Integrated Report

2022

CSN

Contents

Off-road truck at the Casa de Pedra Mine, in Congonhas (MG)

About this report

Since 2012, Companhia Siderúrgica Nacional (CSN) has disclosed the performance of its operations and its advances towards the vision of being a globally respected Brazilian Group, which operates in an integrated and innovative manner, generating development in a sustainable fashion. From 2020, the Integrated Report is published annually.

This edition, approved by the Company's Board of Directors, refers to the period between January 1 and December 31, 2022, and considers all operations under the operational control of the Steel, Mining, Cement, Logistics and Energy businesses, in Brazil and abroad. Exceptions are noted throughout the text or in footnotes.

In line with best practices, this publication was prepared in accordance with the GRI Standards (2021); the International Framework for Integrated Reporting (IIRC), proposed by the Value Reporting Foundation; and the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations; in addition to integrating indicators from the Sustainability Accounting Standards Council (SASB) for the sectors of Iron and Steel Producers, Metals and Mining and Construction Materials. Performance data are also correlated with the Sustainable Development Goals (SDGs) of the United Nations (UN) and the principles of the Global Compact.

Specifically the financial data[1] follow the guidelines issued by the Accounting Pronouncements Committee (CPC) and the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), as well as the interpretations of the International Financial Reporting Interpretations Committee (IFRIC). Such information can be verified on page 84 of this document and in the Company's Financial Statements available at the website of Investor Relations, **here**.

The data presented in this Integrated Report were collected through interviews with leaders and the collection and review of indicators by the administrative and operational areas of the CSN Group's businesses in Brazil and abroad[2]. In relation to the previous period, the Integrated Report now includes in its scope the CSN Alhandra unit, the result of the acquisition of Elizabeth Cements concluded in 2021. and by CSN Energia are not covered in the GRI contents and SASB indicators. These operations are considered only in the CSN Group's financial statements.

All content was internally reviewed, with the approval of the Senior Management, and underwent limited assurance carried out by Russell Bedford, an independent auditor registered with the Brazilian Securities Commission (CVM).

For clarification of doubts and/or sending suggestions, contact us via **sustentabilidade@csn.com.br**.

Enjoy your reading!

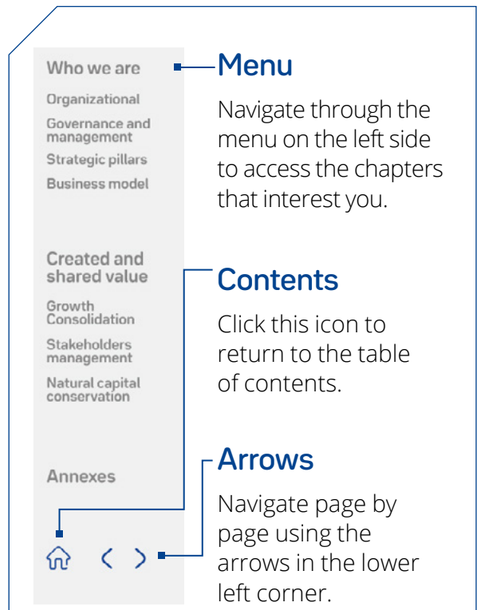
1. In the case of conversions with foreign currencies in relation to the Real, the average annual exchange rate for the reference period of this Integrated Report is applied.

2. The data and information presented in this Integrated Report contain statements about current and future measures, targets and other sustainability 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.

GRI 2-2 | 2-3 | 2-5 | 2-14

Production of long steel at the Presidente Vargas Steelworks (RJ)

How to navigate



Menu

Navigate through the menu on the left side to access the chapters that interest you.

Contents

Click this icon to return to the table of contents.

Arrows

Navigate page by page using the arrows in the lower left corner.

Click on highlights

to access additional content online.

Click on this icon

to access interactive contents.

GRI 2-29 | 3-1 | 3-2

In the footer, the notes indicate which disclosures of the Global Reporting Initiative (GRI) and indicators of the Sustainability Accounting Standards Council (SASB) are answered on each page. Correlations between GRI disclosures and UNCTAD indicators, Global Compact Principles and SDG are presented in the GRI content index.

CSN Alhandra (PB)

Material themes

The priority themes in sustainability management for CSN – and from which the content of this report was defined – were identified based on a broad materiality process, carried out in 2021 and 2022, which involved: the evaluation of studies and sectorial benchmarks; public engagement through surveys and interviews; consolidation of topics in light of the principles of the GRI and the Integrated Report; and validation with the Company's leaders.

In the first phase, 15 companies from the sectors in which CSN operates were analyzed in a benchmark process, with the analysis of the report, frameworks reporting and responses to sustainability indices. In the second phase, qualitative listening was carried out, which included 11 individual interviews, four 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, had 614 respondents, of which 466 were employees and 148 were from external audiences, such as suppliers, customers, local communities, financial institutions, shareholders and investors, outsourced professionals, non-governmental organizations, academia and educational institutions and research, government and civil society.

The material topics identified, and validated by the Executive Board and by the Board of Directors, were also correlated with the Sustainable Development Goals (SDGs), prepared by the United Nations (UN) and the Principles of the Global Compact, as well as market indicators as shown below in order of greatest to least relevance

Employees, third parties, suppliers, investors, customers, government and NGOs were consulted in the materiality process

GRI 2-29 | 3-1

Employee in Area of Relevant Ecological Interest (ARIE) of the Cicuta forest (RJ)

Materiality matrix

TOPICS

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

CAPITALS OF INTEGRATED REPORT

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

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

GLOBAL COMPACT PRINCIPLES

1 2 3 4 5 6 7 8 9 10

GRI 3-2

2022 highlights

Employee at Casa de Pedra, in Congonhas (MG)

Employee at the Presidente Vargas Steelworks (RJ)

FINANCIAL CAPITAL

Net revenue of
R$ 44.4 billion
(consolidated):

R$ 29.3 billion
in the steel industry

R$ 12.5 billion
in mining

R$ 2.8 billion
in cements

R$ 2.6 billion
in logistics

R$ 293 million
in energy

R$ 13.8 billion
of adjusted EBITDA

R$ 2.2 billion
of net profit

Rails at the Salgueiro industrial plant

MANUFACTURED CAPITAL

Steel industry

Full incorporation of Metalgráfica Iguaçu

Investments in operational efficiency at the Presidente Vargas Steelworks (UPV)

Mining

Beginning of the electrification of the off-road truck fleet in Casa de Pedra e Pires

R$ 156 milion invested in expanding the filtering of tailings

Cements

Acquisition of the operations of LafargeHolcim Brasil

CSN Cimentos Brasil becomes the **2nd largest cement producer in Brazil**

Logistics

Progress in the **largest linear work** being carried out in Brazil, the Transnordestina Railroad

Renewal of MRS concession until 2056

Energy

Strategic acquisitions and achieving self-sufficiency with self-production of renewable energy:

- CEEE-G
- HPP Quebra-Queixo
- SHPP Santa Ana
- SHPP Sacre II
- SHPP Cachoeira dos Macacos

HUMAN CAPITAL

20.5%
female representation, a growth of **42%** compared to 2020 (target base year)

54%
representation of blacks in the total number of employees

25%
reduction in Accident Frequency Rate[1] compared to 2021, the lowest result in the last 8 years

1. Accidents with and without leave involving employees and third parties.

Employees at CSN Alhandra (PB)

UTIS Installed at CSN Cimentos Alhandra

INTELLECTUAL CAPITAL

Consolidation of the ESG Committee

Definition of the Biodiversity strategy with a commitment to align with the Task Force for Financial Disclosure related to Nature (TNFD)

