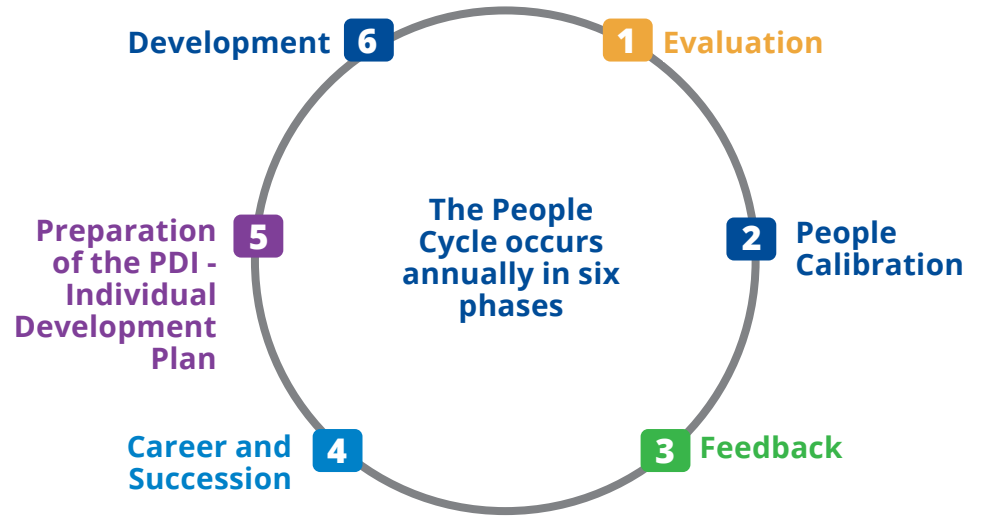
The People Cycle is the process through which leaders and their teams establish a transparent and purposeful dialogue, focusing on professional development and alignment with strategic objectives. At the end of the People Cycle, employees, together with their leaders, establish individual goals and are evaluated according to the achievement of objectives and alignment with corporate competencies, creating inputs for the strategic planning of the workforce.

*Employees of the UPV unit*





Employees of SWT



The performance of employees has a multidimensional evaluation, based on the following methodology:

**360° Assessment**

Executive Directors; Directors; General Managers and Managers: Conduct self-assessment and receive assessment from the immediate manager, peers, staff, and internal customers/suppliers

**180° Assessment**

Coordinators and Supervisors: Conduct self-assessment and receive assessment from the immediate manager and team

**90° Assessment**

Specialists; Higher level; Administrative and Operational Level: Carry out self-assessment and receive assessment from the immediate manager



In 2021, 20,906 employees were evaluated in the Skills Assessment process. After the evaluation, CSN Group's 9Box were carried out and calibration was implemented in the People, Management, Career and Succession Committee - resulting in the "inverted L" and the mapping of the Company's talents and potential, which resulted in 102 retentions, 522 merits and 4,761 promotions.

The evolution of this process also enabled the mapping of potential leaders to strategic positions in the business. This work allowed the definition of parameters for the recognition of talents, up to the level of supervision, and the assessment of leaders so that they can guide the development of these employees in the day-to-day of business.

CSN's objective is to increase the internal movement of employees, expanding opportunities for professionals aligned with the corporate culture to be recognized and strengthen the business. For this purpose, the company uses People Analytics to collect, analyze and diagnose data related to its employees.

### Employees from Brazil evaluated in 2021

	Number of professionals evaluated*	Percentage of total employees at the end of the period
<b>By gender</b>		
Men	17,714	85.03%
Women	3,192	73.99%
<b>By functional level</b>		
Executive	15	78.95%
Leadership	1,079	94.98%
Specialist	216	90.00%
Engineer	777	92.17%
Higher Level	1,050	91.38%
Technician	3,158	92.04%
Administrative	530	85.90%
Operational	13,906	82.35%
Capacitar Program	175	47.81%
<b>Total</b>	<b>20,906</b>	<b>84.68%</b>

\*Lusosider and SWT do not have structured processes for evaluating the individual performance of employees. At SWT, individual meetings of employees with the Human Resources area are promoted on demand – in 2021, 50 such meetings were held.



Employee of the Volta Redonda Research Center

## Outstanding initiatives in 2021

A Corporate Education program was implemented, which, in the future, will evolve into a **Corporate University**, focusing on:

- Structure a learning path for all levels of the organization
- Manage and track mandatory training
- Encourage knowledge management
- Stimulate the action of internal multipliers
- Encourage research and technological and technical updating at CSN.

In light of this, a review of the design, the parameterization of the LMS and the inclusion of the contents were defined.

In 2021, other programs and projects were also carried out aimed at developing the Company's workforce, including:

The **Intern Development Program**, with 4 development modules: Self-knowledge, Financial Planning, Life and Career Planning, and Inclusion and Diversity.

The **Acculturation Diagnosis** of Executives and Specialists admitted to the CSN Group, aiming to raise perceptions regarding our culture; essence; work environment; relationship with the manager and peers and if their expectations were met considering what was contracted in the selection process.



*Employee of the Casa de Pedra unit*

The **"Trainee #VemSerCSN"** program, which aims to attract, retain, and develop young people with high potential to occupy strategic positions, in the medium and long term, aiming to add value to CSN Group's businesses, and had 20,008 applicants for 50 vacancies.

The **CSN Conecta**, a program with the objective of engaging squads of up to 4 employees in the

development of solutions, aimed at accelerating ESG actions in the company, in the areas of water, energy, waste and emissions. The program was launched in all units of the CSN Group, and the initiative, in addition to generating innovation through the solutions that will be developed, will contribute to the generation and sharing of technical knowledge.



Employee of the Casa de Pedra unit



## Partnerships

The year 2021 also marks the beginning of the partnership with **Alicerce Educação**. As a pilot project, investment was made in training 80 young people to receive a highly differentiated educational base for the Brazilian context, accompanied by a complete MAPA diagnosis. The topics covered in the course were designed to cover the CSN Essence, aiming to develop them beyond Language and Mathematics skills, 43 of the young people were used in the Learning program, improving their knowledge with a focus on the Company's opportunities.

Another initiative was the partnership with **BRASA Summer Journey**, whose mission is to train, connect and engage Brazilian talents during the recess period of Universities abroad. The objective of the program was for these students to develop high-impact projects for the organization, learning from the company's culture, during 4 weeks. There was the participation of 30 young people who underwent training and mentoring, as well as conversations with the Leaders. The program was carried out in partnership with CSN Foundation and CSN Inova, with the theme: "Elaboration of a territorial development plan for the cities of Congonhas and Volta Redonda."



Employees of the Port

# Training results for the year

In 2021, this new vision for the development of teams has already started to guide actions and investments in training. The average hours of training for employees rose 37% last year compared to 2020.

SWT and Lusosider have their own annual employee training programs. In the German operation, training needs are defined with the support of the Vocational Training and Corporate Education Committee. In 2021, the units provided a total of 33,5 thousand hours of training.

**In 2021, CSN Group's investment in training its people was R\$ 4.8 million, which represents R\$ 185.79 per employee and achieved more than 350,000 hours of training**



## Training promoted in Brazilian operations in 2021

	Number of hours of training	Average hours of training per employee
<b>By gender</b>		
Men	302,753	13.99
Women	50,739	11.46
<b>By functional level</b>		
Executive	39	1.95
Leadership	12,307	10.74
Specialist	1,816	7.54
Engineer	12,881	15.19
Higher Level	9,922	8.54
Technician	45,890	13.15
Administrative	4,258	5.74
Operational	256,013	14.57
Capacitar Program	7,051	19.21
Apprentice Program	3,315	7.13
<b>Total</b>	<b>353,492</b>	<b>13.57</b>



## Average hours of training per employee in foreign operations in 2021

	Lusosider	SWT
Men	18.89	39.20
Women	20.77	38.62
<b>Total</b>	<b>19.09</b>	<b>39.13</b>

# Local communities



CSN promotes a positive relationship and partnership with the communities in the cities where its units operate. The main vehicle for building these relationships is CSN Foundation, which celebrated its 60th anniversary in 2021 with the expansion of its operations and the scope of the initiatives it conducts.

Even with the challenges of the Covid-19 pandemic, which continued to impact the development of projects in person, the CSN Group invested in 2021 more than R\$ 100 million in social responsibility projects with CSN Foundation initiatives and through support, via incentive laws, to projects of partner institutions.



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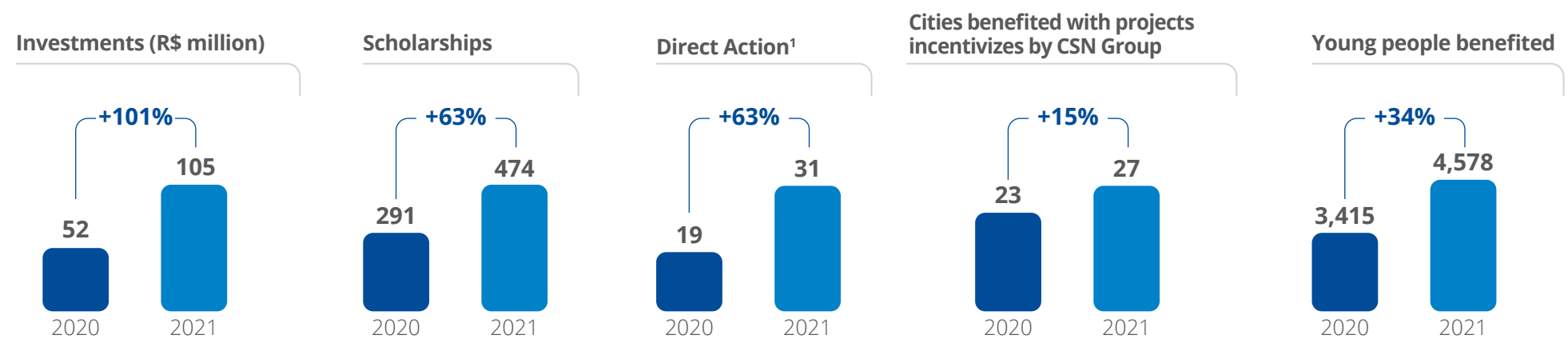
The purpose of CSN Foundation is to promote the transformation of communities through social, educational, and cultural development. Its performance is supported by education, culture, articulation, and curatorship.

Coordination is essential to establish a beneficial relationship with the community, public authorities, institutions, and companies in the regions where it is present, making these actors partners for territorial development. In the curatorship pillar, the Foundation carries out the pre-selection of projects from other institutions, so that CSN can sponsor them through tax incentive laws, thus expanding its social activities and contributing to the transformation of lives, families, and cities.

With its operating model, CSN Foundation connects its investments to the Sustainable Development Goals (SDGs) agenda and the principles of the UN Global Compact



*ETPC Laboratory in Volta Redonda - CSN Foundation*



<sup>1</sup>Refers to the cities where CSN Foundation directly operates.



# CSN Foundation Highlights in 2021

CSN Group invested more than **R\$ 105 million** in social responsibility with contributions to 104 projects in 27 cities

**452 cultural actions**

carried out with 215,227 of audience reach



CSN Foundation is present in **31 cities** with direct actions



**474 students** covered by Scholarship Programs

**4,578 young people** impacted by the projects carried out by CSN Foundation



Theater at the CSN Foundation Cultural Center

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# Education


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## Scholarship Program

CSN Foundation benefits young people by offering scholarships for quality training in two schools it manages – ETPC (Volta Redonda – RJ) and CET (Congonhas – MG). In 2021, classes and extracurricular activities continued in a hybrid format.

The Technological Education Center (CET) has expanded its scholarship program for technical courses and, for 2022, the goal is to increase the number of scholarships offered for the Trilhas de Futuro program, in partnership with the government of the state of Minas Gerais.

The Pandiá Calógeras Technical School (ETPC) offers high school classes with Technical Courses in Administration, Electronics, Electromechanics, Informatics, Mechatronics and Chemistry. Among the free courses and training, it contributes to the training of people with disabilities, having trained more than 17 CSN employees.



**931 students** study at ETPC and CET and **51%** have benefited from full and partial scholarships



*CSN Foundation School in Volta Redonda*

## Young Apprentice

Aimed at including young people in the job market, the Young Apprentice program takes place in municipalities in Minas Gerais, São Paulo, and Rio de Janeiro. The activities increase opportunities for professional development and contribute to the employability of young people and their insertion in the job market.

**1,281 young people** were served in 2021. The goal for 2022 is to increase the number of apprentices by **20%**



Student of the CSN Foundation's Capacitar Hospitality Project

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## Capacitar Hospitality and Services

The project offers training to young people aged between 16 and 29, in a situation of social vulnerability, at the Bela Vista school hotel and at the Vila Business Hotel, managed by the CSN Foundation. During a semester, students participate in theoretical and practical classes in various sectors of the hotel industry and services, such as reception, events, kitchen, waiter, maintenance, and customer service.

In 2021, **96 students** completed the course. Since the beginning of the project, 1,427 young people have been trained. For 2022, the program will be expanded by **10%** with the inclusion of the municipalities of Itatiaia and Vassouras

GRI 103-1 | 103-2 | 103-3 | 203-1 | 413-1

## Internship Integration

Launched in 2021, the program positions CSN Foundation as an integrating agent for internships, connecting educational institutions, companies, and young people in the stages of recruitment, hiring and support for those involved. In the first year, operations took place in the cities of Belo Horizonte, Duque de Caxias, and Volta Redonda.

**10 partner** companies and **31 young people** served in 2021

## Environmental Education Program (PEA)

CSN Foundation carries out the PEA for CSN Mineração and CSN Cimentos in the Minas Gerais cities of Arcos, Belo Vale, Congonhas, Ouro Preto, Pains and Rio Acima, with socio-environmental activities through lectures, events, and workshops in public schools and to CSN employees. In 2021, following all sanitary protocols, the PEA resumed its activities in the communities.

In 2022, the program will expand its activities to Volta Redonda (Rio de Janeiro), planning to carry out various activities, such as environmental awareness and education with students from the municipal school system and teacher training.



**4,424 people** were assisted in environmental education initiatives in **153 activities** carried out during the year



# Culture

## Garoto Cidadão

The sociocultural project, which completed 20 years of existence in 2021, has as its main objective to provide the human development of children and adolescents, between 9 and 18 years old, in a situation of social vulnerability, referred by the Social Assistance Reference Centers (CRAS) of the prefectures. It offers educational and cultural activities in the following languages: music, theater, dance, visual arts, expressions of art and culture and citizenship carried out in 9 units - three of them were inaugurated in 2021, in the state of Mato Grosso do Sul. For 2022, the project is expected to expand with the opening of 4 more units, expanding its operations in the Northeast region.

### 2,550 students

served in Arcos and Congonhas (MG), Itaguaí and Volta Redonda (RJ), São Paulo (SP), Araucária (PR) and Bonito, Coxim and Porto Murtinho (MS)

**234 cultural** activities carried out

**118,033 people** impacted (total audience)

GRI 103-1 | 103-2 | 103-3 | 413-1



Tambores de Aço Group

## Tambores de Aço

Tambores de Aço CSN Foundation has 20 young scholarship holders, aged between 15 and 20, all from Garoto Cidadão. The program provides comprehensive and intensive music training for boys and girls who identify with talent in music. Scholarship holders have 12 hours of weekly activities, including theoretical, practical and rehearsal classes.

**4 musical** performances performed

**1,187 people** impacted (total audience)

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*Art Gallery of the Cultural Center of the CSN Foundation in Volta Redonda*

## Histórias que ficam

Consultancy, promotion, and dissemination program for Brazilian documentary. In 2021, the third edition was launched in a new format, in partnership with the São Paulo International Documentary Meeting (DOCSP). The public notice launched, with a focus on impact films, sought to strengthen reflection on highly relevant topics in Brazil.

### 5 documentaries

selected to participate in 3 training processes between December 2021 and May 2022.

### 1 project benefited

from the Work in Progress award, in the amount of R\$ 100,000

Impact campaign for the film *Limiar*, with a range of **75 self-managed** sessions, reaching an audience of **2,100 spectators** in a non-commercial circuit

## CSN Foundation Cultural Center

Multidisciplinary space dedicated to the formation and dissemination of art, education, and culture, located in Volta Redonda (RJ). In 2021, it continued its activities in digital media with virtual exhibitions, lives, podcasts, workshops, web series, among other actions, strengthening cultural diversity and the relationship with communities and city halls of cities from the South of Rio de Janeiro.

**213 cultural activities** with **94,949** of audience reach



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# Curatorship

CSN Foundation works with the curatorship of projects from partner institutions. Since 2003, more than R\$391 million has been invested in various initiatives through tax incentive laws in the areas of culture, sports, children and adolescents, the elderly and health, thus expanding its social activities.

Among the initiatives sponsored by CSN are Garoto Cidadão, the 24th Tiradentes Film Festival, Hospital do Câncer de Barretos, GRAAC, Unibes Cultural, Casa do Povo, Angelina Caran Hospital, Hospital Albert Einstein, and the football team Audax, from Osasco (SP), among others.

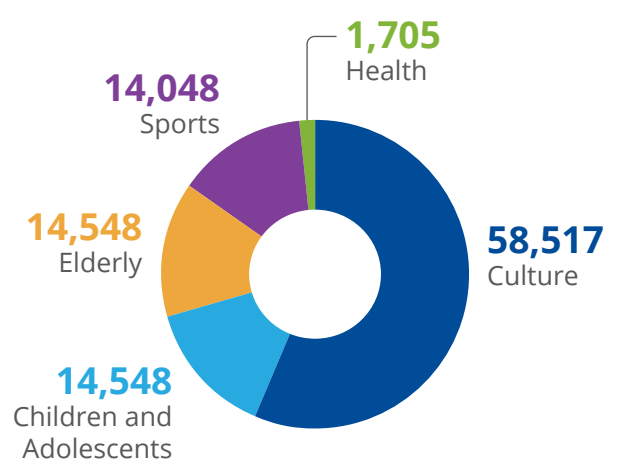


Cultural action supported by CSN Foundation

In 2021, **R\$ 103 million** was invested

**104 projects**, covering 27 cities in 8 Brazilian states

Distribution by area (R\$ thousand)



GRI 103-1 | 103-2 | 103-3 | 413-1



# Articulation

Articulation is fundamental in the search for a harmonious relationship with the community, the public power, local businessmen, institutions and CSN.

In Congonhas (MG), CSN Foundation manages the Espaço Comunidade CSN support house, to develop CSN Mineração's relationship with the local community.

In Volta Redonda (RJ), the entity actively contributes to the creation and development of the VR Gastronomic Pole, to strengthen the local economy through gastronomy and tourism.

In a partnership with the Municipality of Volta Redonda and the Community Action Nucleus (NAC), it identified the need to carry out training for civil society entities and city rights councils, updating institutions on public policies, project design and fundraising. For 2022, training will also take place by the State Youth Forum of the State of Rio de Janeiro for municipalities in the State of Rio, in Arcos, Congonhas and Conselheiro Lafaiete (MG) and Bonito and Coxim (MS).



# Lusosider

## Engagement with communities in units abroad

SWT is the main sponsor of the SV Stahl Unterwellenborn sports club, which promotes spaces for physical activity for children, young people, adults, and seniors. Through cooperation agreements, the company provides financial resources and also opens up the opportunity for its employees to act as volunteers. Volunteering is also encouraged in other clubs, associations, and cultural events in the region.

In order to ensure a good relationship with the community surrounding the unit, SWT ensures compliance with legal noise and dust limits and maintains extensive dialogue with neighboring representatives and the local government.

Lusosider, in Portugal, also values harmonious coexistence with the surroundings of its operations. The company annually promotes a context assessment, mapping potential impacts and relevant demands from the community.



Lusosider unit in Portugal



# Value chain management



CSN's commitment to ethical and transparent performance, with respect for human rights and best market practices, extends to the entire supply chain – in all businesses in which it operates. This form of action is ensured by means of internal policies and rules that guide the processes of evaluation and selection of suppliers and by an active management of contracts for the provision of services and supply of materials.



*Employee of the Port of Itaguaí*



In 2021, CSN's operations in Brazil involved a chain of 4,170 suppliers, with expenditures of around R\$29.2 billion. Abroad, Lusosider had 2,440 suppliers and an annual expenditure of €18 million. SWT, in turn, contracted 1,446 suppliers throughout the year, totaling €522 million in purchases.

The hiring of local suppliers is a practice encouraged throughout the CSN Group, which brings benefits such as agility, reduced delivery times, close relationship, and wealth generation in the vicinity of operations. Some business demands, however, require hiring global partners or specialized companies that are not located close to the units. In 2021, the percentages of CSN's local purchases in Brazil, Portugal and Germany were 31.6%, 55.0% and 48.0%, respectively.

**In both Brazilian and foreign operations, the CSN Group prioritizes the hiring of local suppliers**





## Green Logistics at SWT

With a total transport capacity of 2 million tons per year, logistics are an important factor in SWT's environmental management. About two thirds of the finished products can be shipped directly by wagons with own and external railway companies. SWT already offers CO2 neutral transport to many destinations in Europe (learn more on page 110). This is possible thanks to cooperation with logistics service providers, including Deutsche Bahn, which uses locomotives powered by green electricity.

In addition, most of SWT's suppliers and partners are local. This proximity, as well as the established and fine-tuned processes, ensures that SWT is able to deliver the highest quality product flexibly and quickly around the world.

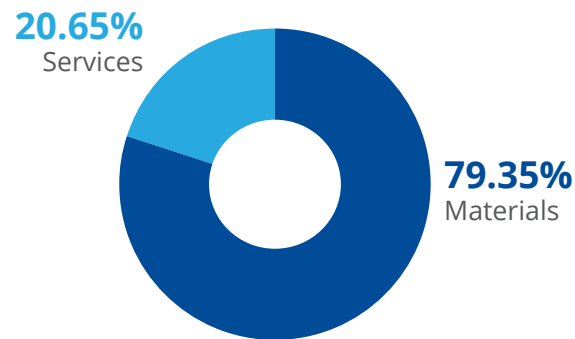


# X-ray of suppliers of CSN's operations in Brazil in 2021

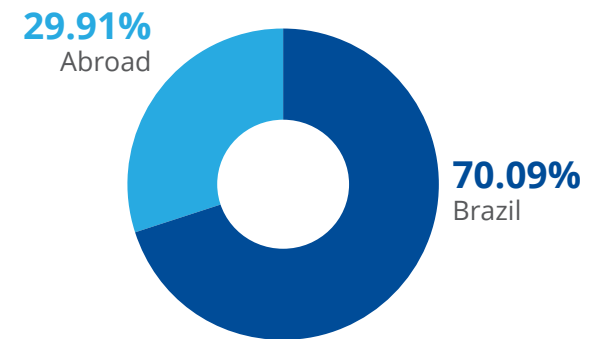


Employee of the Arcos unit

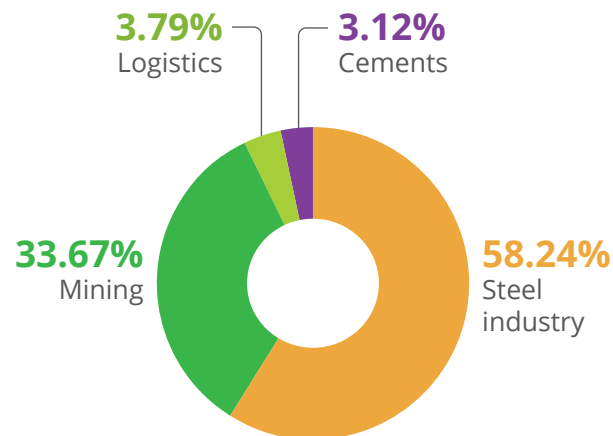
## Expenditures by category of supply



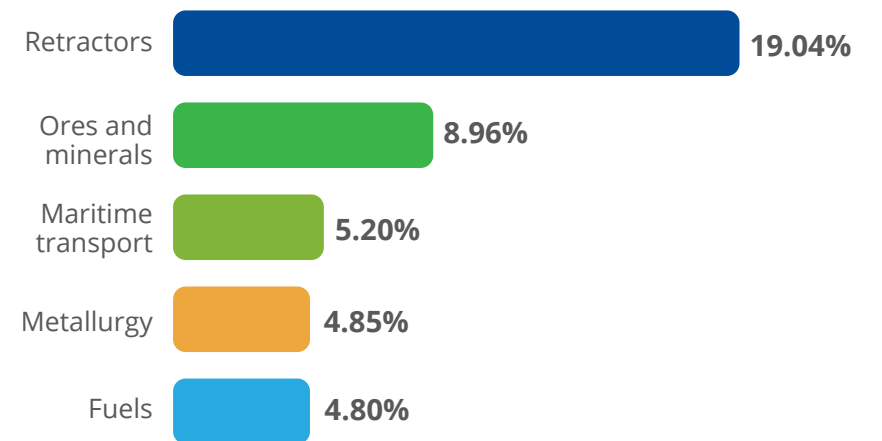
## Expenditures as per geographic location



## Expenditures as per business segment



## TOP 5 types of contracted products/services



# Respect for human rights and supplier ESG compliance



Through supplier assessment and approval processes, CSN seeks to mitigate risks in its value chain. The company requires the consent of all partners to its Code of Ethics and the Anti-Corruption Policy. When applicable, the registration includes the presentation of ISO 9001:2015 and ISO 14001:2015 certificates, a self-assessment questionnaire and environmental licenses.

Companies evaluated with a high level of criticality undergo an assessment process (due diligence) carried out by the Compliance area, which ensures compliance with legislation, the non-use of child labor or forced working conditions, the adoption of good socio-environmental management practices, among other ESG aspects. In 2021, 1,053 suppliers were evaluated with environmental and social criteria, considering the value chain of the units in Brazil and abroad.

Through the Third-Party Management Center (NGT), currently at the Integrated Management Center (CIG), it monitors compliance with labor obligations, such as tax collection, payment of employees, transfer of collective and social security agreements, among others, by suppliers. The area also identifies the respect and alignment of these companies with human rights.

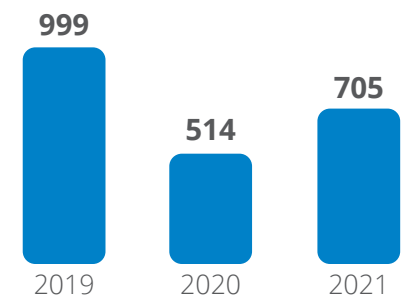
In SWT and Lusosider operations abroad, legal compliance with social and environmental requirements is required from 100% of suppliers at the time of contracting. In Brazil, 12.54% of the suppliers contracted by the CSN Group underwent evaluation of socio-environmental criteria.

With these practices, the CSN Group ensures broad respect for decent work practices in its value chain and avoids the risk of degrading forms, such as child, forced or slave-like labor.



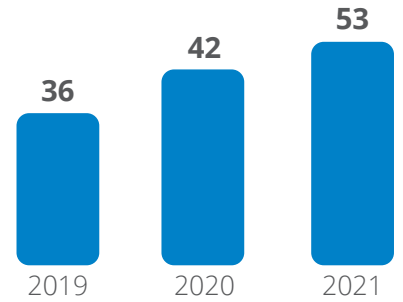
Employee of the Port of Itaguaí

Number of due diligences performed<sup>1</sup>



<sup>1</sup>It only covers assessments carried out in Brazil. The 2019 and 2020 data were updated based on an update of criteria considered in due diligence carried out by the Compliance and Risk department.

Monthly average of analyzed contracts





# Annexes

# Complement to GRI disclosures

## 102-8 and 102-41 | Information on employees and other workers and Collective bargaining agreements

### 102-8 and 102-41 | Employees in CSN Group by gender<sup>1</sup>

	2020			2021 <sup>2</sup>		
	Men	Women	Total	Men	Women	Total
<b>By employment contract<sup>3</sup></b>						
Fixed period	428	215	<b>643</b>	245	43	<b>288</b>
Indefinite period	19,179	2,809	<b>21,988</b>	20,929	3,587	<b>24,516</b>
Fixed period (Apprentice and Capacitar Programs) <sup>4</sup>	590	356	<b>946</b>	520	795	<b>1,357</b>
<b>By region</b>						
North	252	36	<b>288</b>	242	37	<b>279</b>
Northeast	955	120	<b>1,075</b>	1,013	138	<b>1,151</b>
Southeast	18,432	3,103	<b>21,535</b>	19,027	4,002	<b>23,029</b>
South	558	121	<b>679</b>	551	137	<b>688</b>
Abroad <sup>4</sup>	0	0	<b>0</b>	861	111	<b>1,014</b>
<b>Total</b>	<b>20,197</b>	<b>3,380</b>	<b>23,577</b>	<b>21,694</b>	<b>4,425</b>	<b>26,161</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

<sup>2</sup>In 2021, Grupo CSN started to report data regarding operations abroad (Lusosider and SWT).

<sup>3</sup>The Company has a working day policy for operations in Brazil, which establishes respect for the 8-hour working day, as established in the CLT. Employees cannot work more than 2 overtime hours per day to ensure compliance with labor legislation.

<sup>4</sup>In 2021, there are 42 apprentices in SWT for whom it was not possible to identify gender, so they are only counted in the "Total" column.

### 102-8 and 102-41 | Employees in CSN Group by employment contract and region<sup>1</sup>

	2020			2021 <sup>2</sup>		
	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)
North	19	260	9	1	278	0
Northeast	7	1,032	36	2	1,126	23
Southeast	588	20,067	880	24	21,734	1,271
South	29	629	21	0	667	21
Abroad	0	0	0	261	711	42
<b>Total</b>	<b>643</b>	<b>21,988</b>	<b>946</b>	<b>288</b>	<b>24,516</b>	<b>1,357</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

<sup>2</sup>In 2021, the CSN Group started to report data regarding operations abroad (Lusosider and SWT).

### 102-8 and 102-41 | Employees in the Cements segment by employment contract<sup>1</sup>

	2021 <sup>2</sup>			
	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Total
<b>By gender</b>				
Men	7	719	0	<b>726</b>
Women	4	173	6	<b>183</b>
<b>Total</b>	<b>11</b>	<b>892</b>	<b>6</b>	<b>909</b>

<sup>1</sup>Considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees are covered by collective bargaining agreements and work in the Southeast Region. The Company has a working day policy for operations in Brazil, which establishes respect for the 8-hour working day, as established in the CLT. Employees cannot work more than 2 overtime hours per day in order to ensure compliance with labor legislation.

<sup>2</sup>CSN Cimentos was separated from the CSN Group with an independent CNPJ in March 2021, so the history of 2020 is consolidated in the number of employees of CSN Company.

## 102-8 and 102-41 | Employees in the Steel industry segment by gender<sup>1</sup>

	Brazil <sup>2</sup>						Abroad		
	2020			2021			2021 <sup>3</sup>		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>By employment contract<sup>4</sup></b>									
Fixed period	144	77	<b>221</b>	3	6	<b>9</b>	232	29	<b>261</b>
Indefinite period	12,205	1,859	<b>14,064</b>	11,669	2,025	<b>13,694</b>	629	82	<b>711</b>
Fixed period (Apprentice and Capacitar Programs)	457	266	<b>723</b>	425	487	<b>912</b>	0	0	<b>42</b>
<b>By region</b>									
Northeast	60	8	<b>68</b>	57	10	<b>67</b>	0	0	<b>0</b>
Southeast	12,188	2,073	<b>14,261</b>	11,489	2,371	<b>13,860</b>	0	0	<b>0</b>
South	558	121	<b>679</b>	551	137	<b>688</b>	0	0	<b>0</b>
Abroad	0	0	<b>0</b>	0	0	<b>0</b>	861	111	<b>1,014</b>
<b>Total</b>	<b>12,806</b>	<b>2,202</b>	<b>15,008</b>	<b>12,097</b>	<b>2,518</b>	<b>14,615</b>	<b>861</b>	<b>111</b>	<b>1,014</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

<sup>2</sup>In the Brazilian Steel Segment, the UPV, Porto Real, Paraná and Prada (Distribution and Packaging) units are considered.

<sup>3</sup>In 2021, Grupo CSN started to report data regarding operations abroad (Lusosider and SWT). In 2021, there are 42 apprentices in SWT for whom it was not possible to identify gender, so they are only counted in the "Total" column.

<sup>4</sup>The Company has a working day policy for operations in Brazil, which establishes respect for the 8-hour working day, as established in the CLT. Employees cannot work more than 2 overtime hours per day to ensure compliance with labor legislation.

## 102-8 and 102-41 | Employees in the Steel industry segment by employment contract and region<sup>1</sup>

	Brazil						Abroad		
	2020			2021			2021 <sup>2</sup>		
	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)
Northeast	2	63	3	1	62	4	0	0	0
Southeast	190	13,372	699	8	12,965	887	0	0	0
South	29	629	21	4	667	21	0	0	0
Abroad	0	0	0	0	0	0	261	711	42
<b>Total</b>	<b>221</b>	<b>14,064</b>	<b>723</b>	<b>13</b>	<b>13,694</b>	<b>912</b>	<b>261</b>	<b>711</b>	<b>42</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

<sup>2</sup>In 2021, the CSN Group started to report data regarding operations abroad (Lusosider and SWT).



### 102-8 and 102-41 | Employees in the Mining segment by gender<sup>1</sup>

	CSN Mineração						Other mining					
	2020			2021			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>By employment contract<sup>3</sup></b>												
Fixed period	250	130	<b>380</b>	1	3	<b>4</b>	15	5	<b>20</b>	2	0	<b>2</b>
Indefinite period	5,231	740	<b>5,971</b>	6,064	1,063	<b>7,127</b>	405	43	<b>448</b>	403	59	<b>462</b>
Fixed period (Apprentice and Capacitar Programs)	107	61	<b>168</b>	78	268	<b>346</b>	1	8	<b>9</b>	0	0	<b>0</b>
<b>By region</b>												
North	0	0	<b>0</b>	0	0	<b>0</b>	252	36	<b>288</b>	242	37	<b>279</b>
Southeast	5,588	931	<b>6,519</b>	6,143	1,334	<b>7,477</b>	169	20	<b>189</b>	163	22	<b>185</b>
<b>Total</b>	<b>5,588</b>	<b>931</b>	<b>6,519</b>	<b>6,143</b>	<b>1,334</b>	<b>7,477</b>	<b>421</b>	<b>56</b>	<b>477</b>	<b>405</b>	<b>59</b>	<b>464</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

<sup>2</sup>The Company has a working day policy for operations in Brazil, which establishes respect for the 8-hour working day, as established in the CLT. Employees cannot work more than 2 overtime hours per day to ensure compliance with labor legislation.

### 102-8 and 102-41 | Employees in the Mining segment by employment contract and region<sup>1</sup>

	CSN Mineração						Other mining					
	2020			2021			2020 <sup>2</sup>			2021		
	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)
North	0	0	0	0	0	0	19	260	9	1	278	0
Southeast	380	5,971	168	4	7,127	346	1	188	0	1	184	0
<b>Total</b>	<b>380</b>	<b>5,971</b>	<b>168</b>	<b>4</b>	<b>7,127</b>	<b>346</b>	<b>20</b>	<b>448</b>	<b>9</b>	<b>2</b>	<b>462</b>	<b>0</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

### 102-8 and 102-41 | Employees in the Logistics segment by gender<sup>1</sup>

	2020			2021		
	Men	Women	Total	Men	Women	Total
<b>By employment contract<sup>2</sup></b>						
Fixed period	19	3	22	0	1	1
Indefinite period	1,338	167	1,505	1,445	185	1,630
Fixed period (Apprentice and Capacitar Programs)	25	21	46	17	34	51
<b>By region</b>						
Northeast	895	112	1,007	956	128	1,084
Southeast	487	79	566	506	92	598
<b>Total</b>	<b>1,382</b>	<b>191</b>	<b>1,573</b>	<b>1,462</b>	<b>220</b>	<b>1,682</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

<sup>2</sup>The Company has a working day policy for operations in Brazil, which establishes respect for the 8-hour working day, as established in the CLT. Employees cannot work more than 2 overtime hours per day to ensure compliance with labor legislation.

### 102-8 and 102-41 | Employees in the Logistics segment by employment contract and region<sup>1</sup>

	2020			2021		
	Fixed	Indefinite	Fixed (Apprentice and Capacitar)	Fixed	Indefinite	Fixed (Apprentice and Capacitar)
Northeast	5	969	33	1	1,064	19
Southeast	17	536	13	0	566	32
<b>Total</b>	<b>22</b>	<b>1,505</b>	<b>46</b>	<b>1</b>	<b>1,630</b>	<b>51</b>

<sup>1</sup>It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. 100% of employees in Brazil and abroad are covered by collective bargaining agreements.

## 102-9 | Supply chain

### 102-9 | Supplier indicators by business segment

	2019		2020		2021	
	Number of suppliers	Expenditures (R\$ million)	Number of suppliers	Expenditures (R\$ million)	Number of suppliers	Expenditures (R\$ million)
CSN Siderurgia <sup>1</sup>	2,541	11,202.4	2,369	9,380.7	2,292	17,001.2
CSN Cimentos	880	544.5	849	573.6	870	910.2
CSN Mineração	1,418	5,610.4	1,378	6,361.4	1,298	9,727.0
Other mining	na	na	na	na	335	101.0
Logistics	859	323.2	788	448.1	1,027	1,107.2
<b>CSN Group</b>	<b>5,698</b>	<b>17,680.5</b>	<b>5,384</b>	<b>16,763.8</b>	<b>5,822</b>	<b>28,846.4</b>

<sup>1</sup>It only considers suppliers from Brazil. For information on the Steel segment (abroad), see page 184.

### 102-9 | Distribution of expenditures with suppliers of CSN Group (%)<sup>1</sup>

	2020	2021
<b>By supply category</b>		
Materials	70.2%	79.4%
Services	29.8%	20.6%
<b>By geographic location</b>		
Rio de Janeiro	22.8%	18.9%
São Paulo	10.8%	10.5%
Minas Gerais	31.9%	31.9%
Other Brazilian states	9.6%	8.8%
International	24.8%	29.9%

<sup>1</sup>2019 data not available

### 102-9 | Distribution of expenditures with suppliers of the Steel industry segment (Brazil) (%)

	2019	2020	2021
<b>By supply category</b>			
Materials	82.1%	81.5%	87.5%
Services	17.9%	18.5%	12.5%
<b>By geographic location</b>			
Rio de Janeiro	37.5%	33.8%	26.6%
São Paulo	19.0%	13.6%	13.4%
Minas Gerais	11.9%	11.4%	12.5%
Other Brazilian states	7.3%	11.6%	7.7%
International	24.3%	29.6%	39.8%

### 102-9 | Distribution of expenditures with suppliers of the Mining segment (%)

	CSN Mineração			Other Mining		
	2019	2020	2021	2019	2020	2021
<b>By supply category</b>						
Materials	50.2%	60.0%	71.0%	na	na	30.1%
Services	49.8%	40.0%	29.0%	na	na	69.9%
<b>By geographic location</b>						
Minas Gerais	53.6%	63.8%	69.3%	na	na	88.7%
Rio de Janeiro	9.4%	9.3%	7.9%	na	na	2.6%
São Paulo	5.7%	5.1%	4.4%	na	na	6.6%
Other Brazilian states	1.3%	1.5%	2.9%	na	na	2.2%
International	30.0%	20.3%	15.5%	na	na	0.0%

### 102-9 | Distribution of expenditures with suppliers of the Cements segment

	2019	2020	2021
<b>By supply category</b>			
Materials	68.3%	71.0%	63.3%
Services	31.7%	29.0%	36.7%
<b>By geographic location</b>			
Minas Gerais	41.7%	39.4%	28.7%
Rio de Janeiro	21.3%	20.7%	19.4%
São Paulo	14.9%	14.4%	15.9%
Other Brazilian states	11.9%	11.6%	11.6%
International	10.2%	13.8%	24.4%

### 102-9 | Distribution of expenditures with suppliers of the Logistics segment (%)

	2019	2020	2021
<b>By supply category</b>			
Materials	61.1%	84.4%	56.0%
Services	38.9%	15.6%	44.0%
<b>By geographic location</b>			
Espírito Santo	na	na	47.4%
Ceará	26.3%	44.6%	14.0%
Minas Gerais	19.1%	19.0%	7.4%
Other Brazilian states	39.2%	19.7%	14.3%
International	15.4%	16.7%	16.9%

## 102-13 | Membership of associations

### Membership of associations per segment

Business Segment	Associations or class entities to which the Company is associated
CSN Siderurgia	National Institute of Steel Distributors (INDA); Rio Grande do Sul Steel Association (AARS); Technical Chamber of the Paraíba do Sul River Basin Integration Committee (CEIVAP); Technical Chamber of the Middle Paraíba do Sul River Basin Committee (CBH/MPS); Alto Tiete Environmental Professionals Group (GPMAI); Paraná Council of Corporate Citizenship (FIEP/CPCE); Association of Companies of the Industrial City of Araucária (AECIAR); Araucária Economic Development Council - Avança Araucária; Group of Professionals in the Industrial Environment (GPMAI); Mutual Assistance Plan (PAM) - group of professionals for emergency situations; Consultative Council of the APA of the Cicuta Forest Surroundings ARIE (BM); Advisory Board of the Cicuta Forest ARIE- ICMBio; Consultative Council of Refúgio Silvestre do Médio (Paraíba REVISMEP); Municipal Council for the Defense of the Environment (COMDEMA); Deliberative Council of SAAE Volta Redonda; National Confederation of Industry (CNI); Industrial Center of Rio de Janeiro (FIRJAN - CIRJ); Brazilian Association of Technical Standards (ABNT); Brazilian Metallurgy Association (ABM); National Coil Coating Association (NCCA); Zinc Aluminum Coaters Association (ZAC); Prolata Brazilian Steel Packaging Association (ABEAÇO); FIRJAN Environment Business Committee; NICOLE Latin America – Latin America Network for Soil and Water Management; RemTech Europe – International event on Remediation, Coasts, Floods, Climate, Seismic, Regeneration, Industry; EKOS Brazil.
CSN Cimentos	FIEMG Substitute at the State Environmental Policy Council (COPAM) – Alto São Francisco Regional; Head of the Upper São Francisco River Basin Committee; Holder of the Municipal Environment Council (CODEMA) – City of Arcos; Member of the Consultative Council of the Ecological Station of Corumbá – Ecological Station belonging to the IEF – State Forestry Institute; FIEMG Environment and Sustainable Development Council.
CSN Mineração	Federation of Industries of the State of Minas Gerais (FIEMG) (participation in the board of directors and in working groups); Brazilian Association of Port Terminals (ABTP) (participation in working groups); Brazilian Mining Institute (IBRAM) (involvement until December 2021, with participation in working groups); Union of Workers in the Extractive Industries of Itaúna and Itatiaiuçu (Sindiextra) (participation in the board of directors and in working groups); Technical Chamber for the Integration of Procedures, Grant Actions and Regulatory Actions (CTIOAR) (operation via IBRAM until December 2021); Paraopeba River Watershed Committee (operation via IBRAM and Sindiextra until December 2021).
Other mining	Full members of the Mining Sector of the Consultative Council of the Jamari National Forest (ERSA participates in the directive council and in working groups).
Logistics	Sepetiba Bay Area Committee (CABS) (participation in working groups); Brazilian Association of Port Terminals (ABTP) (participation in working groups); Itaguaí Port Operators Union (SINDOPITA) (participation in working groups); Brazilian Association of Container Terminals (ABRATEC) (participation in the Sustainability Committee); National Association of Railway Transport (ANTF) (participation in working groups); Ceará State Agricultural Cooperation Association (ACACE) (participation in working groups); Association of Companies of the Industrial and Port Complex of Pecém (AECIPP) (participation in working groups); Costa Verde Mutual Assistance Plan (PAM) (participation in working groups).
Energy	Brazilian Association of Large Electric Energy Consumers (ABRACE); Brazilian Association of Energy Self-Production Investors (ABIAPPE).
CSN Group	National Institute of Metrology, Quality and Technology (INMETRO); Brazilian Association of Technical Standards (ABNT).

### 102-38 | Annual total compensation ratio

In 2021, the remuneration of the highest paid individual in the Company was equivalent to 32.4 times the average remuneration of other employees. In previous years (2020 and 2019), this proportion was 30 times.

### 102-48 | Restatements of information

Indicators related to the staff were reviewed, adjusting calculation and consolidation assumptions. In order to allow for comparability, data for 2020 have been restated (2019 data not available in the new defined assumptions). The safety indicators (GRI 403-9) started to consider the factor of 200,000 man-hours worked in the calculation of rates, so the history was restated. Regarding environmental indicators, improvements in control and accounting methodologies led to the restatement of the following GRI contents: 303-3, 303-4 and 303-5. Other possible restatements are indicated in footnotes.