UTIS technology escalated to CSN Alhandra

CSN Inova Ventures has **8 companies** in its portfolio, three of which focus on green energy

Definition of new technological routes for the use of iron ore tailings

Employee in the Cicuta forest, in Volta Redonda (RJ)

NATURAL CAPITAL

4% reduction of total GHG emissions

Investment of **R$ 4 billion** in 100% clean and renewable energy sources

98% of the electricity consumed by the CSN Group from renewable sources

Reduction of **9%** in the volume of water withdrawn at the CSN Group compared to 2021

93% of water recirculation in Arcos

94% of water recirculation in the UPV

88% of water recirculation in CSN Mineração

SOCIAL AND RELATIONSHIP CAPITAL

R$ 183 million
in private social investment in the last three years

More than **4,000**
young people benefited by CSN Foundation projects

R$ 8.6 billion
paid to local suppliers

Human Rights Due Diligence in Congonhas (MG)

Launch of the Theory of Change – Company's Territorial Development Strategy

Kids from the CSN Foundation's Garoto Cidadão project in Volta Redonda (RJ)

Message from the Board of Directors

Ready for the future

In 2022, CSN took important steps towards its growth strategy based on four fundamental pillars: austerity, evolution in ESG practices, results innovation and financial discipline.

Austerity to reduce costs, thus managing working capital to enable production cycles and prioritize CAPEX. ESG practices as guidelines to focus on projects aligned with the reduction of our environmental footprint, thus consolidating a more diverse, inclusive and sustainable company that seeks solutions to global challenges, such as the impacts of climate change. Results Innovation that, based on CSN Inova's performance, prioritizes disruptive solutions for short and medium term results. And lastly, absolute financial discipline to guide the Company's growth through efficient and rational capital allocation.

The last year was an important showcase to reflect the effectiveness of this strategy. This can be seen through the two major highlights of 2022: the incorporation of LafargeHolcim Brasil's assets and energy assets (especially those of CEEE-G).

In the cement segment, the recent acquisitions consecrate CSN as the second largest producer in the country by obtaining an operating capacity of 17 million tons per year, in addition to consolidating relevant competitive differentials, with strong brands, a diversified portfolio, capillarity of operation in the main markets of Brazil and efficient plants, both from a financial point of view and in relation to low carbon emissions; a great achievement for a company that, in just over ten years of operation, already occupies the vice-leadership of the sector and has plans to increase more and more participation in domestic and foreign markets.

In terms of energy, the purchase of CEEE-G, in addition to providing self-sufficiency to supply steel, cement and mining activities, inserts the Company as one of the main generators in the country, positioning it among the 11 largest in the sector. With expansion plans planned for the coming years that involve opportunities in hydraulic, wind and solar projects, the energy segment is no longer a support area and has effectively consolidated itself as a business, since the percentage generated not used for consumption of the group should be marketed in the free market. This strategy ensures more competitiveness to face the growing demand of operations and reinforces the concern with the ESG practices, since the Company now operates with 100% energy from renewable sources.

The year also proved the resilience of mining. Even in a scenario strongly impacted by atypical rains that hit, in early January, the Iron Quadrangle region in Minas Gerais, by the slowdown of the global market driven by obstacles in real estate projects and the maintenance of sanitary restrictions caused by Covid-19 in China, the company kept the volume of iron ore traded in relation to 2021 stable, achieving the third best result in our history.

The future of CSN Mineração is one of strong investment in the Casa de Pedra Mine. Projects such as the P15 itabirite plant and the new plants for processing the tailings from the de-characterization of the dams will increase the production capacity of the mine, which includes the production of premium feed pellet with very high iron content, consolidating the company as a strategic supplier of iron ore – indispensable for the decarbonization routes of the world steel sector.

Austerity, evolution in ESG practices, results innovation and financial discipline are the pillars that support CSN's strategy

GRI 2-22

In the steel industry, we had a challenging year impacted by the cost of raw materials resulting from the pressure on the supply chain due to the conflicts between Ukraine and Russia. Despite all the challenges, we closed the year with an adjusted EBITDA of R$ 6 billion, the second best result in our history.

With an eye on the future, we will continue to invest in our operations and seek new opportunities for internationalization. Investments of about R$ 7.5 billion to be made by 2028 aim to modernize our industrial farm with reforms in coke batteries, sinterings, blast furnaces and rolling mills. Internationalization remains an important investment strategy, in which we aim to minimize the impacts arising from regional volatilities and unlock value from higher market multiples.

To achieve all these results, important actors direct our positioning, such as the ESG Committee, the Sustainability Board and CSN Inova. The ESG Committee advises this Board in the definition of ESG strategies, acting directly in the management of indicators, evaluation of risks and opportunities and in the development of projects to leverage this agenda. The Sustainability Board leads several initiatives that propagate breakthroughs in our material issues, in addition to occupying the leading role with regard to the transparency of ESG initiatives. CSN Inova, on the other hand, is a great vector of open innovation that leads to the Company's sustainable transformation.

The year was also highlighted in terms of the performance of the Company's material themes, including governance on the issue of climate change. In addition to the medium-term greenhouse gas reduction targets established for the steel, mining and cement segments, we also announce CSN Group's climate ambition to provide essential materials with carbon neutral emissions by 2050, which will be based on the maximum optimization of resources to achieve high operational efficiency and investment in technologies that allow the transition to low-carbon production. In addition to the decarbonization projects, the management of physical risks and the transition of climate change begin to compose the decision-making matrix of the Company's strategy.

We have evolved by becoming a more diverse and inclusive company, increasing by 46% the female representation in our workforce since 2020, when we set the goal of reaching 28% of women in the Company by 2025. In absolute numbers, we reached a total of 5,205 women, a number 54% higher than in 2020.

We also celebrate in 2022 consistent breakthroughs in the safety performance of our operations and our employees. This is because the Company attained its lowest frequency rate of reportable accidents since this indicator began to be consolidated eight years ago, with a reduction of 25% when compared to the result of 2021, which was already considered the best result of the historical series.

Lastly, we celebrate the 4,643 young people, children and adults directly benefited by CSN Foundation projects in 2022. In the triennium, more than R$ 200 million were invested in initiatives that generate opportunities for training, employment and income while promoting culture, science and sport in the locations where CSN is inserted.

We will continue to grow with the certainty that our trajectory will be virtuous, because it is based on the dedication and competence of our employees. To all the members of this great team, we are grateful for another year of great results and great achievements.

Together we will continue doing well, doing more and doing forever!

Chairman of the Board of Directors

Steelmaking Process at the Presidente Vargas Steelworks (RJ)

GRI 2-22

Message from the CEO

Confirming our resilience

We closed 2022 with the certainty that we are strategically positioned as one of the most resilient companies in Brazil, capable of capturing opportunities and overcoming challenges. We ended the year with a net revenue of R$ 44.4 billion and EBITDA at R$ 13.8 billion, consolidating a new chapter for CSN by maintaining such competitive results.

The highlights of the year were the conclusions of the mergers of LafargeHolcim Brasil's assets and energy assets, especially those of CEEE-G, distributed throughout Rio Grande do Sul. These operations consolidate the position of the CSN Group, thus promoting diversification of its portfolio and exposure to different markets, diluting risks and volatility, as well as raising the level of our cement and energy divisions, placing them as cash-intensive businesses. With this, CSN, which was created more than 80 years ago as a steel plant, today also operates with relevance in four other vital sectors to the development of Brazil: mining, cement, logistics and energy.