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

#### Proportion of the lowest wage paid versus the minimum wage by gender (times)<sup>1</sup>

	2020		2021	
	Men	Women	Men	Women
Steel industry	42.6%	44.9%	44.6%	47.0%
CSN Cimentos	0.0%	0.0%	107.5%	47.0%
CSN Mineração	44.6%	47.0%	47.0%	47.0%
Other mining	89.2%	93.9%	103.7%	105.0%
Logistics	100.0%	100.0%	100.0%	100.0%
Cia Metalurgia Prada	47.0%	47.0%	47.0%	47.0%
Lusosider	na	na	101.0%	101.0%
SWT	na	na	162.4%	162.4%
<b>CSN Group</b>	<b>44.9%</b>	<b>44.9%</b>	<b>44.6%</b>	<b>47.0%</b>

<sup>1</sup>The only wages paid below the minimum wage refer to apprentices, who follow the regulation and differentiated workload, remuneration governed by municipal or national floor agreements, presenting differentiated CLT regulations based on the workload performed. The Brazilian minimum wage considered in 2020 was R\$ 1,045 and in 2021 it was R\$ 1,100.

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

#### Percentage of expenses with local suppliers

	2019			2020			2021		
	Materials	Services	Consolidated	Materials	Services	Consolidated	Materials	Services	Consolidated
Steel industry	34.4%	64.0%	<b>39.7%</b>	29.0%	70.1%	<b>36.6%</b>	24.0%	57.2%	<b>28.2%</b>
CSN Cimentos	28.0%	55.8%	<b>36.8%</b>	20.7%	58.4%	<b>31.7%</b>	23.7%	28.5%	<b>25.5%</b>
CSN Mineração	42.2%	31.8%	<b>37.1%</b>	39.6%	37.2%	<b>38.7%</b>	38.3%	40.9%	<b>39.1%</b>
Other mining							82.1%	91.5%	<b>88.7%</b>
Logistics	36.3%	24.5%	<b>29.1%</b>	46.6%	45.2%	<b>45.4%</b>	9.7%	31.1%	<b>19.1%</b>
<b>CSN Group</b>	<b>35.4%</b>	<b>44.9%</b>	<b>38.2%</b>	<b>31.9%</b>	<b>49.7%</b>	<b>37.2%</b>	<b>27.8%</b>	<b>46.1%</b>	<b>31.6%</b>

**205-2 | Communication and training about anti-corruption policies and procedures**

**Employees trained in ethics and compliance in 2021**

	Number of employees trained	Percentage of headcount on 12/31
<b>By region</b>		
North	85	30.5%
Northeast	298	25.9%
Southeast	17,480	75.9%
South	183	26.6%
<b>By functional level</b>		
Executive	20	105.3%
Leadership	1,147	101.0%
Specialist	1,101	101.7%
Engineer		
Higher Education	1,226	106.7%
Technician	3,083	89.9%
Administrative	988	160.1%
Operational	9,311	55.1%
Capacitar Program		
Apprentice Program	1,170	141.6%
<b>Total</b>	<b>18,046</b>	<b>71.8%</b>

<sup>1</sup>It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. It does not cover SWT and Lusosider, as these companies do not have employee training practices in anti-corruption guidelines. Percentage calculated as the total number of employees trained during the year divided by the headcount on 12/31, therefore, in some cases, the percentage trained exceeds 100% of the workforce at the end of the period.

**206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices**

In October 1999, CSN Group received a fine from the Administrative Council for Economic Defense (CADE) alleging that certain practices adopted by the Company and other Brazilian steel companies before 1997 allegedly constituted a cartel. CSN challenged the allegation and the imposition of the fine in court. In June 2003, a partially favorable decision was obtained. CADE appealed the decision and, in June 2010, the decision was reversed. An appeal was presented to the Brazilian Superior Court of Justice, which upheld the decision. CSN filed an appeal with the Federal Supreme Court, which is awaiting judgment.

## 301-1 and 301-2 | Materials used by weight or volume and Recycled input materials used

### 301-1 and 301-2 | Consumption of CSN Group materials (tons)

	2019	2021	2021
<b>Recycled materials</b>			
<b>Total recycled materials</b>	<b>378,994</b>	<b>913,054</b>	<b>699,933</b>
<b>New materials</b>			
Non-renewable materials	11,458,227	12,725,377	15,945,494
Renewable materials	0	1	1
<b>Total new materials</b>	<b>11,458,228</b>	<b>12,725,378</b>	<b>15,945,495</b>
<b>Overall total</b>	<b>12,882,275</b>	<b>14,760,857</b>	<b>16,645,428</b>

### 301-1 and 301-2 | Consumption of Steel industry segment materials (tons)

	2019	2021	2021
<b>Recycled materials</b>			
<b>Total recycled materials</b>	<b>378,994</b>	<b>913,054</b>	<b>699,933</b>
<b>New materials</b>			
Non-renewable materials	8,904,639	9,908,031	12,051,791
Renewable materials	0	0	0
<b>Total new materials</b>	<b>8,904,639</b>	<b>9,908,031</b>	<b>12,051,791</b>
<b>Overall total</b>	<b>9,283,633</b>	<b>10,821,085</b>	<b>12,751,724</b>

### 301-1 and 301-2 | Consumption of CSN Mineração materials (tons)

	2019	2021	2021
<b>Recycled materials</b>			
<b>Total recycled materials</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>New materials</b>			
Non-renewable materials	6,304	6,427	10,562
Renewable materials	0	0	0
<b>Total new materials</b>	<b>6,304</b>	<b>6,427</b>	<b>10,562</b>
<b>Overall total</b>	<b>6,304</b>	<b>6,427</b>	<b>10,562</b>

### 301-1 and 301-2 | Consumption of Other mining segment materials (tons)

	2019	2021	2021
<b>Recycled materials</b>			
<b>Total recycled materials</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>New materials</b>			
Non-renewable materials	381	363	297
Renewable materials	0	0	0
<b>Total new materials</b>	<b>381</b>	<b>363</b>	<b>297</b>
<b>Overall total</b>	<b>381</b>	<b>363</b>	<b>297</b>



**301-1 and 301-2 | Consumption of Cements segment materials (tons)**

	2019	2021	2021
<b>Recycled materials</b>			
<b>Total recycled materials</b>	<b>1,045,053</b>	<b>1,122,425</b>	<b>1,290,240</b>
<b>New materials</b>			
Non-renewable materials	2,546,593	2,810,360	2,592,389
Renewable materials	0	0	0
<b>Total new materials</b>	<b>2,546,593</b>	<b>2,810,360</b>	<b>2,592,389</b>
<b>Overall total</b>	<b>3,591,647</b>	<b>3,932,785</b>	<b>3,882,629</b>

**301-1 and 301-2 | Consumption of Logistics segment materials (tons)**

	2019	2021	2021
<b>Recycled materials</b>			
<b>Total recycled materials</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>New materials</b>			
Non-renewable materials	310	196	215
Renewable materials	0	1	1
<b>Total new materials</b>	<b>311</b>	<b>196</b>	<b>216</b>
<b>Overall total</b>	<b>311</b>	<b>196</b>	<b>216</b>

## 302-1 | Energy consumption within the organization

### 302-1 | CSN Group's energy consumption (GJ)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Non-renewable fuels</b>			
Metallurgical coal/CSN	35,956,644	26,374,162	24,155,855
PCI metallurgical coal/CSN	7,111,979	12,483,002	13,901,578
Sub-bituminous coal	320,015	78,303	425,231
Coal coke/CSN purchased	20,708,304	19,561,559	25,701,254
Coal coke/Mill/CSN	245,055	300,549	1,066,834
Coal coke/Small Coke/CSN	4,099,378	5,180,385	6,638,058
Petroleum coke	6,453,338	7,226,798	6,445,613
Diesel/Brazil	2,964,609	2,946,538	3,410,386
Liquefied petroleum gas (LPG)	24,853	21,923	26,361
Natural gas	16,209,734	14,973,617	15,585,082
Gasoline/Brazil	28,800	16,912	16,388
Fuel oil	0	118,557	160,732
<b>Subtotal non-renewable fuels</b>	<b>94,122,708</b>	<b>89,282,306</b>	<b>97,533,372</b>
<b>Renewable fuels</b>			
<b>Hydrous ethanol</b>	<b>13</b>	<b>19</b>	<b>27</b>
<b>Electricity</b>			
Electricity/Brazil	4,114,626	4,004,505	4,642,004
Electricity/Renewable electricity	5,744,306	7,213,387	8,405,915
Electricity/International	0	0	1,752,033
<b>Subtotal electricity</b>	<b>9,858,932</b>	<b>11,217,892</b>	<b>14,799,951</b>
<b>Overall total</b>	<b>103,981,653</b>	<b>100,500,217</b>	<b>112,333,349</b>

<sup>1</sup>There is no acquisition of other types of energy, nor the sale of energy. Conversion factors: National Energy Balance and GHG Protocol and specific data from CSN.

<sup>2</sup>Considers operations abroad (Lusosider and SWT) in 2021.

### 302-1 | Steel industry segment's energy consumption (GJ)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Non-renewable fuels</b>			
Metallurgical coal/CSN	35,950,285	26,369,556	24,152,383
PCI metallurgical coal/CSN	7,111,979	12,483,002	13,901,578
Coal coke/CSN purchased	20,708,304	19,561,559	25,701,254
Coal coke/Mill/CSN	245,055	300,549	1,066,834
Coal coke/Small Coke/CSN	4,099,378	5,180,385	6,638,058
Diesel/Brazil	128,509	137,604	141,575
Liquefied petroleum gas (LPG)	12,153	11,312	13,826
Natural gas	16,097,612	14,780,302	15,308,310
Gasoline/Brazil	169	101	88
Fuel oil	0	485	0
<b>Subtotal non-renewable fuels</b>	<b>84,353,445</b>	<b>78,824,855</b>	<b>86,923,907</b>
<b>Renewable fuels</b>			
<b>Hydrous ethanol</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Electricity</b>			
Electricity/Brazil	2,549,536	3,597,210	4,183,523
Electricity/Renewable electricity	5,170,410	5,395,107	6,635,022
Electricity/International	0	0	1,752,033
<b>Subtotal electricity</b>	<b>7,719,946</b>	<b>8,992,318</b>	<b>12,570,578</b>
<b>Overall total</b>	<b>92,073,390</b>	<b>87,817,173</b>	<b>99,494,485</b>

<sup>1</sup>There is no acquisition of other types of energy, nor the sale of energy. Conversion factors: National Energy Balance and GHG Protocol and specific data from CSN.

<sup>2</sup>Considers operations abroad (Lusosider and SWT) in 2021.

### 302-1 | CSN Mineração's energy consumption (GJ)<sup>1</sup>

	2019	2020	2021
<b>Non-renewable fuels</b>			
Diesel/Brazil	2,330,981	2,162,203	2,604,852
Liquefied petroleum gas (LPG)	2,699	2,563	2,660
Gasoline/Brazil	15,089	7,699	6,466
<b>Subtotal non-renewable fuels</b>	<b>2,348,770</b>	<b>2,172,466</b>	<b>2,613,978</b>
<b>Renewable fuels</b>			
<b>Hydrous ethanol</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Electricity</b>			
Electricity/Brazil	1,276,828	0	0
Electricity/Renewable electricity	0	1,211,857	1,242,045
<b>Subtotal electricity</b>	<b>1,276,828</b>	<b>1,211,857</b>	<b>1,242,045</b>
<b>Overall total</b>	<b>3,625,597</b>	<b>3,384,322</b>	<b>3,856,024</b>

<sup>1</sup>There is no acquisition of other types of energy, nor the sale of energy. Conversion factors: National Energy Balance and GHG Protocol and specific data from CSN.

### 302-1 | Other mining segment's energy consumption (GJ)<sup>1</sup>

	2019	2020	2021
<b>Non-renewable fuels</b>			
Metallurgical coal/CSN	6,359	4,605	3,471
Diesel/Brazil	117,440	152,046	127,979
Liquefied petroleum gas (LPG)	1,958	1,686	1,795
Gasoline/Brazil	1,059	744	833
<b>Subtotal non-renewable fuels</b>	<b>126,816</b>	<b>159,082</b>	<b>134,080</b>
<b>Renewable fuels</b>			
<b>Hydrous ethanol</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Electricity</b>			
Electricity/Brazil	65,561	60,323	27,982
Electricity/Renewable electricity	0	0	510
<b>Subtotal electricity</b>	<b>65,561</b>	<b>60,323</b>	<b>28,492</b>
<b>Overall total</b>	<b>192,377</b>	<b>219,404</b>	<b>162,571</b>

<sup>1</sup>There is no acquisition of other types of energy, nor the sale of energy. Conversion factors: National Energy Balance and GHG Protocol and specific data from CSN.

### 302-1 | Cements segment's energy consumption (GJ)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Non-renewable fuels</b>			
Sub-bituminous coal	320,015	78,303	425,231
Petroleum coke	6,453,338	7,226,798	6,445,613
Diesel/Brazil	24,917	111,370	128,254
Liquefied petroleum gas (LPG)	6,954	6,216	7,785
Natural gas	112,121	193,315	276,772
Gasoline/Brazil	862	949	953
Fuel oil	0	118,072	160,732
<b>Subtotal non-renewable fuels</b>	<b>6,918,208</b>	<b>7,735,023</b>	<b>7,445,340</b>
<b>Renewable fuels</b>			
<b>Hydrous ethanol</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Electricity</b>			
Electricity/Brazil	216,175	337,904	418,940
Electricity/Renewable electricity	573,896	606,423	522,099
<b>Subtotal electricity</b>	<b>790,071</b>	<b>944,327</b>	<b>941,039</b>
<b>Overall total</b>	<b>7,708,279</b>	<b>8,679,350</b>	<b>8,386,378</b>

<sup>1</sup>There is no acquisition of other types of energy, nor the sale of energy. Conversion factors: National Energy Balance and GHG Protocol and specific data from CSN.

### 302-1 | Logistics segment's energy consumption (GJ)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Non-renewable fuels</b>			
Diesel/Brazil	362,761	383,314	407,725
Liquefied petroleum gas (LPG)	1,089	146	293
Gasoline/Brazil	11,620	7,420	8,048
<b>Subtotal non-renewable fuels</b>	<b>375,470</b>	<b>390,880</b>	<b>416,067</b>
<b>Renewable fuels</b>			
<b>Hydrous ethanol</b>	<b>13</b>	<b>19</b>	<b>27</b>
<b>Electricity</b>			
Electricity/Brazil	3,986	6,268	11,559
Electricity/Renewable electricity	0	0	6,238
<b>Subtotal electricity</b>	<b>3,986</b>	<b>6,268</b>	<b>17,798</b>
<b>Overall total</b>	<b>379,469</b>	<b>397,167</b>	<b>433,891</b>

<sup>1</sup>There is no acquisition of other types of energy, nor the sale of energy. Conversion factors: National Energy Balance and GHG Protocol and specific data from CSN.

### 302-2 | Energy consumption outside of the organization

#### Energy consumption outside the Company in 2021 (GJ)<sup>1</sup>

Steel (Brazil)	18,770,190.62
CSN Mineração	4,670,944.92
Other mining	1,166.53
Cements	1,753,193.30
Logistics	31,069.81
<b>CSN Group</b>	<b>25,226,565.18</b>

<sup>1</sup>Refers to diesel consumption. Monitoring for reporting started in 2021, does not cover operations abroad (Lusosider and SWT).

**305-1, 305-2 and 305-3 | Direct (Scope 1) GHG emissions, Energy indirect (Scope 2) GHG emissions and Other indirect (Scope 3) GHG emissions**

**305-1, 305-2 and 305-3 | CSN Group's GHG emissions (tCO<sub>2</sub>e)**

	2019	2020	2021 <sup>1</sup>
Scope 1	10,095,345	10,724,789	11,965,917
Scope 2	47,075	73,964	182,810
Scope 3	1,037,484	501,796	1,621,079

<sup>1</sup>Does not consider CSN Mineração's emissions in the consolidation of CSN Group's emissions. Gases included in the calculation of scopes 1, 2 and 3: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs and SF<sub>6</sub>. In 2021, it considers operations abroad (Lusosider and SWT).

**305-1, 305-2 and 305-3 | Steel industry (Brazil) segment's GHG emissions (tCO<sub>2</sub>e)**

	2019	2020	2021
Scope 1	8,049,419	8,611,081	9,933,018
Scope 2	14,419	66,965	166,712
Scope 3	614,712	381,875	1,493,275

**305-1, 305-2 and 305-3 | Steel industry (abroad) segment's GHG emissions (tCO<sub>2</sub>e)**

	Lusosider	SWT
Escopo 1	17,684	100,847
Escopo 2	19,824	0
Escopo 3	0	71,403

**305-1, 305-2 and 305-3 | Cements segment's GHG emissions (tCO<sub>2</sub>e)**

	2019	2020	2021
Scope 1	1,845,221	2,075,111	1,995,227
Scope 2	4,504	5,867	14,709
Scope 3	61,513	115,383	121,863

**305-1, 305-2 and 305-3 | Logistics segment's GHG emissions (tCO<sub>2</sub>e)**

	2019	2020	2021
Scope 1	26,414	27,309	28,324
Scope 2	83	107	406
Scope 3	2,736	4,053	5,684

### 305-1, 305-2 and 305-3 | Mining segment's GHG emissions (tCO<sub>2</sub>e)

	CSN Mineração			Other mining		
	2019	2020	2021	2019	2020	2021
Scope 1	165,211	156,115	183,437	9,079	11,267	9,348
Scope 2	26,601	0	0	1,366	1,024	982
Scope 3	358,066	40,269,240	42,948,338	311	457	256

### 305-1 and 305-3 | Biogenic CO<sub>2</sub> emissions (tCO<sub>2</sub>e)

	Scope 1			Scope 3		
	2019	2020	2021	2019	2020	2021
Steel Industry	874.38	1,140.76	1,108.66	50,725.06	15,833.68	155,351.82
CSN Mineração	16,005.98	18,024.37	20,470.87	39,011.80	37,129.17	38,639.45
Cements	180.91	923.23	1,005.45	6,980.75	13,726.66	14,526.68
Logistics	2,640.98	3,262.94	3,145.03	112.20	158.70	233.66
Other mining	811.47	1,269.89	1,012.51	19.49	10.06	6.68
Offices	0.00	0.33	0.00	5.10	2.14	0.00
<b>Overall total</b>	<b>20,513.72</b>	<b>24,621.52</b>	<b>26,742.52</b>	<b>96,854.40</b>	<b>66,860.40</b>	<b>208,758.31</b>



## Indicators related to the World Steel Association (WSA)

	2018 (goal base year)	2019	2020	2021
<b>Emission intensity in tCO<sub>2</sub>e/t of steel (WSA methodology) - UPV</b>	<b>2.41</b>	<b>2.67</b>	<b>2.29</b>	<b>2.30</b>
<b>Emission intensity in tCO<sub>2</sub>e/t of steel (WSA methodology) - SWT</b>	<b>0.63</b>	<b>0.55</b>	<b>0.51</b>	<b>0.21</b>
<b>Emission intensity in tCO<sub>2</sub>e/t of steel (WSA methodology) - CSN Steel</b>	<b>2.10</b>	<b>2.20</b>	<b>1.97</b>	<b>1.98</b>
UPV steel production (t)	4,152,184	3,005,941	3,816,090	4,388,668
SWT steel production (t)	871,394	845,070	812,282	811,277
Absolute emissions (Scopes 1, 2 and 3) - UPV (tCO <sub>2</sub> e)	10,024,216	8,016,874	8,721,503	10,109,528
Absolute emissions (Scopes 1, 2 and 3) - SWT (tCO <sub>2</sub> e)	547,147	467,788	414,697	172,248
Absolute emissions (Scopes 1, 2 and 3) - Steel Production Process (tCO <sub>2</sub> e)	10,571,363	8,484,662	9,136,200	10,281,776

## Intensity of kgCO<sub>2</sub>e/t of ore produced

	2019 (goal base year)	2020	2021
Iron ore production (t)	32,089,836	21,891,493	27,239,253
Scopes 1 and 2 emissions (kg CO <sub>2</sub> e)	185,272,386	155,499,452	179,245,076
<b>Intensity (kgCO<sub>2</sub>e/t of ore produced)</b>	<b>5.77</b>	<b>7.10</b>	<b>6.58</b>

## Indicators related to the Cement Sustainability Initiative (CSI)

	2018	2019	2020 (goal base year)	2021
CSI Indicator 71 - Absolute direct emissions (tCO <sub>2</sub> e) - CSN (total)	1,594,812	1,795,928	2,038,329	2,056,817
<b>CSI Indicator 74 - Specific emission by cementitious (kg CO<sub>2</sub>/t per metric ton of cement) - CSN</b>	<b>464</b>	<b>504</b>	<b>518</b>	<b>480</b>
<b>CSI Indicator 75 - Specific emission by cement (kg CO<sub>2</sub>/t per metric ton of cement) - CSN</b>	<b>460</b>	<b>506</b>	<b>519</b>	<b>483</b>
<b>CSI 92 Indicator - Clinker Factor (%) - CSN (total)</b>	<b>54.7%</b>	<b>57.6%</b>	<b>58.2%</b>	<b>55.6%</b>
CSI Indicator 93 - Specific energy consumption per clinker produced (MJ/t of clinker) - CSN (total)	3,502	3,585	3,269	3,287
CSI Indicator 21a - Total cementitious products (t) - CSN (total)	3,439,566	3,565,638	3,938,657	4,283,640
CSI Indicator 21b - Total cement products (t) - CSN (total)	3,469,360	3,546,466	3,924,179	4,261,905

### 303-2 | Water sources significantly affected by withdrawal of water

#### Minimum standards established for the quality of effluent disposal

	Standards and regulations
Steel industry	NT-202 R.10 – Criteria and standards for the release of liquid effluents
	DZ-205.R6 – Guideline on organic load control in liquid effluents of industrial origin
	DZ-215.R4 – Guideline on biodegradable organic load control in liquid effluents of sanitary origin
	CONAMA Resolution 430/11 – Effluent release standards, complementing and amending Resolution No. 357, of 17/2005
Cement	COPAM/CERH-MG Normative Deliberation No. 01 of May 5, 2008: Classification of bodies of water and environmental guidelines for their classification and conditions and standards for effluent discharge in the State of Minas Gerais.
Mining	COPAM/CERH-MG Normative Deliberation No. 01 of May 5, 2008: Classification of bodies of water and environmental guidelines for their classification and conditions and standards for effluent discharge in the State of Minas Gerais.

### 303-3 | Water withdrawal

#### 303-3 | CSN Group's water abstraction by source (megaliters)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Total abstraction</b>			
Surface water	95,505.9	83,612.7	81,581.9
Underground water	7,340.5	8,633.1	11,391.5
Produced water	12.9	12.9	24.8
Rainwater	5,115.8	6,662.3	4,981.4
Third party water	460.4	475.4	496.2
<b>Total water abstracted</b>	<b>108,435.5</b>	<b>99,396.4</b>	<b>98,475.9</b>
<b>Abstraction in areas with water stress</b>			
Surface water	953.4	207.7	367.9
Underground water	6,437.00	7,988.4	11,003.3
Rainwater	5,115.8	6,662.3	4,981.4
Third party water	140.2	158.6	179.7
<b>Total water abstracted in areas with water stress</b>	<b>12,646.3</b>	<b>15,017.0</b>	<b>16,532.3</b>

<sup>1</sup>The entire volume captured (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

<sup>2</sup>Considers operations abroad (Lusosider and SWT) in 2021.

#### 303-3 | Cements segment's water abstraction by source (megaliters)<sup>1</sup>

	2019	2020	2021
Underground water	244.7	246.0	330.1
<b>Total water abstracted</b>	<b>244.7</b>	<b>246.0</b>	<b>330.1</b>

<sup>1</sup>The entire volume captured (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l. There is no abstraction in areas with water stress



### 303-3 | Steel industry (Brazil) segment's water abstraction by source (megaliters)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Total abstraction</b>			
Surface water	94,552.5	83,405.0	81,214.0
Underground water	49.7	72.7	56.63
Produced water	0.3	0.3	0.0
Third party water	320.2	316.8	324.5
<b>Total water abstracted</b>	<b>94,922.7</b>	<b>83,794.7</b>	<b>81,595.2</b>
<b>Abstraction in areas with water stress</b>			
Third party water	0.0	0.0	8.0
<b>Total water abstracted in areas with water stress</b>	<b>0.0</b>	<b>0.0</b>	<b>8.0</b>

<sup>1</sup>The entire volume captured (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

### 303-3 | Mining segment's water abstraction by source (megaliters)<sup>1</sup>

	CSN Mineração			Outras minerações		
	2019	2020	2021	2019	2020	2021
<b>Total abstraction</b>						
Surface water	953.4	207.7	367.9	0.0	0.0	0.0
Underground water	6,437.00	7,988.4	10,505.6	718.2	433.7	471.5
Produced water	0.0	0.0	0.0	0.0	0.0	24.8
Rainwater	5,115.8	6,662.3	4,981.4	0.0	0.0	0.0
Third party water	101.6	123.5	107.4	0.0	0.0	0.0
<b>Total water abstracted</b>	<b>12,607.7</b>	<b>14,981.9</b>	<b>15,962.3</b>	<b>718.2</b>	<b>433.7</b>	<b>496.4</b>
<b>Abstraction in areas with water stress</b>						
Surface water	953.4	207.7	367.9	0.0	0.0	0.0
Underground water	6,437.00	7,988.4	10,505.6	609.2	325	470
Rainwater	5,115.8	6,662.3	4,981.4	0.0	0.0	0.0
Third party water	101.6	123.5	107.4	0.0	0.0	0.0
<b>Total water abstracted in areas with water stress</b>	<b>12,607.7</b>	<b>14,981.9</b>	<b>15,962.3</b>	<b>609.2</b>	<b>325</b>	<b>470</b>

<sup>1</sup>The entire volume captured (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

### 303-3 | Steel industry (abroad) segment's water abstraction by source (megaliters)<sup>1</sup>, in 2021

	Lusosider	SWT
<b>Total abstraction</b>		
Surface water	0.0	984.1
Underground water	200.5	122.2
<b>Total water abstracted</b>	<b>200.5</b>	<b>1.106.2</b>
<b>Abstraction in areas with water stress</b>		
Underground water	200.5	0.0
<b>Total water abstracted in areas with water stress</b>	<b>200.5</b>	<b>0.0</b>

<sup>1</sup>The entire volume captured (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

**303-3 | Logistics segment's water abstraction by source (megaliters)<sup>1</sup>**

	2019	2020	2021
<b>Total abstraction</b>			
Underground water	0.0	0.0	27.7
Third party water	38.6	35.1	64.3
<b>Total water abstracted</b>	<b>38.6</b>	<b>35.1</b>	<b>92.0</b>
<b>Abstraction in areas with water stress</b>			
Underground water	0.0	0.0	27.7
Third party water	38.6	35.1	64.3
<b>Total water abstracted in areas with water stress</b>	<b>38.6</b>	<b>35.1</b>	<b>92.0</b>

<sup>1</sup>The entire volume captured (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

## 303-4 | Water discharge

### 303-4 | CSN Group's water discharge by source (megaliters)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Total discharge</b>			
Surface water	90,551.7	84,289.3	74,939.5
Sea water	0.0	17.5	0.3
Third party water	249.5	216.0	243.2
<b>Total water discharged</b>	<b>90,801.21</b>	<b>84,522.82</b>	<b>75,183.1</b>
<b>Discharge in areas with water stress</b>			
Surface water	6,234.8	8,496.0	7,027.6
Sea water	0.0	0.0	0.3
Third party water	0.0	17.5	38.4
<b>Total water discharged in areas with water stress</b>	<b>6,234.8</b>	<b>8,513.6</b>	<b>7,066.4</b>

<sup>1</sup>The entire volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

<sup>2</sup>Considers operations abroad (Lusosider and SWT) in 2021.

### 303-4 | Steel industry (Brazil) segment's water discharge by source (megaliters)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
<b>Total discharge</b>			
Surface water	84,206.1	75,683.8	67,904.1
Third party water	249.5	216.0	204.8
<b>Total water discharged</b>	<b>84,455.6</b>	<b>75,899.8</b>	<b>68,109.0</b>
<b>Discharge in areas with water stress</b>			
Surface water	0.0	0.0	8.0
<b>Total water discharged in areas with water stress</b>	<b>0.0</b>	<b>0.0</b>	<b>8.0</b>

<sup>1</sup>The entire volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

### 303-4 | Steel industry (abroad) segment's water discharge by source (megaliters)<sup>1</sup>

	Lusosider	SWT
<b>Total discharge</b>		
Surface water	0.0	368.2
Underground water	66.0	79.9
<b>Total water discharged</b>	<b>66.0</b>	<b>448.1</b>
<b>Discharge in areas with water stress</b>		
Underground water	66.0	0.0
<b>Total water discharged in areas with water stress</b>	<b>66.0</b>	<b>0.0</b>

<sup>1</sup>The entire volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

### 303-4 | Cements segment's water discharge by source (megaliters)<sup>1</sup>

	2019	2020	2021
Surface water	1.9	0.8	1.8
<b>Total water discharged</b>	<b>1.9</b>	<b>0.8</b>	<b>1.8</b>

<sup>1</sup>The entire volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l. There is no discharge in areas with water stress

### 303-4 | Mining segment's water discharge by source (megaliters)<sup>1</sup>

	CSN Mineração			Other mining		
	2019	2020	2021	2019	2020	2021
<b>Total discharge</b>						
Surface water	6,234.8	8,496.0	7,008.0	24.3	24.3	17.5
Third party water	0.0	0.0	0.0	0.0	1.1	0.0
<b>Total water discharged</b>	<b>6,234.8</b>	<b>8,496.0</b>	<b>7,008.0</b>	<b>24.3</b>	<b>25.4</b>	<b>17.5</b>
<b>Discharge in areas with water stress</b>						
Surface water	6,234.8	8,496.0	7,008.0	11.7	11.7	11.65
<b>Total water discharged in areas with water stress</b>	<b>6,234.8</b>	<b>8,496.0</b>	<b>7,008.0</b>	<b>11.7</b>	<b>11.7</b>	<b>11.65</b>

<sup>1</sup>The entire volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

### 303-4 | Logistics segment's water discharge by source (megaliters)<sup>1</sup>

	2019	2020	2021 <sup>2</sup>
Sea water	0.0	0.0	0.3
Third party water	0.0	17.5	38.4
<b>Total water discharged</b>	<b>0.0</b>	<b>17.5</b>	<b>38.7</b>

<sup>1</sup>The entire volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l. There is no discharge in areas with water stress

## 303-5 | Water consumption

### Water consumption (megaliters)

	2019		2020		2021	
	Total	In areas with water stress	Total	In areas with water stress	Total	In areas with water stress
Steel industry (Brazil)	10,505.7	0.0	7,942.1	0.0	13,486.2	8.0
Steel industry (abroad)	na	na	na	na	792.6	134.5
CSN Mineração	6,271.4	6,271.4	6,485.9	6,485.9	8,954.3	8,954.3
Other mining	693.6	597.5	410.5	313.3	478.8	478.8
CSN Cimentos	242.8	0.0	245.1	0.0	328.21	0.0
Logistics	na	na	35.1	35.1	53.3	53.3
<b>CSN Group</b>	<b>17,478.2</b>	<b>0.0</b>	<b>14,924.5</b>	<b>0.0</b>	<b>23,300.8</b>	<b>9,473.9</b>

## 304-1 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

### 304-1 | Conservation Units adjacent to operational units<sup>1</sup>

	Operation	Conservation Unit	Type	State
CSN Siderurgia	Presidente Vargas Steelworks	ARIE Cicuta Forest	Sustainable Use	Rio de Janeiro
CSN Mineração	Port operation	Sepetiba Bay Seafront	Sustainable Use	Rio de Janeiro
	Port operation	APA Itaguaí Itingussí Espigão Taquara	Sustainable Use	Rio de Janeiro
	Port operation	Saco de Coroa Grande APA	Sustainable Use	Rio de Janeiro
Logistics	Ferrovias Transnordestina Logística S.A. (FTL)	Environmental Protection Area of Upaon-Açu/Miritiba/Alto das Preguiças	Sustainable Use	Maranhão
	Ferrovias Transnordestina Logística S.A. (FTL)	Bacanga State Park	Full Protection	Maranhão
	Ferrovias Transnordestina Logística S.A. (FTL)	Coco State Park	Full Protection	Ceará
	Ferrovias Transnordestina Logística S.A. (FTL)	Rio Ceará - Rio Maranguapinho Estuary APA	Sustainable Use	Ceará
	Ferrovias Transnordestina Logística S.A. (FTL)	Bica do Ipú APA	Sustainable Use	Ceará
	Ferrovias Transnordestina Logística S.A. (FTL)	Pecém Ecological Station	Full Protection	Ceará
	Ferrovias Transnordestina Logística S.A. (FTL)	West Coast Dunes APA	Sustainable Use	Ceará
	Ferrovias Transnordestina Logística S.A. (FTL)	Palmares National Forest	Sustainable Use	Piauí
	Ferrovias Transnordestina Logística S.A. (FTL)	Catimbau National Park	Full Protection	Pernambuco
	Transnordestina Logística S.A. (TLSA)	Chapada do Araripe APA	Sustainable Use	Ceará
	Transnordestina Logística S.A. (TLSA)	Serra do Aratanha APA	Sustainable Use	Ceará
	Transnordestina Logística S.A. (TLSA)	Lagamar do Pecém APA	Sustainable Use	Ceará
	Transnordestina Logística S.A. (TLSA)	Pecém APA	Sustainable Use	Ceará
	Transnordestina Logística S.A. (TLSA)	RPPN Fazenda Não Me Deixes	Sustainable Use	Ceará
	Port operation	Sepetiba Bay Seafront	Sustainable Use	Rio de Janeiro
Port operation	Itaguaí Itingussí Espigão Taquara APA	Sustainable Use	Rio de Janeiro	
Port operation	Saco de Coroa Grande APA	Sustainable Use	Rio de Janeiro	

<sup>1</sup> Considers a radius of up to 5 km away.

**304-1 | Areas preserved in Conservation Units**

	Conservation Unit	Type	Owned area (ha)	Third-party area (ha)	Total area (ha)	State
CSN Siderurgia	Cicuta Forest ARIE	Sustainable Use	131.00	0.00	131.00	Rio de Janeiro
	REVISMEP	Full Protection	14.60	11,098.66	11,113.26	Rio de Janeiro
CSN Cimentos	Serra do Cabral State Park	Full Protection	53.95	0.00	53.95	Minas Gerais
	Cavernas do Peruaçu National Park	Full Protection	251.59	0.00	251.59	Minas Gerais
CSN Minas Gerais	Sempre Viva National Park	Full Protection	1,741.72	0.00	1,741.72	Minas Gerais
	Cavernas do Peruaçu National Park	Full Protection	764.92	0.00	764.92	Minas Gerais
	Serra do Cabral State Park	Full Protection	0	164.00	164.00	Minas Gerais
	Serra de Ouro Branco State Park	Full Protection	620.25	0.00	620.25	Minas Gerais
	RPPN Jurema	Sustainable Use	436.00	0.00	436.00	Minas Gerais

### 304-4 | IUCN Red List species and national conservation list species with habitats in areas affected by operations

#### Species identified in flora and fauna monitoring by level of extinction risk

	CNCFlora	IUCN
Critically endangered	Setaria sp.1 P. Beauv.; Vellozia cf tillandsioides Mello-Silva; Vellozia tillandsioides Mello-Silva	Pithecopus ayeaye; Jacupemba
Endangered	Accara elegans (DC.) Landrum; Anemopaegma arvense (Vell.) Stellfeld ex de Souza; Anthurium megapetiolatum; Araucaria angustifolia; Arthrocerus glaziovii; Calibrachoa elegans; Cinnamomum erythropus; Comanthera elegans (Bong.) L.R.Parra & Giul.; Esterhazyana nanuzae V.C.Souza; Euplassa semicostata; Hoffmannseggella ghillanyi (Pabst) H.G.Jones; Lepidaploa spixiana (Mart. ex DC.) H.Rob.; Lychnophora syncephala; Lychnophora villosissima Mart.; Mikania glauca; Mikania neurocaula DC.; Minasia alpestris (Gardner) H.Rob.; Ocotea odorifera; Paralychnophora glaziouana Loeuille; Pilosocereus aurisetus (Werderm.) Byles & G.D.Rowley; Richterago polyphylla (Baker) Ferreyra; Sinningia rupicola; Smilax lutescens; Symplocos glaberrima Gontsch.; Uebelmannia pectinifera Buining; Vellozia glabra J.C.Mikan; Vriesea minarum; Wunderlichia senae Glaz. ex Maguire & G.M.Barroso; Xyris paradisiaca Wand.	Scytalopus iraiensis
Vulnerable	Apuleia leiocarpa; Aspilia reticulata; Baccharis cf concinna G.M.Barroso; Cedrela fissilis Vell.; Cedrela odorata; Cipocereus minensis (Werderm.) Ritter; Dalbergia nigra; Eremanthus elaeagnus (Mart. ex DC.) Sch.Bip.; Euplassa incana; Euterpe edulis Mart.; Luxemburgia damazioana Beauverd; Lychnophora tomentosa (Mart. ex DC.) Sch.Bip.; Melanoxylon braúna; Mikania argyreiae; Minaria cf. refractifolia; Plinia nana Sobral; Richterago arenaria (Baker) Roque; Rudgea jasminoides (Cham.) Müll.Arg.; Syagrus glaucescens Glaz. ex Becc.; Zeyheria tuberculosa	Coryphaspiza melanotis; Culicivora caudacuta; Jacamaralcyon tridactyla; Microspingus cinereus; Hydromedusa maximiliani; Leopardus guttulus; Myrmecophaga tridactyla; Southern Jaó; Jaguarundi; Northeastern Goldfinch; Sertão flycatcher; fat-tailed rat; Puma; Giant Anteater; Northeastern Woodcreeper; Jacucaca
Almost threatened	—	Chrysocyon brachyurus; Leopardus wiedii; Pompey; Jurará; Maracajá cat; Parrot; Red-fronted Conure; Barbudinho; Guigó; Scarlet Macaw; Cinnamon woodpecker; Maracanã; Hummingbird Woodcreeper
Safe or of little concern	—	Alouatta guariba; Herpailurus yagouaroundi; Puma concolor

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

There is no emission of ozone-depleting substances in Grupo CSN's operations in Brazil and abroad.



### 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions

#### 305-7 | Atmospheric emissions from CSN (tons)

	2019 <sup>1</sup>	2020 <sup>1</sup>	2021
CO	521.46	790.21	na
NOX	4,796.99	5,797.05	5,924.14
SOX	4,416.50	5,394.32	2,805.94
Volatile Organic Compounds (VOCs)	18.59	40.43	76.82
Hazardous Air Pollutants (HAPs)	6.87	14.40	1.42
Particulate matter (PM)	3,162.77	4,051.78	3,328.48
Other standard air emissions categories	-	-	48

<sup>1</sup>In 2019 and 2020, atmospheric emission data refer to UPV, Volta Redonda and Arcos. As of 2021, all units were considered, including steel units abroad.

#### 305-7 | Atmospheric emissions from the Steel industry (Brazil) segment (tons)

	2019	2020	2021
NOX	3,609.3	3,599.9	2,397.4
SOX	4,100.4	5,358.1	2,508.5
Volatile Organic Compounds (VOCs)	1.5	22.0	67.7
Particulate matter (PM)	2,341.3	2,896.2	3,152.2
CO	521.5	790.2	0.0

#### 305-7 | Atmospheric emissions from the Steel industry (abroad) segment in 2021 (tons)

	Lusosider	SWT
NOX	58.6	154.2
SOX	na	60.9
Volatile Organic Compounds (VOCs)	4.7	2.9
Particulate matter (PM)	6.4	1.0

### 305-7 | Atmospheric emissions from the Cements segment (tons)

	2019	2020	2021
NOX	1,187.7	2,197.2	3,314.0
SOX	316.1	36.2	236.5
Volatile Organic Compounds (VOCs)	7.1	18.5	1.6
Hazardous Air Pollutants (HAPs)	6.9	14.4	1.4
Particulate matter (PM)	821.5	1,155.6	144.9

### 305-7 | Atmospheric emissions from the Logistics segment (tons)

	2019	2020	2021
Particulate matter (PM)	na	na	24.0
Other standard air emissions categories	na	na	48.0

### 305-7 | Atmospheric emissions from the Mining segment in 2019<sup>1</sup>

		Total Suspended Particles (PTS) - Annual Average	Inhalable Particulates (PM<10) - Annual average	Inhalable Particulates (PM<2.5) - Annual average	IQA
CSN Mineração	Novo Plataforma	44.3	31.1	8.6	Good
	Basílica	57.0	27.8	16.6	Good
	Bairro Casa de Pedra	55.0	31.0	19.0	Good
	Bairro Cristo Rei	43.0	28.0	22.0	Good
	Bairro Esmeril	52.0	35.0	24.0	Good
Other mining	ERSA	na	na	na	Good

<sup>1</sup>Monitoring carried out by CSN Mineração in compliance with Conama Resolution No. 491/2018 demonstrates the air quality in the community surrounding the projects. The impact on the territory is also influenced by the dispersion of particulates from other projects and the municipality itself.

### 305-7 | Atmospheric emissions from the Mining segment in 2020<sup>1</sup>

		Total Suspended Particles (PTS) - Annual Average	Inhalable Particulates (PM<10) - Annual average	Inhalable Particulates (PM<2.5) - Annual average	IQA
CSN Mineração	Novo Plataforma	42.4	26.3	7.6	Good
	Basílica	46.9	26.3	11.1	Good
	Bairro Casa de Pedra	44.0	25.0	13.0	Good
	Bairro Cristo Rei	42.0	27.0	15.0	Good
	Bairro Esmeril	35.0	24.0	14.0	Good
Other mining	ERSA	na	na	na	Good

<sup>1</sup>Monitoring carried out by CSN Mineração in compliance with Conama Resolution No. 491/2018 demonstrates the air quality in the community surrounding the projects. The impact on the territory is also influenced by the dispersion of particulates from other projects and the municipality itself.

### 305-7 | Atmospheric emissions from the Mining segment in 2021<sup>1</sup>

		Total Suspended Particles (PTS) - Annual Average	Inhalable Particulates (PM<10) - Annual average	Inhalable Particulates (PM<2.5) - Annual average	IQA
CSN Mineração	Novo Plataforma	50.1	29.0	9.4	Good
	Basílica	51.0	29.9	13.1	Good
	Bairro Casa de Pedra	48.0	27.0	8.0	Good
	Bairro Cristo Rei	48.0	29.0	8.0	Good
	Bairro Esmeril	29.0	24.0	7.0	Good
Other mining	ERSA	73.9	40.2	18.0	Good

<sup>1</sup>Monitoring carried out by CSN Mineração in compliance with Conama Resolution No. 491/2018 demonstrates the air quality in the community surrounding the projects. The impact on the territory is also influenced by the dispersion of particulates from other projects and the municipality itself.



### 306-3, 306-4 and 306-5 | Waste generated, Waste diverted from disposal and Waste directed to disposal

	2019	2020 <sup>1</sup>	2021 <sup>2</sup>
<b>Hazardous</b>			
Biological waste	na	0.0	7.0
Construction rubble	na	25.3	4.1
Mud	na	3,808.6	15,631.2
Light bulbs	na	6.4	8.0
Wood	na	26.4	18.9
Used oil	na	1,291.7	4,275.4
Powders and fines	na	3,013.0	17,049.9
Chemical product	na	3,224.5	986.2
Contaminated waste	na	3,891.2	3,593.6
Oily waste	na	221.8	1,197.6
Others	na	4,397.2	2,369.9
<b>Subtotal hazardous waste</b>	<b>29,512</b>	<b>19,906.1</b>	<b>45,141.8</b>
<b>Non-hazardous</b>			
Rubber	na	1,598.1	293.2
Scaling	na	69,010.0	96,059.0
Conveyor belt	na	1,314.5	1,411.9
Effluent	na	385.6	1,346.7
Construction rubble	na	30,888.7	56,159.7
Slag	na	2,080,480.9	2,258,986.9
Mud	na	145,986.7	132,122.2
Wood	na	5,962.4	5,690.6
Used oil	na	37.1	123.8
Iron oxide	na	4,844.0	7,960.3
Powders and fines	na	933,360.7	316,169.4
Chemical product	na	236.0	509.4
Oily waste	na	96.8	0.0
Recyclables	na	1,194.5	1,544.0
Biological waste	na	2,806.0	1,357.0
Scrap metal	na	460,320.6	502,675.8
Others	na	28,690.8	21,318.6
<b>Subtotal non-hazardous waste</b>	<b>2,908,186</b>	<b>3,767,213.6</b>	<b>3,403,728.5</b>
<b>Total waste generated</b>	<b>2,937,698</b>	<b>3,787,119.7</b>	<b>3,448,870.3</b>

<sup>1</sup>Data for 2020 were calculated based on an updated calculation methodology.