In the steel industry, CSN achieved a net revenue of R$ 29.3 billion and EBITDA of R$ 6 billion, in a scenario affected by the effects of the conflict between Russia and Ukraine and cost pressure. In the segment, we continued the investment plan of around R$ 7.5 billion, established until 2028 and continued to modernize the Presidente Vargas Steelworks (UPV), with investments aimed at increasing the operational efficiency of our asset. All projects are structurally linked to the decarbonization program of the sector, a strategic agenda for the business.

In mining, we had positive results even with the pressure on the price of the commodity in the international market resulting from the consequences of the slowdown in Chinese demand, thus reaching a net revenue result of R$ 12.4 billion and EBITDA of R$ 6 billion. With a focus on expanding the production capacity of the Casa de Pedra and Engenho Mines, we have already announced investments of R$ 13.8 billion (by 2027), which include important projects such as P15, new plants for tailings processing and the de-characterization of dams in Minas Gerais. The first will add to our production 15 million tons of iron ore with premium quality, key to the decarbonization routes of the world steel farm, which positions us strategically in this urgent agenda of the planet. The others will expand our production capacity by including the reprocessing of tailings from the de-characterization of our dams.

Benjamin Steinbruch
CEO

We are strategically positioned as one of the most resilient companies in Brazil

GRI 2-22

The cement, logistics and energy segments have been successively increasing their importance in our revenues, consolidating the strategy of increasingly supporting our operations in five distinct businesses – each with its own potential for management, growth, governance and appreciation.

As this annual report is read, I also wish to draw the attention of all readers to a great force that we have within the Company: CSN Inova. It is a strategic arm of the technological transition and ESG of the group that, in 2022, consolidated itself as one of the largest corporate venture capital vehicles in the country and that has articulated several initiatives for CSN.

All the Company's results and strategies are strongly based on our ESG agenda, which is treated in a transversal manner in all our businesses, investments and actions, with a special performance of the ESG Committee that advises our Board of Directors in decision-making, focusing on ensuring investments and speeding up projects on the subject.

The gains in these practices have been recognized through the evolution in two important ESG ratings. The Company received a new rating from Sustainalytics, and of the 155 steel and mining companies evaluated globally, CSN achieved the 4th best score in the industry. We were also the only Brazilian company considering the steel, mining and construction sectors eligible to compose the S&P Global Sustainability Yearbook 2023, being classified as the company in the steel segment that has advanced the most in the ESG agenda in the world, receiving the "Industry Mover" seal.

The historical breakthroughs in Health and Safety indicators, when we ended 2022 with the lowest frequency rate of reportable accidents recorded in the last eight years, and the significant growth of 17% in female representation in the CSN Group, in addition to the 16% increase in the number of people with disabilities, when compared to 2021, reinforce the company's commitment to continue evolving as a modern, safe, diverse and inclusive company.

Finally, we also commemorate the 4,643 young people, children and adults directly benefiting from CSN Foundation projects in 2022. In the three-year period, more than R$ 200 million were invested in initiatives that generate opportunities for training, employment and income while promoting culture, science and sport in the locations where CSN operates.

We have exceptional talents that are dedicated, determined and committed to the company. To our employees, my words are: be very proud to be CSN, because CSN is certainly very proud of you.

I remain excited to be at the head of such an important Company for the history of the country, capable of overcoming the most challenging scenarios. Our strength in generating results, resilience and adaptability are attributes in which I have absolute confidence, since we took over the company.

With great pleasure, I invite you to know a little more about CSN in this Integrated Report.

Benjamin Steinbruch
Chief Executive Officer

I remain excited to be at the head of such an important Company for the history of the country

GRI 2-22

Who we are

Welding operation at the Presidente Vargas Steelworks in Volta Redonda (RJ)

Operation of Metalgráfica Iguaçu

GRI 2-1 | 2-6

Organizational profile

CSN is a Brazilian company, headquartered in São Paulo (SP), positioned as one of the most efficient integrated steel complexes in the world. The Company began its activity in 1941, during the Estado Novo, by decree of the then President of the Republic, Getúlio Vargas, and its steel enabled the implementation of the first national industries, the nucleus of the current Brazilian industrial park. Since 1993, when it was privatized by the Federal Government, it has been diversifying its businesses. Today, with more than 80 years of history, it combines tradition and innovation with a trajectory of growth in the steel, mining, cement, logistics and energy sectors.

At the **steel industry segment**, CSN operates throughout the steel production chain, from the extraction of iron ore by the subsidiary CSN Mineração, to the production and sale of a diversified line of steel products, including flat, coated, galvanized, pre-painted, metal, long steel (rebar and wire rod) cans and packaging. The Company maintains, in the south of the state of Rio de Janeiro, in the city of Volta Redonda, the Presidente Vargas Steelworks – one of the largest steel mills in Latin America with an installed capacity to produce 5.6 million tons of crude steel per year – and a factory unit specializing in galvanized products in the municipality of Portal Real. In Araucária, in the metropolitan region of Curitiba (PR), the pickling, cold rolling, galvanizing, galvalume and pre-painting unit is also located. Abroad, there are flat steel units in Portugal (Lusosider) and long steel production in Germany (Stahlwerk Thüringen GmbH – SWT) with a production capacity of 1.1 million tons.

CSN combines tradition and innovation with a trajectory of growth in the steel, mining, cement, logistics and energy sectors

Further, the Company has Prada Embalagens, one of the main manufacturers of cans and steel packaging in Brazil, with production in São Paulo (SP), Resende (RJ), Uberlândia (MG) and Pelotas (RS); Prada Distribuição operates in the areas of processing and distribution of flat and long steel in the states of São Paulo, Minas Gerais, Rio de Janeiro, Paraná, Rio Grande do Sul and Bahia.

In 2022, CSN announced the incorporation, by Prada Embalagens, of all the shares of Metalgráfica Iguaçu S.A, responsible for the production of metal food packaging for the national and international market, with operations in Ponta Grossa, in the state of Paraná, and in Goiania, in the state of Goiás. The agreement is justified by the opportunity to leverage synergies and greater integration between existing structures, as Prada already explores business lines related to those developed by Metalográfica, such as the manufacture and sale of metallic and non-metallic packaging, and the industrialization, marketing and reprocessing of iron, steel and other metal products.

CSN Mineração is the second largest exporter of iron ore in Brazil

In the **mining** sector, CSN Mineração S.A., the main subsidiary of the CSN Group, is the second largest exporter of iron ore in Brazil and the seventh largest in the world. The high-quality assets are located in the Iron Quadrangle, with emphasis on the Casa de Pedra e Engenho mine Complex – currently considered as another body belonging to the complex to be mined – located in Congonhas (MG) and Belo Vale (MG), and the Pires Processing Plant, which has dry processing, equipped with Mobile Screening Units and an Ore Treatment Facility (ITM), comprising crushing and classification operations. CSN Mineração's global production capacity is 33 million tons per year of iron ore, 22 million tons of which are at the central plant in Casa de Pedra and 11 million tons at the dry plants in Pires. Aside from that, CSN Mineração holds the concession to operate the Port of TECAR, located in the port of Itaguaí (RJ), with an installed capacity for loading 45 million tons of iron ore and for unloading 4 million tons of reducers (e.g. coal, coke) per year. In 2022, the Port of TECAR concession was renewed for another 25 years.

Employee at CSN Mineração

GRI 2-6

The company Minérios Nacional S.A., controlled by the CSN Group, owns the mines of Fernandinho (operational), the mining rights of Cayman and Pedras Pretas (mineral resources), operating in the production and sale of iron ore in the municipality of Rio Acima (MG). The iron ore is processed in its own facilities, with an annual production capacity of 1 million tons.