<sup>2</sup>Considers operations abroad (Lusosider and SWT) in 2021.

### 306-3, 306-4 and 306-5 | Waste generated and discarded from the Logistics segment (tons) by type

	2019	2020	2021
<b>Hazardous</b>			
Oily waste	na	133.0	0.0
Light bulbs	na	0.1	0.1
Wood	na	0.0	8.2
Used oil	na	42.6	128.7
Contaminated waste	na	188.7	193.3
Others	na	13.4	0.3
<b>Subtotal hazardous waste</b>	<b>182</b>	<b>377.8</b>	<b>330.7</b>
<b>Non-hazardous</b>			
Rubber	na	27.6	1.1
Effluent	na	222.7	13.4
Construction rubble	na	1,038.5	171.8
Wood	na	890.2	0.0
Recyclables	na	62.8	10.7
Oily waste	na	51.2	0.0
Scrap metal	na	282.9	73.2
Others	na	442.4	168.9
<b>Subtotal non-hazardous waste</b>	<b>3,718</b>	<b>3,018.2</b>	<b>439.1</b>
<b>Total waste generated</b>	<b>3,900</b>	<b>3,396.0</b>	<b>769.8</b>

### 306-3, 306-4 and 306-5 | Waste generated and discarded from Steel industry (Brazil) segment (tons) by type

	2019	2020	2021
<b>Hazardous</b>			
Biological waste	na	0.0	7.0
Construction rubble	na	25.3	4.1
Mud	na	3,809.0	15,324.5
Light bulbs	na	4.5	6.8
Wood	na	26.2	10.7
Used oil	na	296.5	3,603.6
Powders and fines	na	0.0	5.2
Chemical product	na	3,013.0	3,310.9
Contaminated waste	na	3,224.5	986.2
Oily waste	na	3,282.2	2,969.4
Others	na	3,559.2	1,620.7
<b>Subtotal hazardous waste</b>	<b>26.221</b>	<b>17,240.1</b>	<b>27,849.1</b>
<b>Non-hazardous</b>			
Rubber	na	58.0	50.0
Scaling	na	69,010.0	71,680.0
Conveyor belt	na	1,289.8	1,378.9
Construction rubble	na	28,671.7	53,624.6
Slag	na	2,080,480.9	2,095,970.8
Mud	na	145,986.7	126,862.8
Wood	na	3,683.3	3,511.7
Used oil	na	na	0.1
Iron oxide	na	4,844.0	7,960.3
Powders and fines	na	933,360.7	316,167.5
Chemical product	na	236.0	509.4
Recyclables	na	846.6	1,224.4
Biological waste	na	876.9	760.7
Scrap metal	na	453,372.5	479,976.6
Others	na	18,944.1	12,557.4
<b>Subtotal non-hazardous waste</b>	<b>2,874,298</b>	<b>3,741,695.9</b>	<b>3,172,235.1</b>
<b>Total waste generated</b>	<b>2,900,519</b>	<b>3,758,936.0</b>	<b>3,200,084.2</b>

### 306-3, 306-4 and 306-5 | Waste generated and discarded from Steel industry (abroad) segment in 2021 (tons) by type

	Lusosider	SWT
<b>Hazardous</b>		
Mud	5.7	301.0
Powders and fines	0.0	13,739.0
Others	306.2	0.0
<b>Subtotal hazardous waste</b>	<b>311.9</b>	<b>14,040.0</b>
<b>Non-hazardous</b>		
Slag	778.1	162,238.0
Mud	5,259.4	0.0
Powders and fines	1.9	0.0
Scrap metal	18,950.6	0.0
Scaling	0.0	24,379.0
Others	160.6	0.0
<b>Subtotal non-hazardous waste</b>	<b>25,150.5</b>	<b>186,617.0</b>
<b>Total waste generated</b>	<b>25,462.4</b>	<b>200,657.0</b>

### 306-3, 306-4 and 306-5 | Waste generated and discarded from Mining segment (tons) by type

	CSN Mineração			Other mining		
	2019	2020	2021	2019	2020	2021
<b>Hazardous</b>						
Light bulbs	na	1.6	0.8	na	0	0.0
Used oil	na	893.3	498	na	3.1	4.5
Contaminated waste	na	270.3	302.6	na	47.0	35.1
Oily waste	na	38.2	1,161.7	na	50.7	30.7
Others	na	729	438	na	0.0	0.0
<b>Subtotal hazardous waste</b>	<b>2,493</b>	<b>1,932.5</b>	<b>2,401.2</b>	<b>10</b>	<b>100.7</b>	<b>70.3</b>
<b>Non-hazardous</b>						
Rubber	na	1,327.7	19.2	na	15.0	3.8
Effluent	na	80.2	1,328.5	na	43.6	0.0
Construction rubble	na	1,178.6	2,363.3	na	0.0	0.0
Oily waste	na	11.0	0.0	na	0.0	0.0
Wood	na	611.4	1,521.2	na	28.2	14.5
Used oil	na	37.1	123.6	na	0.0	0.0
Recyclables	na	113.2	151.2	na	0.0	0.0
Biological waste	na	1,929.1	558.5	na	0.0	37.8
Scrap metal	na	5,066.6	2,280.5	na	1,114.7	700
Others	na	8,955.7	7,043.4	na	146.3	87.1
<b>Subtotal non-hazardous waste</b>	<b>27,277</b>	<b>19,310.6</b>	<b>15,389.4</b>	<b>1,559</b>	<b>1,347.7</b>	<b>843.1</b>
<b>Total waste generated</b>	<b>29,770.0</b>	<b>21,243.1</b>	<b>17,790.6</b>	<b>1,559</b>	<b>1,448.5</b>	<b>913.4</b>

### 306-3, 306-4 and 306-5 | Waste generated and discarded from Cements segment (tons) by type

	2019	2020	2021
<b>Hazardous</b>			
Light bulbs	na	0.2	0.3
Used oil	na	56.2	40.5
Wood	na	0.1	0.0
Contaminated waste	na	103.0	93.2
Others	na	95.5	4.7
<b>Subtotal hazardous waste</b>	<b>606</b>	<b>255.1</b>	<b>138.7</b>
<b>Non-hazardous</b>			
Rubber	na	169.8	219.2
Conveyor belt	na	24.7	33.0
Effluent	na	39.1	4.7
Wood	na	749.3	643.3
Recyclables	na	171.8	157.8
Scrap metal	na	483.9	695.0
Others	na	202.4	1,301.2
<b>Subtotal non-hazardous waste</b>	<b>1,334</b>	<b>1,841.1</b>	<b>3,054.2</b>
<b>Total waste generated</b>	<b>1,940</b>	<b>2,096.1</b>	<b>3,192.9</b>

### 306-3, 306-4 and 306-5 | Waste generated and discarded by disposal method in 2020 (t)<sup>1</sup>

	CSN Group	Steel Industry		Mining		Cements	Logistics
		Brazil	Abroad	CSN Mineração	Other mining		
<b>Hazardous</b>							
Co-processing <sup>2</sup>	2,502.6	1,433.6	na	952.9	100.7	1.4	14.1
Re-refine <sup>2</sup>	939.1	3.1	na	893.3	0.0	0.0	42.6
Class I Landfill <sup>3</sup>	2,936.3	2,587.7	na	0.0	0.0	229.0	119.6
Incineration <sup>3</sup>	20.7	0.2	na	0.2	0.0	0.0	20.3
Others <sup>3</sup>	1.3	0.0	na	0.1	0.0	1.2	0.0
External recycling <sup>2</sup>	7,918.9	7,833.2	na	48.7	0.0	23.5	13.5
Internal recycling <sup>2</sup>	5,332.9	5,332.9	na	0.0	0.0	0.0	0.0
Effluent treatment <sup>3</sup>	228.4	0.0	na	60.6	0.0	0.0	167.8
<b>Subtotal hazardous waste</b>	<b>19,880.1</b>	<b>17,190.7</b>	<b>na</b>	<b>1,955.8</b>	<b>100.7</b>	<b>255.1</b>	<b>377.8</b>
<b>Non-hazardous</b>							
Class IIA and IIB Landfill <sup>3</sup>	191,732.6	178,663.0	na	10,494.9	128.2	961.5	1,485.0
Co-processing <sup>2</sup>	270.6	268.4	na	2.2	0.0	0.0	0.0
Re-refine <sup>2</sup>	0.0	0.0	na	0.0	0.0	0.0	0.0
Incineration <sup>3</sup>	469.1	27.1	na	16.6	0.0	0.0	425.4
Others <sup>3</sup>	2,290.6	87.8	na	1,700.7	0.0	436.8	65.3
External recycling <sup>2</sup>	1,591,915.9	967,912.0	na	241.7	622,872.7	403.6	485.8
Internal recycling <sup>2</sup>	2,815,756.7	2,811,001.4	na	4,007.7	464.7	0.0	283.0
Effluent treatment <sup>3</sup>	2,338.4	48.0	na	1,933.8	43.63	39.1	273.8
<b>Subtotal non-hazardous waste</b>	<b>4,604,773.8</b>	<b>3,958,007.7</b>	<b>na</b>	<b>18,397.7</b>	<b>623,509.1</b>	<b>1,841.1</b>	<b>3,018.3</b>
<b>Total waste generated</b>	<b>4,624,653.9</b>	<b>3,975,198.4</b>	<b>na</b>	<b>20,353.4</b>	<b>623,609.9</b>	<b>2,096.1</b>	<b>3,396.0</b>

1. Does not cover units abroad. 100% of the waste generated is discarded.

2. Treatment methods (GRI 306-4).

3. Final disposal methods (GRI 306-5). The "Others" categories were classified as final disposal, adopting a conservative premise for measuring the environmental impacts associated with waste.

### 306-3, 306-4 and 306-5 | Waste generated and discarded by disposal method in 2021 (t)<sup>1</sup>

	CSN Group	Steel Industry		Mining		Cements	Logistics
		Brazil	Abroad	CSN Mineração	Other mining		
<b>Hazardous</b>							
Class I Landfill <sup>3</sup>	1,861.4	1,462.4	292.8	0.0	0.0	90.0	16.2
Co-processing <sup>2</sup>	3,947.0	2,611.0	0	1,108.9	70.3	1.2	155.6
Incineration <sup>3</sup>	55.2	1.2	0	0.1	0.0	0.0	54.0
External recycling <sup>2</sup>	19,291.3	5,552.9	13,688.2	39.9	0.0	4.3	6.1
Internal recycling <sup>2</sup>	18,739.3	18,739.3	0	0.0	0.0	0.0	0.0
Re-refine <sup>2</sup>	1,094.6	24.4	0	909.1	0.0	36.8	124.3
Effluent treatment <sup>3</sup>	349.4	7.0	0	342.4	0.0	0.0	0.0
Others <sup>3</sup>	88.7	0.0	88	0.7	0.0	0.0	0.0
<b>Subtotal hazardous waste</b>	<b>45,426.9</b>	<b>28,398.2</b>	<b>14,069.0</b>	<b>2,401.2</b>	<b>70.3</b>	<b>132.2</b>	<b>356.2</b>
<b>Non-hazardous</b>							
Class IIA and IIB Landfill <sup>3</sup>	178,175.8	151,521.3	21,434.0	4,777.4	81.2	151.7	210.2
Co-processing <sup>2</sup>	1,389.7	698.4	0	469.4	0.0	221.9	0.0
Incineration <sup>3</sup>	568.1	23.0	434.8	0.0	0.0	0.0	110.3
External recycling <sup>2</sup>	1,581,175.5	1,395,304.8	180,354.3	4,127.4	702.9	680.1	6.0
Internal recycling <sup>2</sup>	2,308,522.0	2,238,611.9	60,375.5	2,621.3	0.0	6,841.0	72.3
Recovery of degraded areas <sup>3</sup>	29,685.7	29,685.7	0.0	0.0	0.0	0.0	0.0
Reuse	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Effluent treatment <sup>3</sup>	2,160.3	97.8	0.0	2,006.5	37.8	0.0	13.4
Others <sup>3</sup>	8,365.6	48.1	5,280.3	1,771.4	0.0	1,265.4	0.4
<b>Subtotal non-hazardous waste</b>	<b>4,110,042.9</b>	<b>3,815,991.1</b>	<b>267,879.0</b>	<b>15,773.4</b>	<b>821.9</b>	<b>9,164.7</b>	<b>412.8</b>
<b>Total waste generated</b>	<b>4,155,469.8</b>	<b>3,844,389.2</b>	<b>281,948.0</b>	<b>18,174.6</b>	<b>892.2</b>	<b>9,296.9</b>	<b>769.0</b>

1. 100% of the waste generated is discarded.

2. Treatment methods (GRI 306-4).

3. Final disposal methods (GRI 306-5). The "Others" categories were classified as final disposal, adopting a conservative premise for measuring the environmental impacts associated with waste.



### 307-1 | Non-compliance with environmental laws and regulations

Business Segment	Company	Year	Total number of fines for non-compliance with environmental laws and/or regulations	Total monetary value of significant fines (R\$ million) <sup>1</sup>	Total number of non-monetary sanctions
Steel Industry	Prada	2019	-	-	1
		2020	-	-	-
		2021	-	-	-
Mining	CSN Mineração	2019	2	3,285.00	-
		2020	1	2,190.00	-
		2021	2	6,496.90	-
	Minérios Nacional	2019	-	-	1
		2020	-	-	-
		2021	-	-	-
Logistics	Sepetiba Tecon	2019	-	-	1
		2020	-	-	-
		2021	1	1,400.00	-

<sup>1</sup>Significant monetary fines: over R\$ 1 million.  
 The amounts presented and considered significant for the company are related to undergoing cases with pending analysis of their defenses in court.

### 308-1 | New suppliers that were screened using environmental criteria

#### Assessment of environmental aspects in contracting suppliers in 2021

	Total contracted suppliers	Number of suppliers evaluated with environmental criteria	Percentage of suppliers evaluated with environmental criteria
Steel industry	2,168	304	14.02%
CSN Cimentos	1,057	145	13.72%
CSN Mineração	1,228	158	12.87%
Other mining	389	64	16.45%
Logistics	1,228	90	7.33%
<b>CSN Group</b>	<b>3,901</b>	<b>489</b>	<b>12.54%</b>

### 403-9 | Work-related injuries

#### 403-9 | Health and safety indicators for employees of CSN Group<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	7	8	4
Number of mandatory reporting work accidents	178	137	113
Total man-hours worked	46,712,604	42,190,781	43,592,372
Total number of days lost or debited	9,833	4,741	2,541
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.03	0.04	0.02
Mandatory reporting work accident rate	0.76	0.65	0.52
Accident severity rate	42	22	12

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Does not cover SWT and Lusosider due to differences in data consolidation methodology. Rates calculated with a factor of 200 thousand man-hours worked.

Types of accidents at work can include death, limb amputation, laceration, fracture, burns, among others. The greatest risks of high-consequence injuries are related to the critical activities mapped and addressed in the SSO Management Manual. Critical activities include moving vehicles and mobile equipment, power blocking, electrical service, cargo handling, working at height, hot work, contact with moving parts, hazardous chemicals, confined space, flammable gases and liquids.

The identification of health and safety risks is carried out using internationally recognized qualitative and/or quantitative methodologies (NBR ISO 31000:2018) and appropriate for each situation.

### 403-9 | Health and safety indicators for third parties of CSN Group<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	1	2
Number of work accidents with serious consequences (except deaths)	7	0	8
Number of mandatory reporting work accidents	52	36	67
Total man-hours worked	31,664,840	28,191,955	31,431,803
Total number of days lost or debited	1,538	6,650	14,633
Rate of deaths resulting from work accidents	0.00	0.01	0.01
Rate of accidents at work with serious consequences (except deaths)	0.04	0.00	0.05
Mandatory reporting work accident rate	0.33	0.26	0.43
Accident severity rate	10	47	93

1. It considers third party workers. Does not cover SWT and Lusosider due to differences in data consolidation methodology. Rates calculated with a factor of 200 thousand man-hours worked.

Types of accidents at work can include death, limb amputation, laceration, fracture, burns, among others. The greatest risks of high-consequence injuries are related to the critical activities mapped and addressed in the SSO Management Manual. Critical activities include moving vehicles and mobile equipment, power blocking, electrical service, cargo handling, working at height, hot work, contact with moving parts, hazardous chemicals, confined space, flammable gases and liquids.

The identification of health and safety risks is carried out using internationally recognized qualitative and/or quantitative methodologies (NBR ISO 31000:2018) and appropriate for each situation.

### 403-9 | Health and safety indicators for employees and third parties of CSN Group<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	1	2
Number of work accidents with serious consequences (except deaths)	14	8	12
Number of mandatory reporting work accidents	230	173	180
Total man-hours worked	76,533,445	70,382,735	75,024,175
Total number of days lost or debited	11,371	11,391	17,174
Rate of deaths resulting from work accidents	0.00	0.00	0.01
Rate of accidents at work with serious consequences (except deaths)	0.04	0.02	0.03
Mandatory reporting work accident rate	0.60	0.49	0.48
Accident severity rate	30	32	46

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories and third party workers. Does not cover SWT and Lusosider due to differences in data consolidation methodology. Rates calculated with a factor of 200 thousand man-hours worked.

Types of accidents at work can include death, limb amputation, laceration, fracture, burns, among others. The greatest risks of high-consequence injuries are related to the critical activities mapped and addressed in the SSO Management Manual. Critical activities include moving vehicles and mobile equipment, power blocking, electrical service, cargo handling, working at height, hot work, contact with moving parts, hazardous chemicals, confined space, flammable gases and liquids.

The identification of health and safety risks is carried out using internationally recognized qualitative and/or quantitative methodologies (NBR ISO 31000:2018) and appropriate for each situation.

### 403-9 | Health and safety indicators for employees of the Steel industry segment (Brazil)<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	5	6	3
Number of mandatory reporting work accidents	88	60	63
Total man-hours worked	25,970,641	23,512,167	22,667,592
Total number of days lost or debited	7,484	2,606	1,258
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.04	0.05	0.03
Mandatory reporting work accident rate	0.68	0.51	0.56
Accident severity rate	58	22	11

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for third parties of the Steel industry segment (Brazil)<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	2
Number of work accidents with serious consequences (except deaths)	6	0	7
Number of mandatory reporting work accidents	33	17	33
Total man-hours worked	17,995,125	13,194,521	14,984,843
Total number of days lost or debited	1,337	202	13,691
Rate of deaths resulting from work accidents	0.00	0.00	0.03
Rate of accidents at work with serious consequences (except deaths)	0.07	0.00	0.09
Mandatory reporting work accident rate	0.37	0.26	0.44
Accident severity rate	15	3	183

1. It considers third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for employees and third parties of the Steel industry segment (Brazil)<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	2
Number of work accidents with serious consequences (except deaths)	11	6	10
Number of mandatory reporting work accidents	121	77	96
Total man-hours worked	43,965,766	36,706,688	37,652,435
Total number of days lost or debited	8,821	2,808	14,949
Rate of deaths resulting from work accidents	0.00	0.00	0.01
Rate of accidents at work with serious consequences (except deaths)	0.05	0.03	0.05
Mandatory reporting work accident rate	0.55	0.42	0.51
Accident severity rate	40	15	79

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories and third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for the Steel industry segment (abroad) in 2021<sup>1</sup>

	Lusosider			SWT		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	434,897	104,389	539,286	1,139,816	178,624	1,318,440
Number of accidents without leave	0	1	1	66	1	67
Number of accidents with leave	3	3	6	13	8	21
Number of fatal accidents	0	0	0	0	0	0
Total number of accidents	3	4	7	79	9	88
Number of days lost/debited	106	75	181	186	130	316
Frequency rate of accidents with and without leave	1.38	7.66	2.60	13.86	10.08	13.35
Frequency rate of accidents with leave	1.38	5.75	2.23	2.28	8.96	3.19
Fatal accident frequency rate	0.00	0.00	0.00	0.00	0.00	0.00
Accident severity rate	49	144	67	33	146	48

1. It considers the effective employees in 2021, the year in which the monitoring of data for reporting by Lusosider and SWT was started. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for employees of the Mining segment<sup>1</sup>

	CSN Mineração			Other mining		
	2019	2020	2021	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0	0	0	0
Number of work accidents with serious consequences (except deaths)	2	2	1	0	0	0
Number of mandatory reporting work accidents	22	14	18	11	7	3
Total man-hours worked	11,600,852	10,988,422	11,880,492	996,246	937,974	981,668
Total number of days lost or debited	1,205	851	746	78	93	73
Rate of deaths resulting from work accidents	0.00	0.00	0.00	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.03	0.04	0.02	0.00	0.00	0.00
Mandatory reporting work accident rate	0.38	0.25	0.30	2.21	1.49	0.61
Accident severity rate	21	15	13	16	20	15

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for third parties of the Mining segment<sup>1</sup>

	CSN Mineração			Other mining		
	2019	2020	2021	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0	0	1	0
Number of work accidents with serious consequences (except deaths)	1	0	0	0	0	0
Number of mandatory reporting work accidents	13	7	22	1	3	0
Total man-hours worked	7,509,062	7,057,793	8,528,265	465,285	646,802	409,659
Total number of days lost or debited	199	364	449	0	6,015	0
Rate of deaths resulting from work accidents	0.00	0.00	0.00	0.00	0.31	0.00
Rate of accidents at work with serious consequences (except deaths)	0.03	0.00	0.00	0.00	0.00	0.00
Mandatory reporting work accident rate	0.35	0.20	0.52	0.43	0.93	0.00
Accident severity rate	5	10	11	0	1,860	0

1. It considers third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for employees and third parties of the Mining segment<sup>1</sup>

	CSN Mineração			Outras minerações		
	2019	2020	2021	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0	0	1	0
Number of work accidents with serious consequences (except deaths)	3	2	1	0	0	0
Number of mandatory reporting work accidents	35	21	40	12	10	3
Total man-hours worked	19,109,913	18,046,215	20,408,756	1,461,530	1,584,777	1,391,327
Total number of days lost or debited	1,404	1,215	1,195	78	6,108	73
Rate of deaths resulting from work accidents	0.00	0.00	0.00	0.00	0.13	0.00
Rate of accidents at work with serious consequences (except deaths)	0.03	0.02	0.01	0.00	0.00	0.00
Mandatory reporting work accident rate	0.37	0.23	0.39	1.64	1.26	0.43
Accident severity rate	15	13	12	11	771	10

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories and third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for employees of the Cements segment<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	0	0	0
Number of mandatory reporting work accidents	5	3	3
Total man-hours worked	1,659,134	1,636,422	2,148,172
Total number of days lost or debited	0	15	0
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.00	0.00	0.00
Mandatory reporting work accident rate	0.60	0.37	0.28
Accident severity rate	0	2	0

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for third parties of the Cements segment<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	0	0	0
Number of mandatory reporting work accidents	2	0	5
Total man-hours worked	2,172,497	1,801,259	2,090,272
Total number of days lost or debited	0	0	136
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.00	0.00	0.00
Mandatory reporting work accident rate	0.18	0.00	0.48
Accident severity rate	0	0	13

1. It considers third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for employees and third parties of the Cements segment<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	0	0	0
Number of mandatory reporting work accidents	7	3	8
Total man-hours worked	3,831,631	3,437,681	4,238,444
Total number of days lost or debited	0	15	136
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.00	0.00	0.00
Mandatory reporting work accident rate	0.37	0.17	0.38
Accident severity rate	0	1	6

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories and third party workers. Rates calculated with a factor of 200 thousand man-hours worked.



### 403-9 | Health and safety indicators for employees of the Logistics segment<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	0	0	0
Number of mandatory reporting work accidents	28	25	11
Total man-hours worked	4,336,994	3,428,771	3,582,261
Total number of days lost or debited	945	585	165
Rate of deaths resulting from work accidents.	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.00	0.00	0.00
Mandatory reporting work accident rate	1.29	1.46	0.61
Accident severity rate	44	34	9

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for third parties of the Logistics segment<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	0	0	1
Number of mandatory reporting work accidents	2	7	7
Total man-hours worked	2,958,586	4,956,599	4,811,871
Total number of days lost or debited	0	69	357
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.00	0.00	0.04
Mandatory reporting work accident rate	0.14	0.28	0.29
Accident severity rate	0	3	15

1. It considers third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-9 | Health and safety indicators for employees and third parties of the Logistics segment<sup>1</sup>

	2019	2020	2021
Number of deaths resulting from work accidents	0	0	0
Number of work accidents with serious consequences (except deaths)	0	0	1
Number of mandatory reporting work accidents	30	32	18
Total man-hours worked	7,295,580	8,385,369	8,394,132
Total number of days lost or debited	945	654	522
Rate of deaths resulting from work accidents	0.00	0.00	0.00
Rate of accidents at work with serious consequences (except deaths)	0.00	0.00	0.02
Mandatory reporting work accident rate	0.82	0.76	0.43
Accident severity rate	26	16	12

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories and third party workers. Rates calculated with a factor of 200 thousand man-hours worked.

### 403-10 | Work-related ill health

The hazards related to the development of occupational diseases are identified through internal audits at the operational units, which allows for the early identification of situations or deviations that may trigger risks to the health of employees. Among the risks listed are: noise, dust, oil and grease, vibration and ergonomic hazards. In 2021, 27 confirmed cases of occupational diseases were identified, 21 in the steel industry and 6 in the mining segment, all related to musculoskeletal disorders in own employees. To mitigate risks, collective protection measures (EPC) and personal protective equipment (PPE) are available when necessary. In addition, collective and individual training and educational campaigns are promoted.

## 401-1 | New employee hires and employee turnover

### 401-1 | Hires and dismissals of CSN Group<sup>1</sup>

	2020		2021	
	Hires	Dismissals	Hires	Dismissals
<b>By gender</b>				
Men	1,516	3,043	4,131	3,487
Women	452	758	1,919	987
<b>By age group</b>				
Less than 30 years old	1,285	1,715	3,674	2,018
Between 30 and 50	641	1,657	2,191	2,101
Over 50	42	429	185	355
<b>By region</b>				
North	71	33	76	81
Northeast	75	301	269	195
Midwest	0	43	0	0
Southeast	1,772	3,364	5,552	4,064
South	50	60	153	134
<b>Total</b>	<b>1,968</b>	<b>3,801</b>	<b>6,050</b>	<b>4,474</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Does not cover SWT and Lusosider due to differences in data consolidation methodology.

### 401-1 | Hiring and turnover rates of CSN Group<sup>1</sup>

	2020		2021	
	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>
<b>By gender</b>				
Men	7.4%	14.7%	19.8%	16.7%
Women	12.8%	21.6%	47.7%	23.8%
<b>By age group</b>				
Less than 30 years old	18.4%	24.4%	50.5%	27.5%
Between 30 and 50	4.4%	11.3%	14.7%	14.1%
Over 50	1.7%	17.1%	6.9%	13.2%
<b>By region</b>				
North	26.5%	12.7%	26.6%	28.5%
Northeast	6.2%	25.7%	24.0%	17.5%
Midwest	0.0%	102.8%	0.0%	0.0%
Southeast	8.1%	15.2%	24.4%	17.7%
South	7.4%	8.9%	22.6%	19.9%
<b>Total</b>	<b>8.2%</b>	<b>15.7%</b>	<b>24.3%</b>	<b>17.9%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Does not cover SWT and Lusosider due to differences in data consolidation methodology.

2. The hiring rate is calculated as the number of hires in the month over the effective headcount for the month. For annual data, monthly rates were added.

3. The turnover rate is calculated as the number of disconnections in the month over the effective headcount for the month. For annual data, monthly rates were added.

### 401-1 | Hires and dismissals of the Steel industry segment (Brazil)<sup>1</sup>

	CSN Siderurgia			
	2020		2021	
	Hires	Dismissals	Hires	Dismissals
<b>By gender</b>				
Men	893	1,842	2,262	2,211
Women	226	501	1,035	539
<b>By age group</b>				
Less than 30 years old	725	1,121	2,112	1,236
Between 30 and 50	370	941	1,091	1,272
Over 50	24	281	94	242
<b>By region</b>				
Northeast	11	46	11	13
Midwest	0	43	0	0
Southeast	1,058	2,194	3,133	2,603
South	50	60	153	134
<b>Total</b>	<b>1,119</b>	<b>2,343</b>	<b>3,297</b>	<b>2,750</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

### 401-1 | Hiring and turnover rates of the Steel industry segment (Brazil)<sup>1</sup>

	CSN Siderurgia			
	2020		2021	
	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>
<b>By gender</b>				
Men	7.0%	14.4%	18.7%	18.3%
Women	10.3%	22.8%	41.1%	21.4%
<b>By age group</b>				
Less than 30 years old	na	na	na	na
Between 30 and 50	na	na	na	na
Over 50	na	na	na	na
<b>By region</b>				
Northeast	16.2%	67.6%	16.4%	19.4%
Midwest	0.0	102.8%	0.0	0.0
Southeast	7.4%	15.4%	22.6%	18.8%
South	7.4%	8.8%	22.2%	19.5%
<b>Total</b>	<b>7.5%</b>	<b>15.6%</b>	<b>22.6%</b>	<b>18.8%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

2. The hiring rate is calculated as the number of hires in the month over the effective headcount for the month. For annual data, monthly rates were added.

3. The turnover rate is calculated as the number of disconnections in the month over the effective headcount for the month. For annual data, monthly rates were added.

### 401-1 | Hires and dismissals of the Steel industry segment (abroad) in 2021<sup>1</sup>

	Lusosider		SWT	
	Hires	Dismissals	Hires	Dismissals
<b>By gender</b>				
Men	26	18	33	11
Women	2	4	1	1
<b>By age group</b>				
Less than 30 years old	7	3	18	2
Between 30 and 50	21	19	15	8
Over 50	0	0	1	2
<b>Total</b>	<b>28</b>	<b>22</b>	<b>34</b>	<b>12</b>

1. Considers the effective employees in 2021, the year in which the monitoring of data for reporting by Lusosider and SWT was started.

### 401-1 | Hiring and turnover rates of the Steel industry segment (abroad) in 2021<sup>1</sup>

	Lusosider		SWT	
	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>
<b>By gender</b>				
Men	12.3%	8.5%	5.1%	1.7%
Women	7.7%	15.4%	1.2%	1.2%
<b>Total</b>	<b>11.8%</b>	<b>9.3%</b>	<b>4.6%</b>	<b>1.6%</b>

1. Considers the effective employees in 2021, the year in which the monitoring of data for reporting by Lusosider and SWT was started.

2. The hiring rate is calculated as the number of hires in the month over the effective headcount for the month. For annual data, monthly rates were added.

3. The turnover rate is calculated as the number of disconnections in the month over the effective headcount for the month. For annual data, monthly rates were added.

### 401-1 | Hires and dismissals of the Mining segment<sup>1</sup>

	CSN Mineração				Outras minerações			
	2020		2021		2020	2021	2021	
	Hires	Dismissals	Hires	Dismissals	Hires	Dismissals	Hires	Dismissals
<b>By gender</b>								
Men	480	799	1,404	874	91	71	93	109
Women	192	191	711	326	13	18	38	33
<b>By age group</b>								
Less than 30 years old	456	454	1,205	561	53	81	80	65
Between 30 and 50	201	490	849	576	48	72	45	69
Over 50	15	46	61	63	3	22	6	8
<b>Por região</b>								
North	0	0	0	0	71	33	76	81
Southeast	672	990	2,115	1,200	33	56	55	61
<b>Total</b>	<b>672</b>	<b>990</b>	<b>2,115</b>	<b>1,200</b>	<b>104</b>	<b>89</b>	<b>131</b>	<b>142</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

### 401-1 | Hiring and turnover rates of the Mining segment<sup>1</sup>

	CSN Mineração				Other mining			
	2020		2021		2020		2021	
	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>
<b>By gender</b>								
Men	8.4%	14.0%	23.3%	14.4%	22.9%	21.9%	22.4%	26.4%
Women	18.9%	19.9%	56.6%	24.9%	22.1%	18.7%	57.1%	52.6%
<b>By age group</b>								
Less than 30 years old	20.9%	22.0%	51.6%	23.8%	10.5%	22.9%	57.5%	48.6%
Between 30 and 50	5.1%	12.4%	19.9%	13.4%	2.1%	16.7%	17.2%	26.4%
Over 50	2.4%	7.6%	8.9%	9.0%	0.0%	38.0%	7.4%	10.1%
<b>By region</b>								
North	0.0%	0.0%	0.0%	0.0%	26.5%	12.7%	26.6%	28.5%
Southeast	10.0%	14.8%	29.1%	16.3%	18.2%	31.4%	28.0%	31.5%
<b>Total</b>	<b>10.0%</b>	<b>14.8%</b>	<b>29.1%</b>	<b>16.3%</b>	<b>23.1%</b>	<b>21.5%</b>	<b>27.2%</b>	<b>29.7%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

2. The hiring rate is calculated as the number of hires in the month over the effective headcount for the month. For annual data, monthly rates were added.

3. The turnover rate is calculated as the number of disconnections in the month over the effective headcount for the month. For annual data, monthly rates were added.

### 401-1 | Hires and dismissals of the Cements segment<sup>1</sup>

	2021	
	Hires	Dismissals
<b>By gender</b>		
Men	107	107
Women	39	24
<b>By age group</b>		
Less than 30 years old	72	50
Between 30 and 50	65	71
Over 50	9	10
<b>Total</b>	<b>146</b>	<b>131</b>

### 401-1 | Hiring and turnover rates of the Cements segment<sup>1</sup>

	2021	
	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>
<b>By gender</b>		
Men	14.7%	14.7%
Women	22.2%	13.7%
<b>By age group</b>		
Less than 30 years old	30.0%	21.0%
Between 30 and 50	11.3%	12.3%
Over 50	10.5%	11.2%
<b>Total</b>	<b>16.2%</b>	<b>14.5%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. All work in the Southeast Region. The company CSN Cimentos was separated from the CSN Group with an independent CNPJ in March 2021, with this the history of 2020 is consolidated in the number of employees of CSN Company.

2. The hiring rate is calculated as the number of hires in the month over the effective headcount for the month. For annual data, monthly rates were added.

3. The turnover rate is calculated as the number of disconnections in the month over the effective headcount for the month. For annual data, monthly rates were added.

### 401-1 | Hires and dismissals of the Logistics segment<sup>1</sup>

	2020		2021	
	Hires	Dismissals	Hires	Dismissals
<b>By gender</b>				
Men	52	331	265	186
Women	21	48	96	65
<b>By age group</b>				
Less than 30 years old	51	107	205	106
Between 30 and 50	22	177	141	113
Over 50	0	95	15	32
<b>By region</b>				
Northeast	64	255	258	182
Southeast	9	124	103	69
<b>Total</b>	<b>73</b>	<b>379</b>	<b>361</b>	<b>251</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

### 401-1 | Hiring and turnover rates of the Logistics segment<sup>1</sup>

	2020		2021	
	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>	Hiring rate <sup>2</sup>	Turnover rate <sup>3</sup>
<b>By gender</b>				
Men	3.3%	22.1%	18.4%	13.0%
Women	10.3%	23.9%	57.5%	30.3%
<b>By age group</b>				
Less than 30 years old	11.0%	24.1%	48.2%	25.2%
Between 30 and 50	2.2%	17.7%	14.2%	11.5%
Over 50	0.0%	36.6%	6.1%	13.3%
<b>By region</b>				
Northeast	5.7%	23.4%	24.5%	17.5%
Southeast	1.4%	20.3%	17.1%	11.4%
<b>Total</b>	<b>4.1%</b>	<b>22.2%</b>	<b>21.8%</b>	<b>15.2%</b>

It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

2. The hiring rate is calculated as the number of hires in the month over the effective headcount for the month. For annual data, monthly rates were added.

3. The turnover rate is calculated as the number of disconnections in the month over the effective headcount for the month. For annual data, monthly rates were added.

## 404-1 | Average hours of training per year per employee

### 404-1 | Average training hours per employee of CSN Group<sup>1</sup>

	2020	2021
<b>By gender</b>		
Men	9.5	14
Women	5.5	11.5
<b>By functional level</b>		
Executive	0.0	2.0
Leadership	10.6	10.7
Specialist	4.1	7.5
Engineer	9.8	15.2
Higher Education	3.5	8.5
Technician	10.5	13.1
Administrative	3.2	5.7
Operational	8.9	14.6
Capacitar Program	57.5	19.2
Apprentice Program	2.6	7.1
<b>Consolidated</b>	<b>8.7</b>	<b>13.6</b>

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Does not cover SWT and Lusosider due to differences in data consolidation methodology. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.

### 404-1 | Average training hours per employee of CSN corporate office<sup>1</sup>

	2020	2021
<b>By gender</b>		
Men	2.2	6.0
Women	1.8	4.0
<b>By functional level</b>		
Executive	0.0	1.0
Leadership	2.2	2.9
Specialist	4.0	4.5
Engineer	13.1	90.0
Higher Education	1.1	3.8
Technician	0.1	9.7
Administrative	0.9	3.5
Operational	15.2	10.4
Capacitar Program	0.0	0.0
Apprentice Program	1.5	3.6
<b>Consolidated</b>	<b>2.0</b>	<b>5.2</b>

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.



#### 404-1 | Average training hours per employee of the Steel industry segment (Brazil)<sup>1</sup>

	CSN Siderurgia	
	2020	2021
<b>By gender</b>		
Men	6.0	10.8
Women	4.5	9.6
<b>By functional level</b>		
Executive	0.0	0.2
Leadership	9.8	9.5
Specialist	1.5	2.8
Engineer	8.8	13.1
Higher Education	1.7	5.4
Technician	6.7	9.5
Administrative	2.8	3.8
Operational	5.8	11.4
Capacitar Program	16.9	19.4
Apprentice Program	1.9	6.9
<b>Consolidated</b>	<b>5.8</b>	<b>10.6</b>

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.

#### 404-1 | Average training hours per employee of the Steel industry segment (abroad) in 2021<sup>1</sup>

	Lusosider	SWT
<b>By gender</b>		
Men	18.9	39.2
Women	20.8	38.6
<b>By functional level</b>		
Executive	4.3	na
Leadership	24.7	na
Specialist	na	na
Engineer	5.3	na
Higher Education	40.7	na
Technician	2.9	na
Administrative	0.6	na
Operational	25.0	na
Capacitar Program	na	na
Apprentice Program	na	na
<b>Consolidated</b>	<b>19.1</b>	<b>39.1</b>

1. Considers the effective employees in 2021, the year in which the monitoring of data for reporting by Lusosider and SWT was started. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.

## 404-1 | Average training hours per employee of the Mining segment<sup>1</sup>

	CSN Mineração		Other mining	
	2020	2021	2020	2021
<b>By gender</b>				
Men	16.8	21.2	3.2	3.4
Women	6.5	14.4	0.7	5.3
<b>By functional level</b>				
Executive	0.0	10.5	0.0	0.0
Leadership	10.9	10.3	0.4	4.0
Specialist	2.6	9.3	0.0	0.0
Engineer	10.6	13.5	0.0	16.3
Higher Education	4.4	8.2	0.2	1.7
Technician	14.2	17.1	6.2	3.8
Administrative	7.6	8.4	0.0	2.1
Operational	16.7	23.0	3.0	3.3
Capacitar Program	2,018.1	19.2	0.0	0.0
Apprentice Program	0.0	2.8	0.0	0.0
<b>Consolidated</b>	<b>15,3</b>	<b>20,00</b>	<b>2.9</b>	<b>3.6</b>

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.

#### 404-1 | Average training hours per employee of the Cements segment<sup>1</sup>

	2020	2021
<b>By gender</b>		
Men	9.3	13.4
Women	3.1	7.2
<b>By functional level</b>		
Executive	0.0	0.0
Leadership	11.5	10.9
Specialist	21.9	16.3
Engineer	6.7	17.1
Higher Education	2.1	4.7
Technician	8.2	12.6
Administrative	3.2	8.3
Operational	9.0	13.3
Capacitar Program	0.0	0.0
Apprentice Program	7.7	8.4
<b>Consolidated</b>	<b>8.2</b>	<b>12.2</b>

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.

#### 404-1 | Average training hours per employee of the Logistics segment<sup>1</sup>

	2020	2021
<b>By gender</b>		
Men	9.1	17.5
Women	0.8	17.7
<b>By functional level</b>		
Executive	0.0	0.0
Leadership	8.8	1.7
Specialist	2.8	14.8
Engineer	12.8	28.7
Higher Education	8.6	19.5
Technician	10.0	12.5
Administrative	4.4	15.2
Operational	9.5	18.3
Capacitar Program	0.0	0.0
Apprentice Program	8.9	13.0
<b>Consolidated</b>	<b>9.1</b>	<b>17.5</b>

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The average is calculated as the total hours of training promoted in the year divided by the headcount on 12/31.

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

### Percentage of employees with performance evaluation in 2021<sup>1</sup>

	CSN Goup	Steel industry Brazil	CSN Mineração	Other mining	Cements	Logistics
<b>By gender</b>						
Men	<b>85.0%</b>	88.1%	86.6%	75.1%	83.3%	56.6%
Women	<b>74.0%</b>	71.5%	77.8%	81.4%	83.6%	69.5%
<b>By functional level</b>						
Executive	<b>78.9%</b>	88.2%	0.0%	na	na	na
Leadership	<b>95.0%</b>	95.9%	96.5%	90.9%	93.0%	89.4%
Specialist	<b>90.0%</b>	88.0%	95.2%	na	100.0%	90.9%
Engineer	<b>92.2%</b>	96.1%	88.1%	69.2%	90.5%	80.0%
Higher Education	<b>91.4%</b>	92.3%	89.6%	92.3%	88.5%	91.0%
Technician	<b>92.0%</b>	95.1%	90.3%	80.0%	94.1%	81.3%
Administrative	<b>85.9%</b>	91.5%	85.9%	85.7%	87.5%	60.5%
Operational	<b>82.4%</b>	85.5%	84.6%	73.9%	75.8%	47.4%
Capacitar Program	<b>47.8%</b>	26.4%	54.5%	na	na	na
<b>Consolidated</b>	<b>83.1%</b>	<b>87.3%</b>	<b>85.1%</b>	<b>75.9%</b>	<b>83.4%</b>	<b>58.3%</b>

1. It considers effective employees in the CLT and Capacitar Program categories. It does not cover SWT and Lusosider, as companies do not have systematic corporate processes for evaluating employee performance. The percentage is calculated as the total number of employees evaluated in the year divided by the headcount on 12/31, which includes professionals who are not eligible for the performance evaluation cycle.

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

#### 405-1 | Gender diversity of CSN Group by functional level<sup>1</sup>

	2020		2021 <sup>2</sup>	
	Men	Women	Men	Women
Executive	88.2%	11.8%	89.5%	10.5%
Leadership	89.1%	10.9%	89.0%	11.0%
Specialist	60.2%	39.8%	62.5%	37.5%
Engineer	84.5%	15.5%	84.0%	16.0%
Higher Education	48.8%	51.2%	49.1%	50.9%
Technician	82.5%	17.5%	81.8%	18.2%
Administrative	65.9%	34.1%	64.7%	35.3%
Operational	91.3%	8.7%	89.1%	10.9%
Capacitar Program	20.0%	80.0%	9.3%	90.7%
Apprentice Program	60.1%	39.9%	42.2%	57.8%
<b>Total</b>	<b>85.7%</b>	<b>14.3%</b>	<b>82.8%</b>	<b>17.2%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.  
 2. In 2021, CSN Group started to report data regarding operations abroad (Lusosider and SWT).