Estanho de Rondônia S.A (ERSA) also controlled by the CSN Group, is made up of Mineração Santa Bárbara, in Itapuã do Oeste (RO), where cassiterite is extracted, and a foundry in Ariquemes (RO), where cassiterite is melted and transformed into tin, grade "A", in the form of ingots. Tin is the main raw material for the production of tinplate, necessary for the production of metal packaging at Prada Embalagens. The company is the only manufacturer in Brazil.

Employee at Ersa Mineração

GRI 2-6

The combination of blast furnace slag, resulting from the steelmaking process, and limestone extracted from the mines, places CSN among the most competitive **cement** players from Brazil. CSN Cimentos has been operating in this sector since 2009 with the grinding plant in Volta Redonda. In 2011, the first clinker production line was installed in Arcos (MG). In 2015, two new cement mills came into operation and, in 2016, a new clinker line, adding 2.4 million tons per year of cement production capacity. In 2021, the acquisition of Elizabeth Cements S.A, located in Alhandra (PB), was completed, an integrated plant with an installed capacity of 1.3 million tons per year. Yet, in 2022 the Company leaped from the seventh to the second largest producer of this input in the country with the acquisition of all the Brazilian operations of the Franco-Swiss company LafargeHolcim. The movement added five integrated cement production units already in operation in Brazil and five mills in the Southeast, Northeast and Midwest regions to the structure of CSN Cimentos, in addition to high-quality limestone reserves and 19 units of concrete and six of aggregates. A waste management platform was also integrated into the Group, responsible for managing industrial and urban waste that can be used as an alternative fuel or substitute for raw materials in clinker kilns through co-processing technology.

CSN Cimentos is the second largest producer in Brazil

View of CSN Cimentos plant in Arcos (MG)

GRI 2-6

In the **logistics** sector, CSN Mineração manages at the Port of Itaguaí (RJ): TECAR; and CSN manages the container terminal (Sepetiba TECON S.A.), whose current capacity is 660,000 TEUs (Twenty-Foot Equivalent Unit) per year. In the railway segment, CSN also has a direct and indirect stake of 37.27% (18.64% CSN + 18.63% CMIN) of the total share capital in MRS Logística S.A., operator of the railway network that connects the Quadrilátero Ferrífero and the south of Rio de Janeiro to the port terminals for the flow of production and receipt of raw materials in the transoceanic market. All iron ore exported by CSN Mineração and all coal, coke and iron ore consumed by UPV are transported by MRS. Beyond that, it controls the Transnordestina Logistics Railroad (FTL), with a total length of 4,534 km and current transport capacity of around 3.2 million tons/year, and Transnordestina Logistics S.A. (TLSA), the largest linear work being carried out in Brazil, which will connect the hinterland of Piauí to the ports of Suape (PE) and Pecém (CE). The railroad's projected operating capacity will be 30 million tons per year.

CSN is one of the few Brazilian companies that maintains integrated logistics, covering its operations throughout the national territory. The synergy between the businesses and the integrated logistics of the factories and distribution centers – which are strategically located – allows the Company to provide a differentiated service to all its customers and the consumer market in general.

CSN works with logistics integrated to the business to efficiently distribute its products

Rail of TLSA

GRI 2-6

In 2022, CSN achieved energy self-sufficiency, with 100% clean energy in its matrix

In terms of **energy**, CSN Energia is responsible for the interface between the needs involving the consumption of electricity at the Group's industrial units and the sector's agents: Ministry of Mines and Energy (MME), National Electric Energy Agency (ANEEL), National Operator of the System (ONS), Electric Energy Trading Chamber (CCEE), transmission companies, distributors, among others.

Itá Hydroelectric Plant (SC)

Among the Company's energy assets, at the Presidente Vargas Steelworks (UPV), in Volta Redonda (RJ), there are two Thermoelectric Cogeneration Centers (CTE1 and CTE2) with annual installed capacity of 10 MW and 235 MW, which are generated through from use of the waste gasses from steel production. There is also, since 2014, the Top Recovery Turbine (TRT), located in Blast Furnace 3 of the UPV, which takes advantage of the gas outlet pressure for power generation and has an installed generation capacity of 22 MW.

CSN also holds a 48.75% stake in the share capital of Itá Energética S.A., which in turn holds a stake in the concession of the Itá Hydroelectric Power Plant (ITASA), located on the border between Santa Catarina and Rio Grande do Sul, and the stake 17.92% of the Igarapava Hydroelectric Plant, located in the city of Conquista (MG). The Itá Hydroelectric Power Plant has 1,450 MW of installed capacity, and the Igarapava Hydroelectric Power Plant has 210 MW of installed capacity.

In 2022, CSN completed important acquisitions: the Quebra-Queixo Hydroelectric Plant, with an average installed capacity of 120MW; the Cachoeira dos Macacos Small Hydroelectric Plant, with an installed capacity of 3.4 MW; the Cachoeira dos Macacos Small Hydroelectric Plant, with an installed capacity of 3.4 MW; the Santa Ana Energética S.A., with 6.5MW of installed capacity; Topazio Energética S.A., holder of the concession for the exploitation of the Small Hydroelectric Plant Sacre II with 30 MW of installed capacity; and 98.96% of the shares of the State Electric Power Generation Company (CEEE-G) with 1.2 thousand MW of installed capacity. These businesses are intended to support and strengthen the business expansion strategy of CSN and its subsidiaries, in addition to offering self-sufficiency in 100% renewable energy to the Group's entire operation.

GRI 2-6

In the search for an innovative performance in all business areas, CSN has a structure totally dedicated to innovation, to **CSN Inova**. Created in 2018, CSN Inova is CSN's innovation platform that catalyzes the transformation of its businesses towards a management even more focused on ESG and is responsible for systematizing and leading the innovation process in an organized and broad way, in order to enable the execution of innovative projects with different skills and areas of expertise.

Its performance through its four pillars – CSN Inova Ventures, CSN Inova Open, CSN Inova Bridge and CSN Inova Tech – is a lever in the search for new solutions and technologies that allow for increased efficiency and productivity, associated with technologies for industry 4.0, new materials, process decarbonization journey, digitization and circular economy.

Lastly, this integrated and diversified business model is further strengthened by the work of the **CSN Foundation**, which for more than 60 years has invested in projects and programs that benefit the communities close to the operational units, promoting education, culture and the articulation of civil society and public authorities in favor of citizenship and sustainable development.

For over 60 years, the CSN Foundation has strengthened CSN's social activities in the communities where it operates

Student of the CSN Foundation's Garoto Cidadão Program in Volta Redonda (RJ)

GRI 2-6

HPP Itá (SC)

Essence

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

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

Doing forever
Our learning is constant to continuously act in building a sustainable future. This is our success.

Mission
Acting in an integrated and innovative way, generating sustainable and perpetual development.

Vision
Being the most respected and globally recognized national group, strengthening the meaning of being Brazilian.

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

Steel industry

Mining

Cement

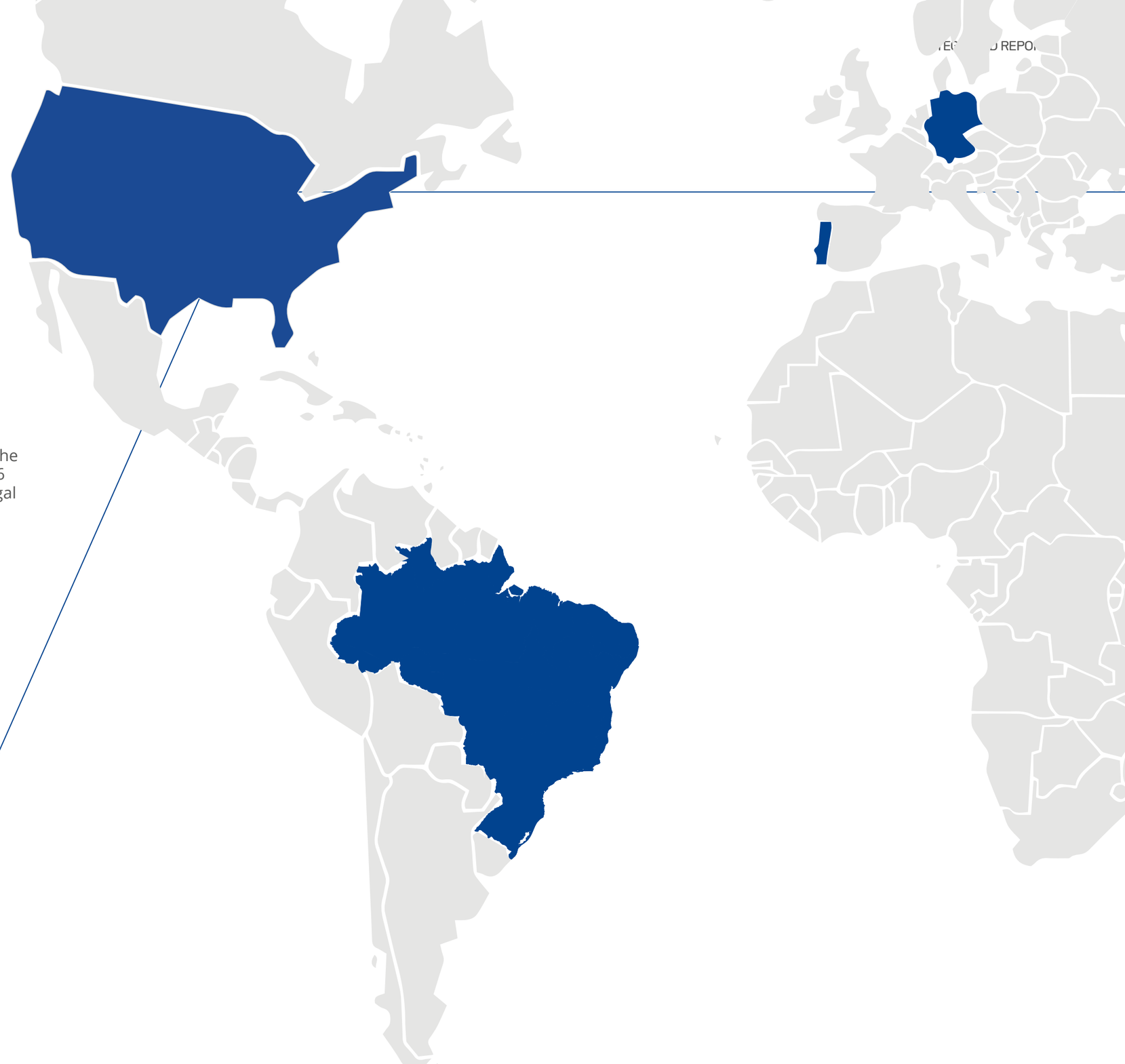
Logistics

Energy

Map of operations

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

Click on the icon for each business segment to find out where its production units are located.



Back to the initial screen

GRI 2-1

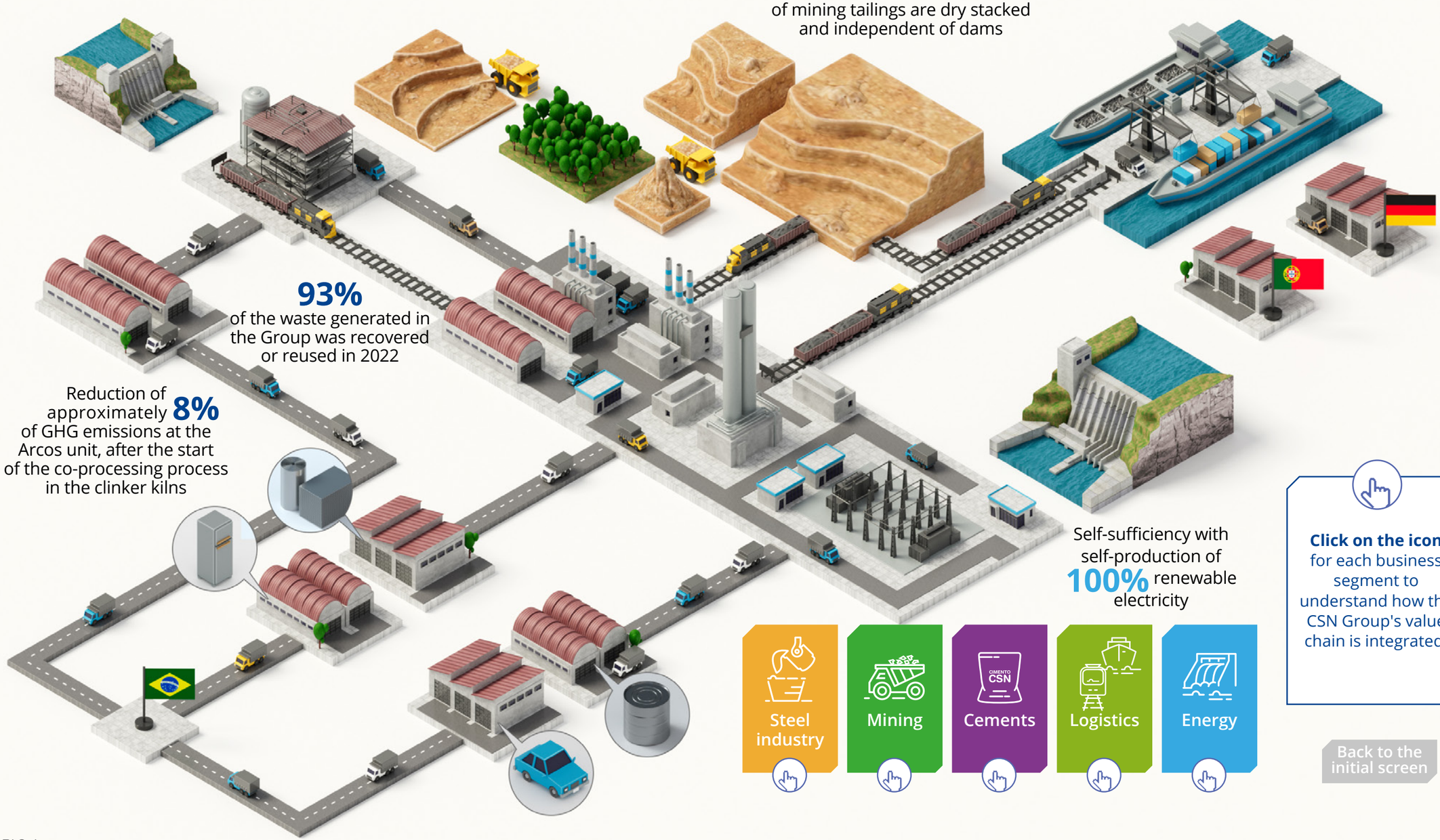
Integrated value chain

100%
of mining tailings are dry stacked and independent of dams

93%
of the waste generated in the Group was recovered or reused in 2022

Reduction of approximately **8%** of GHG emissions at the Arcos unit, after the start of the co-processing process in the clinker kilns