#### 405-1 | Age group diversity of CSN Group by functional level<sup>1</sup>

	2020			2021 <sup>2</sup>		
	Less than 30 years old	Between 30 and 50	Over 50	Less than 30 years old	Between 30 and 50	Over 50
Executive	0.0%	47.1%	52.9%	0.0%	42.1%	57.9%
Leadership	3.4%	76.3%	20.3%	3.6%	77.1%	19.3%
Specialist	3.5%	76.4%	20.1%	3.8%	76.3%	20.0%
Engineer	11.7%	77.4%	10.9%	10.8%	79.0%	10.2%
Higher Education	24.6%	67.2%	8.2%	25.7%	66.0%	8.2%
Technician	25.7%	65.4%	8.9%	24.4%	66.9%	8.8%
Administrative	34.8%	52.6%	12.5%	34.2%	53.6%	12.2%
Operational	29.5%	60.1%	10.4%	30.2%	58.7%	11.1%
Capacitar Program	48.9%	51.1%	0.0%	73.0%	27.0%	0.0%
Apprentice Program	72.4%	0.0%	0.0%	100.0%	0.0%	0.0%
<b>Total</b>	<b>27.9%</b>	<b>61.6%</b>	<b>10.6%</b>	<b>29.1%</b>	<b>60.1%</b>	<b>10.8%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.  
 2. In 2021, CSN Group started to report data regarding operations abroad (Lusosider and SWT).

**405-1 | Race diversity of CSN Group by functional level in 2021**

	Yellow	White	Indigenous	Black and Mixed	Not informed
Executive	0.0%	89.5%	0.0%	10.5%	0.0%
Leadership <sup>1</sup>	0.9%	65.6%	0.4%	31.4%	1.8%
Specialist	2.1%	77.5%	0.0%	18.3%	2.1%
Engineer	0.9%	67.4%	0.0%	28.5%	3.2%
Higher Education	1.4%	67.6%	0.3%	28.0%	2.7%
Technician	1.7%	53.4%	0.2%	43.6%	1.0%
Administrative	1.8%	47.2%	0.3%	44.9%	5.8%
Operational	1.3%	35.5%	0.4%	59.3%	3.5%
Capacitar Program	0.5%	31.7%	0.3%	65.8%	1.6%
Apprentice Program	2.2%	36.3%	0.0%	59.1%	2.4%
<b>Total</b>	<b>1.4%</b>	<b>42.6%</b>	<b>0.3%</b>	<b>52.7%</b>	<b>3.0%</b>

1. At the Leadership level, managers, coordinators and supervisors are considered.

### 405-1 | Gender diversity of the Steel industry segment (Brazil) by functional level<sup>1</sup>

	2020		2021 <sup>2</sup>	
	Men	Women	Men	Women
Executive	87.5%	12.5%	88.2%	11.8%
Leadership	88.0%	12.0%	88.1%	11.9%
Specialist	58.7%	41.3%	57.5%	42.5%
Engineer	85.7%	14.3%	85.8%	14.2%
Higher Education	49.2%	50.8%	49.1%	50.9%
Technician	84.5%	15.5%	83.2%	16.8%
Administrative	42.5%	57.5%	46.2%	53.8%
Operational	91.5%	8.5%	89.2%	10.8%
Capacitar Program	20.5%	79.5%	9.7%	90.3%
Apprentice Program	60.7%	39.3%	42.5%	57.5%
<b>Total</b>	<b>85.7%</b>	<b>14.3%</b>	<b>83.4%</b>	<b>16.6%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

### 405-1 | Age group diversity of the Steel industry segment (Brazil) by functional level<sup>1</sup>

	2020			2021 <sup>2</sup>		
	Less than 30 years old	Between 30 and 50	Over 50	Less than 30 years old	Between 30 and 50	Over 50
Executive	0.0%	50.0%	50.0%	0.0%	41.2%	58.8%
Leadership	3.5%	76.3%	20.2%	3.2%	78.9%	17.9%
Specialist	3.3%	78.3%	18.5%	5.6%	75.6%	18.8%
Engineer	11.0%	74.7%	14.3%	9.2%	76.2%	14.6%
Higher Education	27.0%	65.0%	7.9%	30.6%	61.6%	7.8%
Technician	23.8%	66.2%	10.0%	22.1%	67.9%	10.0%
Administrative	40.4%	51.0%	8.6%	40.8%	50.0%	9.2%
Operational	29.1%	61.6%	9.4%	29.8%	60.1%	10.1%
Capacitar Program	47.7%	52.3%	0.0%	74.3%	25.7%	0.0%
Apprentice Program	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
<b>Total</b>	<b>27.7%</b>	<b>62.3%</b>	<b>10.0%</b>	<b>29.2%</b>	<b>60.5%</b>	<b>10.3%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

### 405-1 | Diversity of the Steel industry segment (abroad) by functional level in 2021<sup>1</sup>

	Gender		Age group		
	Men	Women	Less than 30 years old	Between 30 and 50	Over 50
Executive	100.0%	0.0%	0.0%	33.3%	66.7%
Leadership	92.8%	7.2%	0.0%	49.7%	50.3%
Engineer	90.5%	9.5%	4.8%	81.0%	14.3%
Higher Education	62.1%	37.9%	3.6%	67.9%	28.6%
Technician	83.3%	16.7%	22.2%	55.6%	22.2%
Administrative	30.4%	69.6%	0.0%	65.0%	35.0%
Operational	96.1%	3.9%	18.1%	45.2%	36.7%
Apprentice Program	95.2%	4.8%	100.0%	0.0%	0.0%
<b>Total</b>	<b>89.0%</b>	<b>11.0%</b>	<b>15.6%</b>	<b>48.6%</b>	<b>35.8%</b>

1. Considers the effective employees in 2021, the year in which the monitoring of data for reporting by Lusosider and SWT was started.

### 405-1 | Gender diversity of the Mining segment by functional level<sup>1</sup>

	CSN Mineração				Other mining			
	2020		2021		2020		2021	
	Men	Women	Men	Women	Men	Women	Men	Women
Executive	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Leadership	90.4%	9.6%	89.6%	10.4%	95.5%	4.5%	90.9%	9.1%
Specialist	62.8%	37.2%	66.7%	33.3%	0.0%	100.0%	0.0%	0.0%
Engineer	83.8%	16.2%	82.8%	17.2%	77.8%	22.2%	84.6%	15.4%
Higher Education	39.0%	61.0%	42.6%	57.4%	52.9%	47.1%	38.5%	61.5%
Technician	80.0%	20.0%	80.0%	20.0%	83.8%	16.2%	83.3%	16.7%
Administrative	53.0%	47.0%	56.6%	43.4%	40.0%	60.0%	35.7%	64.3%
Operational	90.8%	9.2%	89.0%	11.0%	93.3%	6.7%	91.1%	8.9%
Capacitar Program	0.0%	100.0%	9.1%	90.9%	0.0%	0.0%	0.0%	0.0%
Apprentice Program	50.0%	50.0%	46.7%	53.3%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>85.7%</b>	<b>14.3%</b>	<b>82.2%</b>	<b>17.8%</b>	<b>88.3%</b>	<b>11.7%</b>	<b>87.3%</b>	<b>12.7%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.



### 405-1 | Age group diversity of the Mining segment by functional level<sup>1</sup>

	CSN Mineração						Other mining					
	2020			2021			2020			2021		
	Less than 30 years old	Between 30 and 50	Over 50	Less than 30 years old	Between 30 and 50	Over 50	Less than 30 years old	Between 30 and 50	Over 50	Less than 30 years old	Between 30 and 50	Over 50
Executive	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Leadership	2.9%	80.0%	17.1%	2.1%	78.9%	19.0%	4.5%	68.2%	27.3%	18.2%	54.5%	27.3%
Specialist	4.7%	74.4%	20.9%	0.0%	81.0%	19.0%	0.0%	100.0%	200.0%	0.0%	0.0%	0.0%
Engineer	12.1%	82.2%	5.7%	13.2%	82.1%	4.6%	33.3%	55.6%	11.1%	38.5%	61.5%	0.0%
Higher Education	17.5%	75.0%	7.5%	16.3%	75.7%	7.9%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%
Technician	28.1%	65.5%	6.4%	26.3%	67.2%	6.4%	21.6%	70.3%	8.1%	26.7%	63.3%	10.0%
Administrative	39.0%	52.0%	9.0%	34.3%	57.6%	8.1%	30.0%	60.0%	10.0%	42.9%	50.0%	7.1%
Operational	33.4%	56.0%	10.6%	33.3%	55.4%	11.3%	27.6%	55.2%	17.2%	28.0%	53.0%	19.1%
Capacitar Program	100.0%	0.0%	0.0%	72.3%	27.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Apprentice Program	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>29.8%</b>	<b>60.5%</b>	<b>9.7%</b>	<b>30.9%</b>	<b>59.3%</b>	<b>9.8%</b>	<b>26.6%</b>	<b>57.7%</b>	<b>15.7%</b>	<b>27.4%</b>	<b>55.2%</b>	<b>17.5%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

#### 405-1 | Gender diversity of the Cements segment by functional level<sup>1</sup>

	2021	
	Men	Women
Leadership	85.9%	14.1%
Specialist	100.0%	0.0%
Engineer	90.5%	9.5%
Higher Education	52.1%	47.9%
Technician	84.0%	16.0%
Administrative	25.0%	75.0%
Operational	93.4%	6.6%
Apprentice Program	0.0%	100.0%
<b>Total</b>	<b>79.9%</b>	<b>20.1%</b>

#### 405-1 | Age group diversity of the Cements segment by functional level<sup>1</sup>

	2021		
	Less than 30 years old	Between 30 and 50	Over 50
Leadership	4.2%	80.3%	15.5%
Specialist	0.0%	70.0%	30.0%
Engineer	14.3%	76.2%	9.5%
Higher Education	15.6%	71.9%	12.5%
Technician	21.9%	70.1%	8.0%
Administrative	32.5%	66.3%	1.3%
Operational	31.7%	57.5%	10.7%
Apprentice Program	100.0%	0.0%	0.0%
<b>Total</b>	<b>25.6%</b>	<b>64.4%</b>	<b>10.0%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. The company CSN Cimentos was separated from the CSN Group with an independent CNPJ in March 2021, with this the history of 2020 is consolidated in the number of employees of CSN Company.

### 405-1 | Gender diversity of the Logistics segment by functional level<sup>1</sup>

	2020		2021	
	Men	Women	Men	Women
Executive	100.0%	0.0%	100.0%	0.0%
Leadership	88.0%	12.0%	90.1%	9.9%
Specialist	60.0%	40.0%	68.2%	31.8%
Engineer	89.3%	10.7%	84.0%	16.0%
Higher Education	50.0%	50.0%	48.5%	51.5%
Technician	80.8%	19.2%	81.3%	18.7%
Administrative	58.1%	41.9%	59.3%	40.7%
Operational	98.3%	1.7%	96.9%	3.1%
Apprentice Program	59.4%	40.6%	29.3%	70.7%
<b>Total</b>	<b>87.9%</b>	<b>12.1%</b>	<b>86.9%</b>	<b>13.1%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

### 405-1 | Age group diversity of the Logistics segment by functional level<sup>1</sup>

	2020			2021		
	Less than 30 years old	Between 30 and 50	Over 50	Less than 30 years old	Between 30 and 50	Over 50
Executive	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Leadership	5.1%	70.9%	23.9%	6.3%	71.1%	22.5%
Specialist	0.0%	70.0%	30.0%	0.0%	77.3%	22.7%
Engineer	28.6%	67.9%	3.6%	12.0%	88.0%	0.0%
Higher Education	26.7%	65.3%	8.0%	23.9%	69.4%	6.7%
Technician	27.6%	60.3%	12.2%	24.7%	63.9%	11.4%
Administrative	50.0%	40.5%	9.5%	51.9%	42.0%	6.2%
Operational	22.9%	61.0%	16.1%	24.4%	59.6%	16.0%
Capacitar Program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Apprentice Program	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
<b>Total</b>	<b>5.1%</b>	<b>70.3%</b>	<b>24.6%</b>	<b>6.3%</b>	<b>70.6%</b>	<b>23.1%</b>

1. It considers the permanent employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

## 405-2 | Ratio of basic salary and remuneration of women to men

### 405-2 | Ratio between the average salary of women in relation to that of men in CSN Group by job level<sup>1</sup>

	2020	2021
Executive	67.5%	78.2%
Leadership	122.9%	127.4%
Specialist	96.3%	94.8%
Engineer	93.4%	91.0%
Higher Education	90.9%	93.1%
Technician	80.9%	82.3%
Administrative	93.8%	92.2%
Operational	87.4%	86.4%
Capacitar Program	99.8%	100.0%
Apprentice Program	100.8%	103.2%
<b>Consolidado</b>	<b>116.2%</b>	<b>101.2%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Does not cover SWT and Lusosider due to differences in data consolidation methodology. The calculation of this indicator does not consider factors such as length of service, area of expertise and collective agreements applicable to specific categories, which is why salary differences are observed. The compensation for each position in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for compensation definition.

### 405-2 | Ratio between the average salary of women in relation to that of men in the Cements segment by job level<sup>1</sup>

	2021
Leadership	64.8%
Specialist	na
Engineer	96.4%
Higher Education	92.6%
Technician	64.3%
Administrative	93.3%
Operational	84.1%
Apprentice Program	na
<b>Consolidated</b>	<b>88.7%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The calculation of this indicator does not consider factors such as length of service, area of expertise and collective agreements applicable to specific categories, which is why salary differences are observed. The compensation for each position in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for compensation definition. The company CSN Cimentos was separated from the CSN Group with an independent CNPJ in March 2021, with this the history of 2020 is consolidated in the number of employees of CSN

### 405-2 | Ratio between the average salary of women in relation to that of men in the Steel industry segment (Brazil) by job level<sup>1</sup>

	CSN Siderurgia		Cia Metalurgia Prada	
	2020	2021	2020	2021
Executive	66.6%	80.2%	na	na
Leadership	124.5%	139.7%	114.7%	95.3%
Specialist	94.4%	93.4%	112.4%	117.1%
Engineer	95.5%	95.9%	na	123.1%
Higher Education	95.0%	98.7%	79.4%	86.9%
Technician	79.7%	84.5%	66.8%	63.0%
Administrative	93.2%	94.4%	100.8%	85.4%
Operational	84.8%	84.7%	74.6%	74.5%
Capacitar Program	99.8%	100.0%	na	na
Apprentice Program	101.8%	97.5%	97.0%	109.4%
<b>Consolidated</b>	<b>120.1%</b>	<b>109.2%</b>	<b>75.4%</b>	<b>68.7%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The calculation of this indicator does not consider factors such as length of service, area of expertise and collective agreements applicable to specific categories, which is why salary differences are observed. The compensation for each position in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for compensation definition.

### 405-2 | Ratio between the average salary of women in relation to that of men in the Steel industry segment (abroad) by job level in 2021<sup>1</sup>

	Lusosider <sup>2</sup>	SWT <sup>3</sup>
Executive		na
Leadership	81.2%	16.2%
Engineer	105.7%	na
Higher Education	na	65.1%
Technician	99.1%	na
Administrative	121.4%	na
Operational	na	5.4%
Apprentice Program	na	na
<b>Consolidated</b>	<b>58.1%</b>	<b>12.6%</b>

1. Considers the effective employees in 2021, the year in which the monitoring of data for reporting by Lusosider and SWT was started.

2. Data grouped in the Executive and Leadership categories due to the reduced number of employees (237 in total, 3 Executive and 52 Leadership).

3. Data calculated on hourly pay.

### 405-2 | Ratio between the average salary of women in relation to that of men in the Mining segment by job level<sup>1</sup>

	CSN Mineração		Other mining	
	2020	2021	2020	2021
Executive	na	na	na	na
Leadership	117.7%	115.4%	115.6%	191.2%
Specialist	101.2%	91.7%	na	na
Engineer	89.7%	84.5%	116.8%	97.6%
Higher Education	82.6%	81.3%	74.4%	71.7%
Technician	83.2%	83.7%	94.3%	98.1%
Administrative	94.7%	89.9%	67.9%	87.2%
Operational	91.6%	89.3%	87.6%	86.6%
Capacitar Program	na	100.0%	na	na
Apprentice Program	100.0%	100.0%	na	na
<b>Consolidated</b>	<b>110.4%</b>	<b>91.3%</b>	<b>104.0%</b>	<b>117.2%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The calculation of this indicator does not consider factors such as length of service, area of expertise and collective agreements applicable to specific categories, which is why salary differences are observed. The compensation for each position in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for compensation definition.

### 405-2 | Ratio between the average salary of women in relation to that of men in the Logistics segment by job level<sup>1</sup>

	2020	2021
Executive	na	na
Leadership	111.8%	120.0%
Specialist	92.8%	89.0%
Engineer	72.4%	84.0%
Higher Education	85.7%	88.1%
Technician	87.2%	87.4%
Administrative	89.5%	92.9%
Operational	100.4%	94.3%
Apprentice Program	115.2%	136.0%
<b>Consolidated</b>	<b>144.4%</b>	<b>126.1%</b>

1. It considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. The calculation of this indicator does not consider factors such as length of service, area of expertise and collective agreements applicable to specific categories, which is why salary differences are observed. The compensation for each position in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for compensation definition.



### 411-1 | Incidents of violations involving rights of indigenous peoples

The CSN Group does not have units located at less than 5 km from indigenous communities and fully respects Brazilian legislation and the determinations of the Indian Foundation (Funai) and the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama). There is no record of violations of the rights of indigenous peoples in the Company's operations.

### 412-1 | Operations that have been subject to human rights reviews or impact assessments

The CSN Group guides its performance by the United Nations Guiding Principles on Business and Human Rights and formalizes this commitment to promoting the topic in its Integrated Policy on Occupational Sustainability, Environment, Health and Safety and in adherence, since 2020, as a signatory to the Global Compact. As part of the internal management and compliance processes, all units are monitored with the support of compliance ambassadors, who seek to comply with the guidelines of the Company's Code of Ethics. In 2022, the Company will develop a pilot project to assess human rights according to the AIDH methodology at the Casa de Pedra Mine (Congonhas, MG), in partnership with Fundação Getulio Vargas. The project envisages carrying out a diagnosis to understand the local context, the company's ability to influence other local actors and the main risks and opportunities associated with business activity in this area. Based on the results, it will be possible to define actions to improve performance.

### 412-2 | Employee training on human rights policies or procedures

In 2021, 5,611 hours of training were provided in policies and practices related to human rights, involving 5,838 employees (22.4% of the total headcount on 12/31/2021). Human Rights topics are covered by CSN Group's Code of Ethics and Anti-Corruption Policy, as part of the integration training for all new employees and periodic training within the scope of the Compliance Program (learn more on page 66).

### 414-1 | New suppliers that were screened using social criteria

#### Assessment of social aspects when hiring suppliers in 2021

	Total contracted suppliers	Number of suppliers evaluated with social criteria	Percentage of suppliers evaluated with social criteria
Steel industry	2,168	304	14.02%
CSN Cimentos	1,057	145	13.72%
CSN Mineração	1,228	158	12.87%
Other mining	389	64	16.45%
Logistics	1,228	90	7.33%
<b>CSN Group</b>	<b>3,901</b>	<b>489</b>	<b>12.54%</b>

### 419-1 | Non-compliance with laws and regulations in the social and economic area

There were no relevant socioeconomic assessments in the period.

# GRI content index

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>GRI 101   Foundation 2016</b>							
<b>General disclosures</b>							
<b>Organizational profile</b>							
GRI 102   General disclosures 2016	102-1   Name of the organization	3	-	-	-	-	-
	102-2   Activities, brands, products, and services	20, 21, 22, 27, 28, 29, 32, 33, 37, 38, 41, 42, 44, 45 and 46	-	-	-	-	-
	102-3   Location of headquarters	269	-	-	-	-	-
	102-4   Location of operations	26	-	-	-	-	-
	102-5   Ownership and legal form	20 and 54	-	-	-	-	-
	102-6   Markets served	20, 21 and 22	-	-	-	-	-
	102-7   Scale of the organization	14 and 22	-	-	-	-	-
	102-8   Information on employees and other workers	162, 190, 191, 192, 193 and 194	-	-	-	6	8 and 10
	102-9   Supply chain	185, 187, 195 and 196	-	-	-	-	-
	102-10   Significant changes to the organization and its supply chain	15, 37, 38, 45 and 105	-	-	-	-	-
	102-11   Precautionary Principle or approach	59, 76, 77, 78 and 79	-	-	-	-	-
	102-12   External initiatives	100, 101 and 102	-	-	-	-	-
	102-13   Membership of associations	197	-	-	-	-	-
<b>Strategy</b>							
	102-14   Statement from senior decision-maker	11 e 12	-	-	-	-	-
	102-15   Key impacts, risks, and opportunities	25, 59, 60, 61, 92, 93, 94, 95, 96, 97, 98 and 99	-	-	-	-	-
<b>Ethics and integrity</b>							
	102-16   Values, principles, standards, and norms of behavior	23, 24 and 66	-	-	-	10	16
	102-17   Mechanisms for advice and concerns about ethics	67 and 68	-	-	-	10	16



GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>GRI 101   Foundation 2016</b>							
<b>Governance</b>							
GRI 102   General disclosures 2016	102-18   Governance structure	48 and 49	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-19   Delegating authority	48, 49, 51, 72 and 74	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-22   Composition of the highest governance body and its committees	50	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	5 and 16
	102-23   Chair of the highest governance body	50	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-24   Nominating and selecting the highest governance body	48	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 14	5 and 16
	102-25   Conflicts of interest	66	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-28   Evaluating the highest governance body's performance	53	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-30   Effectiveness of risk management processes	59 and 60	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-35   Remuneration policies	53	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-36   Process for determining remuneration	53	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	102-38   Annual total compensation ratio	198	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	<b>Stakeholder engagement</b>						
	102-40   List of stakeholder groups	7	-	-	-	-	17
	102-41   Collective bargaining agreements	190, 191, 192, 193 and 194	-	-	-	3	8
	102-42   Identifying and selecting stakeholders	7	-	-	-	-	17
	102-43   Approach to stakeholder engagement	7	-	-	-	-	17
	102-44   Key topics and concerns raised	8	-	-	-	-	17

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>GRI 101   Foundation 2016</b>							
<b>Reporting practice</b>							
GRI 102   General disclosures 2016	102-45   Entities included in the consolidated financial statements	4	-	-	-	-	-
	102-46   Defining report content and topic Boundaries	7	-	-	-	-	-
	102-47   List of material topics	8	-	-	-	-	-
	102-48   Restatements of information	198	-	-	-	-	-
	102-49   Changes in reporting	7	-	-	-	-	-
	102-50   Reporting period	5	-	-	-	-	-
	102-51   Date of most recent report	5	-	--	-	-	-
	102-52   Reporting cycle	3	-	-	-	-	-
	102-53   Contact point for questions regarding the report	5	-	-	-	-	-
	102-54   Claims of reporting in accordance with the GRI Standards	4	-	-	-	-	-
	102-55   GRI content index	256, 257, 258, 259, 260, 261, 262, 263, 264 and 265	-	-	-	-	-
	102-56   External assurance	5, 266, 267 and 268	-	-	-	-	-

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>Material topic   Climate change</b>							
GRI 103   Management approach 2016 <sup>1</sup>	103-1   Explanation of the material topic and its Boundary	8, 62, 63, 64, 65, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118 and 119	-	-	-	-	-
	103-2   The management approach and its components	62, 63, 64, 65, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118 and 119	-	-	-	-	-
	103-3   Evaluation of the management approach	62, 63, 64, 65, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118 and 119	-	-	-	-	-
GRI 201   Economic performance 2016	201-2   Financial implications and other risks and opportunities due to climate change	62, 63, 64, 65, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118 and 119	-	-	-	7, 8 and 9	12 and 13
GRI 302   Energy 2016	302-1   Energy consumption within the organization	104, 107, 202, 203 and 204	-	EM-MM-130a.1	B.5.1	7, 8 and 9	3, 7, 11, 13 and 17
	302-2   Energy consumption outside of the organization	204	-	-	-	7, 8 and 9	3, 7, 11, 13 and 17
	302-3   Energy intensity	104	-	-	-	7, 8 and 9	3, 7, 11, 13 and 17
	302-4   Reduction of energy consumption	87, 107 108, 109, 110, 111, 112, 113, 114 and 115	-	-	-	7, 8 and 9	3, 7, 11, 13 and 17
GRI 305   Emissions 2016	305-1   Direct (Scope 1) GHG emissions	106, 107, 205 and 206	-	EM-MM-110a.1	B.3.1	7, 8 and 9	12, 13, 14 and 15
	305-2   Energy indirect (Scope 2) GHG emissions	106, 107, 205 and 206	-	-	B.3.2	7, 8 and 9	12, 13, 14 and 15
	305-3   Other indirect (Scope 3) GHG emissions	107, 113, 205 and 206	-	-	-	7, 8 and 9	12, 13, 14 and 15
	305-4   GHG emissions intensity	106, 107, 109, 112, 113 and 114	-	-	-	7, 8 and 9	12, 13, 14 and 15
	305-5   Reduction of GHG emissions	87, 107 108, 109, 110, 111, 112, 113, 114 and 115	-	-	-	7, 8 and 9	12, 13, 14 and 15

1. The management approach refers to all GRI topics in the material topic "Climate change."

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>Material topic   Labor health and safety</b>							
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	8, 153, 154, 155, 156, 157, 158, 159 and 160	-	-	-	-	-
	103-2   The management approach and its components	153, 154, 155, 156, 157, 158, 159 and 160	-	-	-	-	-
	103-3   Evaluation of the management approach	153, 154, 155, 156, 157, 158, 159 and 160	-	-	-	-	-
GRI 403   Occupational health and safety 2018	403-1   Occupational health and safety management system	79, 153 and 154	-	-	-	-	8
	403-2   Hazard identification, risk assessment, and incident investigation	154, 156 and 157	-	-	-	3, 4, 5 and 6	3 and 8
	403-3   Occupational health services	159 and 160	-	-	-	3, 4, 5 and 6	3 and 8
	403-4   Worker participation, consultation, and communication on occupational health and safety	158	-	EM-MM-320a.1	-	3, 4, 5 and 6	3 and 8
	403-5   Worker training on occupational health and safety	156 and 158	-	-	-	3, 4, 5 and 6	3 and 8
	403-6   Promotion of worker health	159 and 160	-	-	-	3, 4, 5 and 6	3 and 8
	403-7   Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	160	-	-	-	3, 4, 5 and 6	3 and 8
	403-8   Workers covered by an occupational health and safety management system	154	-	-	-	3, 4, 5 and 6	3 and 8
	403-9   Work-related injuries	157, 226, 227, 228, 229, 230, 231, 232, 233 and 234	-	EM-MM-320a.1	-	3, 4, 5 and 6	3 and 8
	403-10   Work-related ill health	159 and 234	-	-	-	3, 4, 5 and 6	3 and 8
<b>Material topic   Safety and de-characterization of dams</b>							
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	8, 141, 142, 143 and 144	-	-	-	-	-
	103-2   The management approach and its components	141, 142, 143 and 144	-	-	-	7, 8 and 9	12, 15 and 16
	103-3   Evaluation of the management approach	141, 142, 143 and 144	-	-	-	-	-

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>Material topic   Waste management, responsible use and circular economy</b>							
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	8, 132, 133, 134, 135, 136, 137, 138, 139 and 140	-	-	-	-	-
	103-2   The management approach and its components	132, 133, 134, 135, 136, 137, 138, 139 and 140	-	-	-	-	-
	103-3   Evaluation of the management approach	132, 133, 134, 135, 136, 137, 138, 139 and 140	-	-	-	-	-
GRI 306   Waste 2020	306-1   Waste generation and significant waste-related impacts	132, 133, 134, 135, 136, 137, 138, 139 and 140	-	-	-	7, 8 and 9	3, 11, 12 and 17
	306-2   Management of significant waste-related impacts	132, 133, 134, 135, 136, 137, 138, 139 and 140	-	-	-	7, 8 and 9	3, 11, 12 and 17
	306-3   Waste generated	136, 220, 221, 222, 223 and 224	-	-	"B.2.1 B.2.3"	7, 8 and 9	3, 11, 12 and 17
	306-4   Waste diverted from disposal	220, 221, 222, 223 and 224	-	-	B.2.2	7, 8 and 9	3, 11, 12 and 17
	306-5   Waste directed to disposal	220, 221, 222, 223 and 224	-	-	-	7, 8 and 9	3, 11, 12 and 17
<b>Material topic   Biodiversity</b>							
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	8, 145, 146, 147, 148, 149, 150, 151 and 152	-	-	-	-	-
	103-2   The management approach and its components	145, 146, 147, 148, 149, 150, 151 and 152	-	-	-	-	-
	103-3   Evaluation of the management approach	145, 146, 147, 148, 149, 150, 151 and 152	-	-	-	-	-
GRI 304   Biodiversity 2016	304-1   Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	214 and 215	-	-	-	7, 8 and 9	3, 15 and 17
	304-2   Significant impacts of activities, products, and services on biodiversity	146, 147, 148, 149, 150 and 151	-	-	-	7, 8 and 9	3, 15 and 17
	304-3   Habitats protected or restored	146, 147, 148, 149, 151 and 152	-	-	-	7, 8 and 9	3, 15 and 17
	304-4   IUCN Red List species and national conservation list species with habitats in areas affected by operations	216	-	-	-	7, 8 and 9	3, 15 and 17

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>Material topic   Innovation and technology</b>							
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	8, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89 and 90	-	-	-	-	-
	103-2   The management approach and its components	80, 81, 82, 83, 84, 85, 86, 87, 88, 89 and 90	-	-	-	9	7, 9 and 12
	103-3   Evaluation of the management approach	80, 81, 82, 83, 84, 85, 86, 87, 88, 89 and 90	-	-	-	-	-
<b>Material topic   Governance, ethics and transparency</b>							
GRI 103   Management approach 2016 <sup>2</sup>	103-1   Explanation of the material topic and its Boundary	8, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 66, 67, 68, 69, 70 and 71	-	-	-	-	-
	103-2   The management approach and its components	47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 66, 67, 68, 69, 70 and 71	-	-	-	-	-
	103-3   Evaluation of the management approach	47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 66, 67, 68, 69, 70 and 71	-	-	-	-	-
GRI 205   Anti-corruption 2016	205-1   Operations assessed for risks related to corruption	70	-	EM-MM-510a.1	-	10	16
	205-2   Communication and training about anti-corruption policies and procedures	70 and 199	-	-	-	10	16
	205-3   Confirmed incidents of corruption and actions taken	68	-	-	-	10	16
GRI 207   Tax 2019	207-1   Approach to tax	58	-	-	-	-	1, 10 and 17
	207-2   Tax governance, control, and risk management	58	-	-	-	-	1, 10 and 17
	207-3   Stakeholder engagement and management of concerns related to tax	58	-	-	-	-	1, 10 and 17
	207-4   Country-by-country reporting	58	-	-	-	-	1, 10 and 17
GRI 307   Environmental compliance 2016	307-1   Non-compliance with environmental laws and regulations	225	-	-	-	7, 8 and 9	12, 15 and 16
GRI 408   Child labor 2016	408-1   Operations and suppliers at significant risk for incidents of child labor	71 and 188	-	-	-	1, 2, 3, 4, 5 and 6	5, 8 and 16
GRI 409   Forced or compulsory labor 2016	409-1   Operations and suppliers at significant risk for incidents of forced or compulsory labor	71 and 188	-	-	-	1, 2, 3, 4, 5 and 6	5, 8 and 16
GRI 419   Socioeconomic compliance 2016	419-1   Non-compliance with laws and regulations in the social and economic area	255	-	-	-	-	16

2. The management approach refers to all GRI topics in the material topic "Governance, ethics and transparency."

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	SDG
<b>Material topic   Local communities</b>							
GRI 103   Management approach 2016 <sup>3</sup>	103-1   Explanation of the material topic and its Boundary	8, 175, 176, 177, 178, 179, 180, 181, 182 and 183	-	-	-	-	-
	103-2   The management approach and its components	175, 176, 177, 178, 179, 180, 181, 182 and 183	-	-	-	-	-
	103-3   Evaluation of the management approach	175, 176, 177, 178, 179, 180, 181, 182 and 183	-	-	-	-	-
GRI 203   Indirect economic impacts 2016	203-1   Infrastructure investments and services supported	57, 176, 178 and 179	-	-	-	8 and 10	9
GRI 411   Rights of indigenous peoples 2016	411-1   Incidents of violations involving rights of indigenous peoples	255	-	-	-	-	1 and 2
GRI 412   Human rights assessment 2016	412-1   Operations that have been subject to human rights reviews or impact assessments	255	-	-	-	1, 2, 3, 4, 5 and 6	5, 8 and 16
	412-2   Employee training on human rights policies or procedures	255	-	-	-	1, 2, 3, 4, 5 and 6	5, 8 and 16
GRI 413   Local communities 2016	413-1   Operations with local community engagement, impact assessments, and development programs	176, 177, 178, 179, 180, 181, 182 and 183	-	-	-	-	1, 2, 4, 5 and 10
	413-2   Operations with significant actual and potential negative impacts on local communities	146, 147 and 183	-	-	-	-	1, 2, 4, 5 and 10
<b>Material topic   Diversity and inclusion</b>							
GRI 103   Management approach 2016 <sup>4</sup>	103-1   Explanation of the material topic and its Boundary	8, 161, 162, 163, 164, 165 and 166	-	-	-	-	-
	103-2   The management approach and its components	161, 162, 163, 164, 165 and 166	-	-	-	-	-
	103-3   Evaluation of the management approach	161, 162, 163, 164, 165 and 166	-	-	-	-	-
GRI 405   Diversity and equal opportunity 2016	405-1   Diversity of governance bodies and employees	162, 163, 166, 245, 246, 247, 248, 249, 250 and 251	-	-	-	6	5 and 10
	405-2   Ratio of basic salary and remuneration of women to men	252, 253 and 254	-	-	-	6	5 and 10
GRI 406   Non-discrimination 2016	406-1   Incidents of discrimination and corrective actions taken	68	-	-	-	6	5 e 10

3. The management approach refers to all GRI topics in the material topic "Local communities."

4. The management approach refers to all GRI topics in the material topic "Diversity and inclusion."

GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	Global Compact
<b>Material topic   Efficient water use and effluent management practices</b>							
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	8, 122, 123, 124, 125, 126, 127, 128, 129, 130 and 131	-	-	-	-	-
	103-2   The management approach and its components	122, 123, 124, 125, 126, 127, 128, 129, 130 and 131	-	-	-	-	-
	103-3   Evaluation of the management approach	122, 123, 124, 125, 126, 127, 128, 129, 130 and 131	-	-	-	-	-
GRI 303   Water and effluents 2018	303-1   Interactions with water as a shared resource	122, 123, 124, 125, 126, 127, 128, 129, 130 and 131	-	-	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-2   Management of water discharge-related impacts	122, 123, 124, 125, 126, 127, 128, 129, 130, 131 and 208	-	-	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-3   Water withdrawal	123, 208, 209 and 210	-	EM-MM-140a.1	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-4   Water discharge	211 and 212	-	EM-MM-140a.1	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-5   Water consumption	213	-	EM-MM-140a.1	B.1.1 B.1.2	7, 8 and 9	3, 6, 11, 14 and 17
<b>Material topic   Supplier management</b>							
GRI 103   Management approach 2016 <sup>5</sup>	103-1   Explanation of the material topic and its Boundary	8, 184, 185, 186, 187 and 188	-	-	-	-	-
	103-2   The management approach and its components	184, 185, 186, 187 and 188	-	-	-	-	-
	103-3   Evaluation of the management approach	184, 185, 186, 187 and 188	-	-	-	-	-
GRI 308   Supplier environmental assessment 2016	308-1   New suppliers that were screened using environmental criteria	188 and 226	-	-	-	7, 8 and 9	17
GRI 414   Avaliação Supplier social assessment 2016	414-1   New suppliers that were screened using social criteria	188 and 255	-	-	-	-	-

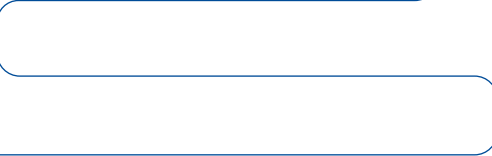
5. The management approach refers to all GRI topics in the material topic "Supplier management."



GRI Standard	Disclosure	Page	Comments	SASB indicators	UNCTAD	Global Compact	Global Compact
<b>Material topic   Staff management</b>							
GRI 103   Management approach 2016 <sup>6</sup>	103-1   Explanation of the material topic and its Boundary	8, 167, 168, 169, 170, 171, 172, 173 and 174	-	-	-	-	-
	103-2   The management approach and its components	167, 168, 169, 170, 171, 172, 173 and 174	-	-	-	-	-
	103-3   Evaluation of the management approach	167, 168, 169, 170, 171, 172, 173 and 174	-	-	-	-	-
GRI 401   Employment 2016	401-1   New employee hires and employee turnover	235, 236, 237, 238 and 239	-	-	-	1, 2 and 3	8
GRI 404   Training and education 2016	404-1   Average hours of training per year per employee	174, 240, 241, 242 and 243	-	-	-	-	-
	404-3   Percentage of employees receiving regular performance and career development reviews	171 and 244	-	-	-	-	-
<b>Additional content - not included in materiality, but kept in the report for transparency and comparability</b>							
GRI 201   Economic performance 2016	201-1   Direct economic value generated and distributed	56	-	-	-	8 and 10	1 and 8
GRI 202   Market presence 2016	202-1   Ratios of standard entry level wage by gender compared to local minimum wage	198	-	-	-	1	1 and 8
GRI 204   Procurement practices 2016	204-1   Proportion of spending on local suppliers	185 and 198	-	-	-	-	-
GRI 206   Anti-competitive behavior 2016	206-1   Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	199	-	-	-	10	16
GRI 301   Materials 2016	301-1   Materials used by weight or volume	200 and 201	-	-	-	7, 8 and 9	3, 11, 12 and 17
	301-2   Recycled input materials used	200 and 201	-	-	-	7, 8 and 9	3, 11, 12 and 17
GRI 305   Emissions 2016	305-6   Emissions of ozone-depleting substances (ODS)	216	-	-	-	7, 8 and 9	3, 12, 13, 14 and 15
	305-7   Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	217, 218 and 219	-	-	-	7, 8 and 9	3, 12, 13, 14 and 15
GRI 401   Employment 2016	401-2   Benefits provided to full-time employees that are not provided to temporary or part-time employees	168	-	-	-	-	3, 5 and 8
GRI 407   Freedom of association and collective bargaining 2016	407-1   Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	71 and 188	-	-	-	3	-

6. The management approach refers to all GRI topics in the material topic "Staff management."

# Assurance Report



## Independent auditor's limited assurance report

To Board of Directors, the directors and other interested parties of the COMPANHIA SIDERÚRGICA NACIONAL S.A. – CSN São Paulo – SP

### Introduction

We have been commissioned by the management of Companhia Siderúrgica Nacional S. A. (“CSN”, “CSN Group” or “company”) to present our limited assurance report on the information contained in its Integrated Report and annexes for the year ended December 31, 2021, prepared based on the guidelines of the Global Reporting Initiative (“GRI”), Standards version, essential option, and in accordance with the basic conceptual framework for Integrated Reporting, elaborated by International Integrated Reporting Council (IIRC) and base on guidance issued by the accounting pronouncements Committee through CPC 09, approved by the Securities and Exchange Commission on December 9, 2020 through CVM Resolution No. 14. Information related to greenhouse gas emissions for 2021 have been prepared in accordance with the guidelines of the The Greenhouse Gas (GHG) Protocol ISO 14064-3:2007, and were verified by the independent auditors of Green Domus Desenvolvimento Sustentável (“Green Domus”).

### CSN management responsibilities

CSN's management is responsible for preparing and presenting in an appropriate manner the sustainability information disclosed in the Integrated Report and annexes 2021, using as a reference the Standards for Sustainability Report of Global Reporting Initiative-GRI, essential option, and in accordance with the internal controls that it has determined to be necessary to allow the preparation of this information free of material distortion, regardless of whether caused by fraud or error.

CSN management is also responsible for the preparation and proper presentation of information related to greenhouse gas emissions, indicators GRI 305-1 (direct greenhouse gas emissions - Scope 1), GRI 305-2 (indirect greenhouse gas emissions - Scope 2) and GRI 305-3 (other indirect greenhouse gas emissions - Scope 3) contained in the Integrated Report and Annexes of 2021, in accordance with the specifications of the Brazilian greenhouse gas program.GHG Protocol, with the abnt NBR ISO 14064-3:2007 standard and with the internal controls that it has determined as necessary to allow the preparation of this information free of material distortion, regardless of whether caused by fraud or error.

## Assurance Report (continued)

### Independent auditor's responsibilities

Our responsibility is to express a conclusion on the information contained in the Integrated Report and Annexes of 2021, based on the limited assurance work conducted in accordance with the Ibracon (CT) Technical Communication 07/2012, approved by the Federal Accounting Council and prepared on the basis of NBC TO 3000 (assurance work other than Audit and review), issued by the Federal Accounting Council - CFC, which is equivalent to the international standard ISAE 3000, issued by the International Federation of accountants, applicable to non-historical information.

These standards require compliance with ethical requirements, including requirements for independence and that work be performed with the aim of obtaining limited assurance that the information in the 2021 Integrated Report and annexes, taken together, is free from material misstatement.

A limited assurance work conducted in accordance with the NBC TO 3000 (ISAE 3000) consists mainly in inquiries to the management of CSN and other CSN professionals who are involved in the preparation of the information contained in the Integrated Report and Annexes of 2021, as well as in the review of the Verification Statement prepared by Green Domus on greenhouse gas emissions, and also by the application of analytical procedures and substantive tests, by sampling, to obtain evidence that allows us to conclude, in the form of limited assurance, on the sustainability information taken together. A limited assurance engagement also requires the execution of additional procedures when the independent auditor becomes aware of matters that lead him or her to believe that the information in the 2021 Integrated Report and annexes, taken together, may present material misstatements.

The procedures selected were based on our understanding of the aspects related to the compilation, materiality and presentation of the information contained in the Integrated Report and annexes 2021 and other circumstances of the work and our consideration of areas and processes associated with the material sustainability information disclosed in the Integrated Report and annexes 2021, in which material misstatements could exist. The procedures included:

- a)** The planning of the work, considering the materiality of the aspects for CSN's activities, the relevance of the information disclosed, the volume of quantitative and qualitative information and the operating systems and internal controls that served as the basis for the preparation of the information contained in CSN's 2021 Integrated Report and annexes;
- b)** Understand and analyze the information disclosed in relation to the form of management of material aspects;
- c)** The analysis of the processes for the preparation of the Integrated Report and Annexes of 2021 and its structure and content, using as a reference the principles of content and quality of Standards the Sustainability Report of Global Reporting Initiative - GRI (GRI-Standards).
- d)** The evaluation of the sampled non-financial indicators:
  - understanding of calculation methodologies and procedures for the compilation of indicators through interviews with managers responsible for the preparation of information;
  - application of analytical procedures on quantitative information and inquiries about qualitative information and its correlation with the indicators disclosed in the Integrated Report and Annexes of 2021;
  - analysis of evidence supporting the information disclosed;
- e)** The confrontation of indicators of a financial nature with financial statements and/ or accounting records.

We believe that the information, evidence and results obtained in our work are sufficient and appropriate to substantiate our conclusion in the limited form.

## Assurance Report (continued)

### Scope and limitations

The procedures applied in a limited assurance engagement are substantially less extensive than those applied in a reasonable assurance engagement. Consequently, they do not enable us to obtain assurance that we are aware of all matters that would be identified in a reasonable assurance engagement that is intended to provide an opinion. Had we carried out reasonable assurance work, we could have identified other matters and possible distortions that may exist in the information contained in the 2021 Integrated Report and annexes.

Non-financial data is subject to more inherent limitations than financial data, given the nature and diversity of the methods used to determine, calculate, or estimate such data. Qualitative interpretations of materiality, relevance, and accuracy of data are subject to individual assumptions and judgments. In addition, we do not perform any work on data reported for the previous periods, to assess the adequacy of its policies, practices, and performance in sustainability, nor in relation to future projections.

Our work aimed at applying limited assurance procedures on the sustainability information disclosed in the Integrated Report and Annexes of CSN 2021, not including the assessment of the adequacy of its policies, practices, and performance in sustainability.

### Conclusion

Based on the procedures carried out, described in this report, and in the Green Domus Verification Statement, with regard to greenhouse gas emissions, nothing has come to our knowledge that leads us to believe that the information contained in the Integrated Report and Annexes of the CSN of 2021, have not been compiled, in all relevant aspects, in accordance with the records and files that served as the basis for its preparation, following the guidelines of the CSN of 2021. Global Reporting Initiative - GRI, Standards version, essential option.

Barueri, June 28, 2022

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## Photos

Image Bank CSN



**Companhia Siderúrgica Nacional**