Self-sufficiency with self-production of **100%** renewable electricity



Steel industry | Mining | Cements | Logistics | Energy

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

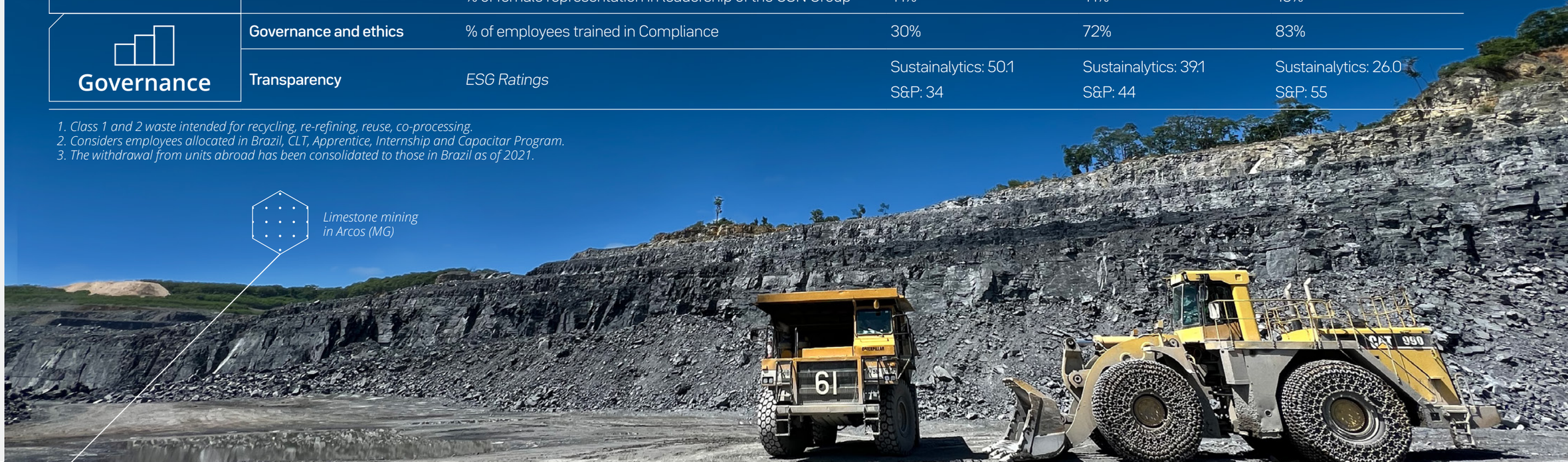
Back to the initial screen

GRI 2-6

Scorecard ESG

Dimension	Topic	KPI	2020	2021	2022
Environmental	Climate change	Emissions: tCO_2e per ton of crude steel	1.97	1.98	1.99
		Emissions: kg CO_2e per ton of cement	519	483	481
		Emissions: kg CO_2e per ton of ore produced	7.10	6.58	7.92
	Waste management, responsible use of materials and circular economy	Revenue generated by Special Sales (R$MM)	NA	293.7	337.6
		Circularity of waste[1]	95%	95%	93%
	Efficient water use and effluent management practices	Water Uptake (in thousand Megaliters)[3]	101	101	92
Social	Labor health and safety	CSN Group Fatalities	1	2	4
		CSN Group Accident Frequency Rate (own and third parties, 1MM HHT factor)	2.5	2.4	1.8
	Diversity and inclusion	% of female representation in the CSN Group[2]	14%	17.5%	20.5%
		% of female representation in leadership of the CSN Group	11%	11%	13%
Governance	Governance and ethics	% of employees trained in Compliance	30%	72%	83%
	Transparency	*ESG Ratings*	Sustainalytics: 50.1 S&P: 34	Sustainalytics: 39.1 S&P: 44	Sustainalytics: 26.0 S&P: 55

1. Class 1 and 2 waste intended for recycling, re-refining, reuse, co-processing.
2. Considers employees allocated in Brazil, CLT, Apprentice, Internship and Capacitar Program.
3. The withdrawal from units abroad has been consolidated to those in Brazil as of 2021.



Limestone mining in Arcos (MG)

Governance and management

Companhia Siderúrgica Nacional S.A. is a publicly traded company – with shares traded in São Paulo, on B3 – Brasil, Bolsa, Balcão, and in New York, on the New York Stock Exchange (NYSE) – and which follows the highest standards of corporate governance required by Brazilian and US law. Among the practices adopted, the following stand out:

- Board of Directors with three independent members – in line with the definitions of independence established in CVM Resolution 80/2022.
- Installation of Internal Audit, Risk Management and Compliance areas.
- Adoption of a Whistleblowing Channel with independence, autonomy and impartiality.
- Adoption of an appropriate risk management process, structure of internal controls and integrity/compliance programs.
- Audit Committee, as provided for in the bylaws, exclusively composed of independent members.
- The Board of Directors compensation is not based on participation in meetings and is not linked to short-term results.
- Elaboration and dissemination of the Code of Conduct.
- Elaboration and disclosure of securities trading policy.
- Issuance of common shares only.
- Simultaneous disclosure, in English and Portuguese, of material facts, information on earnings and press releases on quarterly financial and ESG results.

The corporate governance structure and the management policies and processes drive the Company's strategic direction towards sustainable growth and long-term value creation, carrying out the integrated management of financial and non-financial risks.

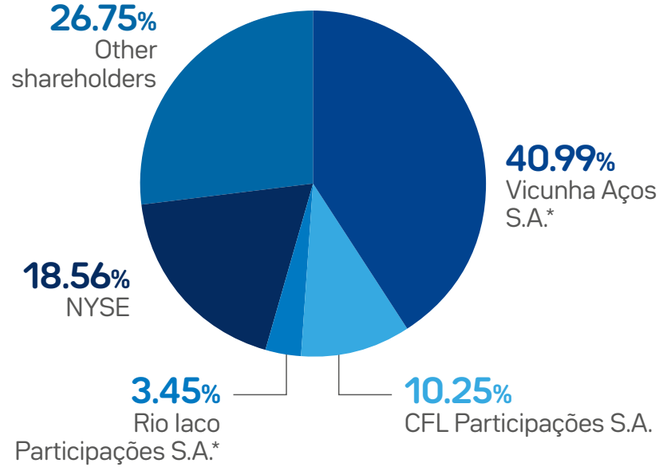
Employees at the Faria Lima office (SP)

Shareholding composition

The share capital, fully subscribed and paid in, is divided into 1,326,093,947 common and book-entry shares, with no par value. Each common share entitles you to one vote in General Meeting resolutions – the controlling group owns 54.69% of the Company's voting capital.

On March 30, 2023, the Company published via material fact, filed with the CVM, the current shareholding composition of CSN.

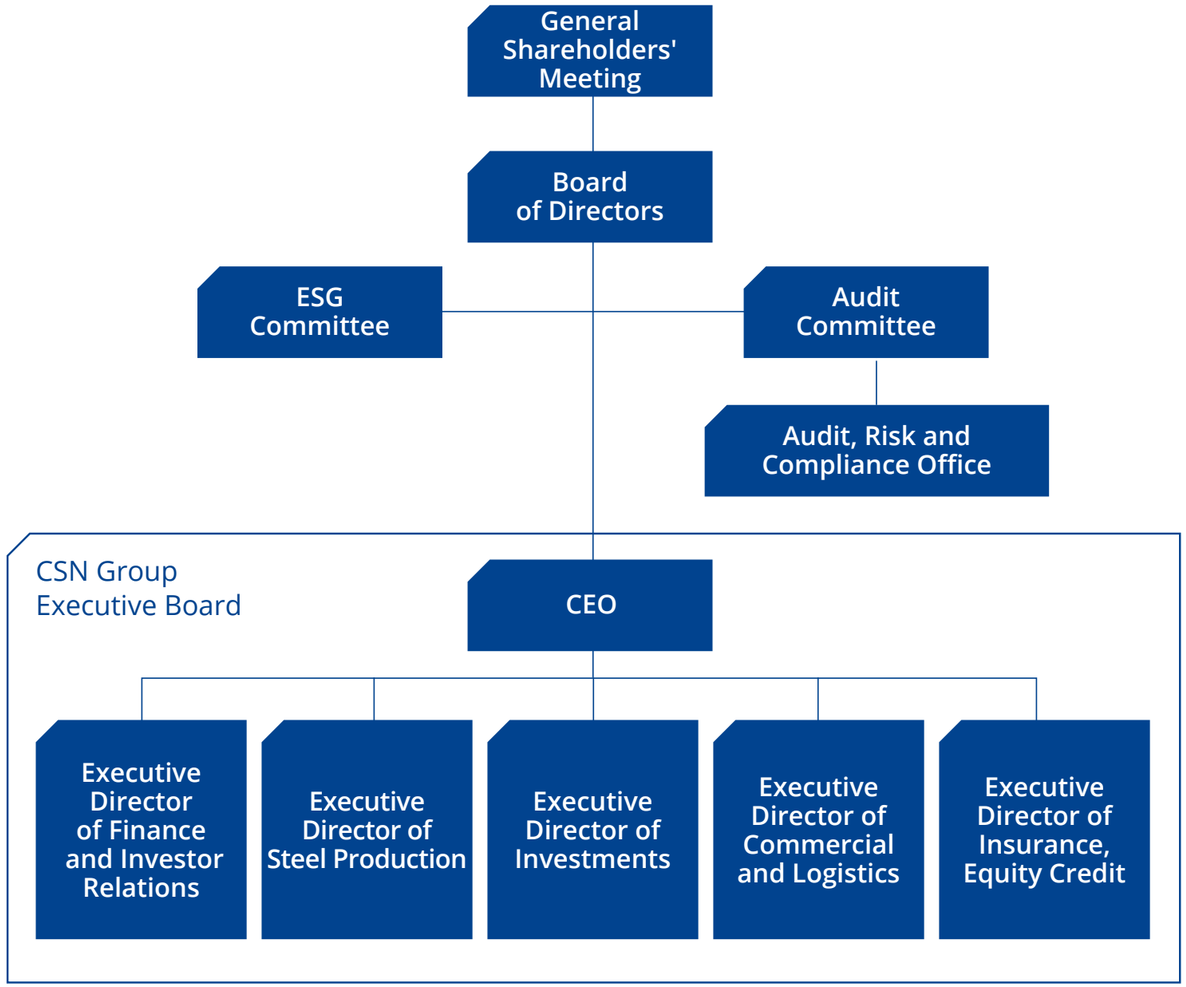
CSN's Shareholding structure



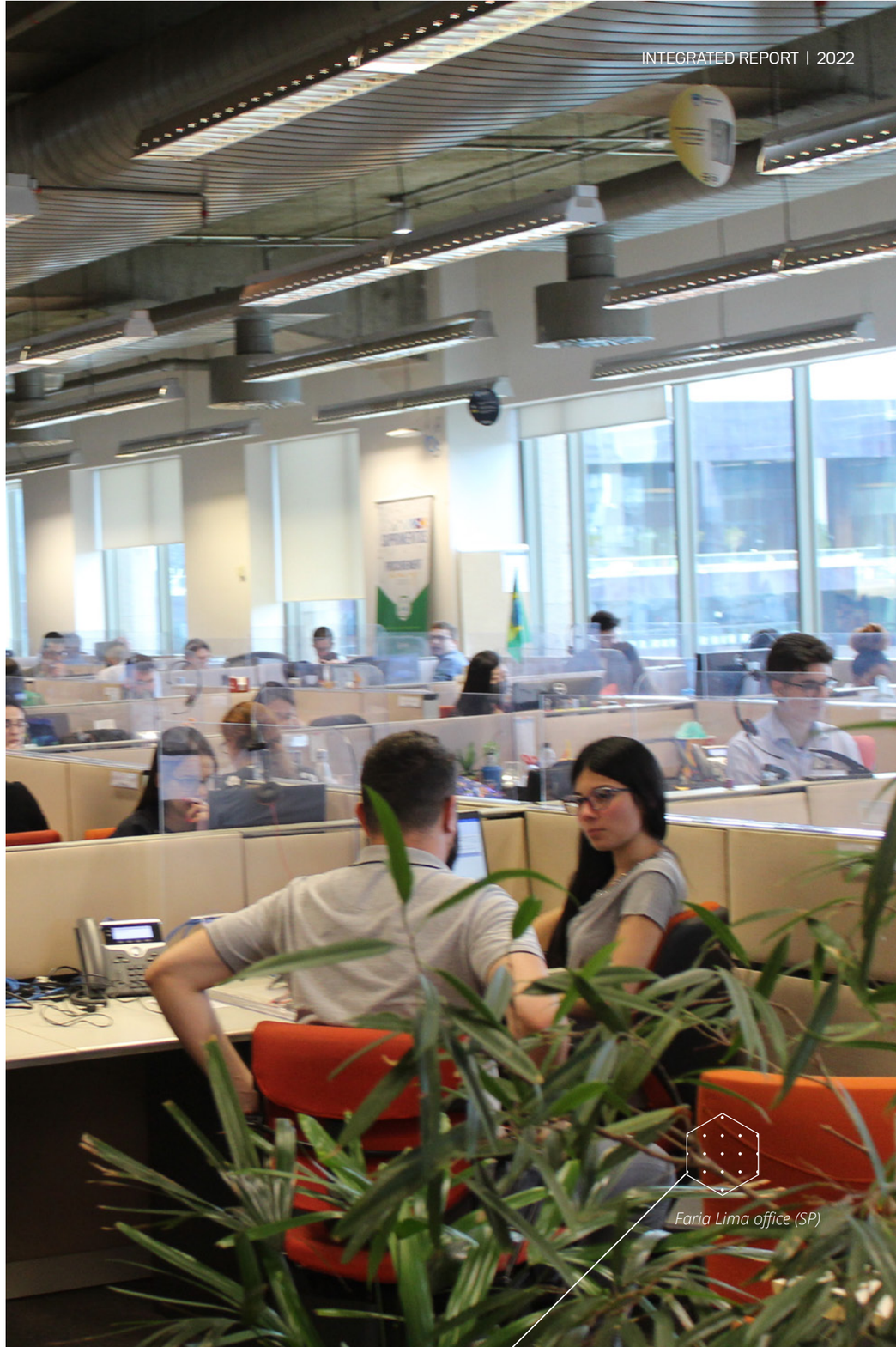
*Controlling group companies.

GRI 2-1 | 3-3

Governance structure



GRI 2-9 | 2-13 | 3-3



Faria Lima office (SP)

General meeting

Shareholders meet, ordinarily, in the first four months following the end of the fiscal year and, extraordinarily, whenever necessary. The General Meeting constitutes the highest decision-making body at the Company, responsible for electing and dismissing the members of the Board of Directors and the Fiscal Council; sets the global amount of the management compensation; decides on the allocation of net income for the year and the distribution of dividends; among other attributions detailed in the Company's Bylaws (available **here**) and consistent with the applicable legislation.

Board of Directors

- It can be composed of up to 11 members, and in 2022 it was made up of five members, of which three are independent and one employee representative.
- The members of the Board of Directors are elected by the General Meeting, which takes into account requirements described in the good governance practices manuals: with knowledge and experience to address and deliberate on economic, social and environmental issues that have an impact on the business or strategy of the Company, in addition to adherence to CSN's principles, level of independence and availability of time to exercise their functions.
- Two-year terms, with permission for re-election.
- It sets the overall direction of the business; approves annual and multi-annual budgets, expansion projects and investment programs, as well as monitors their execution and performance; elects and removes members of the Board of Directors and advisory committees; among other attributions detailed in the Bylaws (available **here**) and on the Company's reference form (available **here**).
- In 2022, the Board of Directors held 32 meetings, of which six were ordinary and 26 were extraordinary. At the meetings, strategic topics, risks and opportunities for the business were discussed, including ESG risks and opportunities presented by the ESG committee, in addition to the election of new members for the ESG Committee, acquisitions of equity interests and approvals of operations in the capital market.

Composition of the Board of Directors[1]

	Age	Position
Benjamin Steinbruch	69	Chairman of the Board of Directors
Fabiam Franklin	55	Effective member representative of the employees
Yoshiaki Nakano	78	Independent member
Antônio Bernardo Vieira Maia	63	Independent member
Miguel Ethel Sobrinho	76	Independent member

1. Composition in 12/31/2022.

Executive Board

Comprised of six executive directors with complementary skills, elected by the Board of Directors to carry out their duties and conduct business in general, guided by strategic guidelines and corporate policies.

Composition of the Executive Board[1]

	Age	Position
Benjamin Steinbruch	69	CEO
Marcelo Cunha Ribeiro	45	Executive Director of Finance and Investor Relations
Milton Picinini Filho	63	Executive Director of Steel Production
Stephan Heinz Josef Victor Weber	61	Executive Director of Investments
Luis Fernando Barbosa Martinez	59	Executive Director of Commercial and Logistics
David Moise Salama	56	Executive Director of Insurance, Equity Credit

1. Composition in 12/31/2022.

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

GRI 2-9 | 2-10 | 2-11 | 2-13 | 3-3 | 405-1

Advisory committees

- The Board of Directors may set up committees, technical and advisory, with the purpose of advising it in order to ensure the deepening of discussions and the quality of decisions.
- The objectives and attributions of a Committee are set by the Board of Directors at the time of its creation.

Audit Committee
Statutory committee created in 2005, made up of three independent members – all elected for a two-year term, reelection being permitted. Its attributions include, among others, the monitoring and quality control of financial statements, internal controls, risk management and compliance and follow-up of investigations and handling of complaints carried out through its reporting channels, in addition to other attributions provided for in its own internal regulations.

Composition of the Audit Committee[1]

	Age	Position
Yoshiaki Nakano	78	Independent member – President
Antonio Bernardo Vieira Maia	63	Independent member
Miguel Ethel Sobrinho	76	Independent member

1. Composition in 12/31/2022.

ESG Committee
Non-statutory committee, made up of 17 CSN executives, as per the latest update approved by the Board of Directors in May 2022. Its role is to support the decision on environmental, social and governance (ESG) risks and opportunities and on other topics related to the Company's ESG management, such as diversity, equity and inclusion, risks and opportunities associated with climate change, waste management, innovation, circular economy, water and effluents, biodiversity and ecosystem services, occupational health & safety, territorial development, value chain and governance & compliance.

Composition of the ESG Committee[1]

	Age	Position
Victoria Steinbruch	30	Advisor to the Presidency – Chairwoman of the ESG Committee
Felipe Steinbruch	29	Head of CSN Inova – Vice President of the ESG Committee
Alberto de Senna Santos	40	Advisor to the Presidency – Effective member
Claudia Maria Sarti	53	Corporate Legal, Governance and Capital Market Manager – Effective member
Edvaldo Araújo Rabelo	64	Director of Operations of CSN Cimentos – Effective member
Enéas Garcia Diniz	62	Superintendent Director of CSN Mineração – Effective member
Harry Morgenstern	71	Director of Procurement and Investments – Effective member
Helena Brennand Guerra	46	Director of Sustainability and HSE – Effective member
Leonardo de Abreu	44	People and Management Director – Effective member
Marcelo Cunha Ribeiro	45	Executive Director of Finance and Investor Relations – Effective member
Milton Picinini Filho	63	Executive Director of Steel Production – Effective member
Mônica Garcia Fogazza Rego	54	Chief Executive Officer of CSN Foundation – Effective member
Nuno Francisco Bruno Saramago	51	Director of Logistics Planning and Special Sales – Effective member
Pedro Barros Mercadante Oliva	37	Executive Director of Finance of CSN Mineração– Effective member
Rogério Gonçalves Pizeta	52	Energy Director – Effective member
Ubaldo Marques Silva Filho	45	Procurement Director – Effective member
Igor Estrada Gouvea	42	Audit, Risks and Compliance Director

1. Composition in 12/31/2022.

GRI 2-9 | 2-13 | 3-3

Ethics, Risks and Compliance Committee

The Company also has an Ethics, Risks and compliance: responsible for evaluating and deliberating on the most relevant cases, when related to violations of the Code of Conduct and other internal policies and rules of the Company, reported by the Audit, Risks and compliance. The main cases of complaints and investigations, including those evaluated by the Ethics, Risks and compliance, are reported to the Audit Committee.

Fiscal Council

- Non-permanent body. When instituted, always at the request of the shareholders, it is composed of three effective members and three alternates elected at the General Meeting. The Fiscal Council was installed in the last 5 years.
- It is responsible for overseeing the acts and compliance with legal and statutory duties by the members of the Board of Directors and Executive Board.

Composition of the Fiscal Council[1]

	Age	Position
Angélica Maria de Queiroz	65	Chairwoman of the Fiscal Council
André Coji	58	Effective member
Valmir Pedro Rossi	61	Effective member
Beatriz Santos Martini	68	Alternate member
Nilton Maia Sampaio	67	Alternate member
Andriei José Beber	49	Alternate member

1. Composition in 12/31/2022.

Skills and Abilities of the Board of Directors

Board of Directors	Finance	Risk management	ESG and Innovation	Economy and Politics	Industrial Operations/Mining
Benjamin Steinbruch	✓	✓	✓	✓	✓
Yoshiaki Nakano	✓			✓	
Antônio Bernardo Vieira Maia	✓	✓	✓	✓	
Miguel Ethel Sobrinho	✓	✓	✓	✓	✓
Fabiam Franklin	✓			✓	✓

GRI 2-9 | 2-13 | 3-3

Business governance

As they mature, CSN's businesses begin to have structures with their own and independent governance as a way of speeding up decision-making and the verticalization of the sectors in which they operate. In this sense, CSN Mineração S.A. and CSN Cimentos S.A. have their own board of directors and statutory boards. CSN Mineração S.A. also has an independent Audit Committee.

In addition, the management of CSN's businesses is supported by the following executive committees, which advise the Board of Directors on strategic and operational issues, in the appraisal of action plans for risk mitigation and in business development:

- Crisis Committee
- Occupational Health and Safety Committees
- Internal Environmental Management Committee
- Investment Committee
- People, Management and Career & Succession Committee
- Portfolio Committee
- Community Committee at CSN Mineração
- Dam Committee

Composition of the Board of Directors at CSN Mineração S.A.[1]

	Age	Position
Benjamin Steinbruch	69	Chairman of the Board of Directors
Marcelo Cunha Ribeiro	45	Effective Member
Victoria Steinbruch	30	Effective Member
Helena Olímpia de Almeida Brennand Guerra	46	Effective Member
Hiroshi Akiba	59	Effective Member
Miguel Ethel Sobrinho	76	Independent Member
Yoshiaki Nakano	78	Independent Member
Daisuke Hori	50	Alternate Member

1. Composition in 12/31/2022.

Composition of the Audit Committee at CSN Mineração S.A.[1]

	Age	Position
Yoshiaki Nakano	78	Independent member – President
Angélica Maria de Queiroz	65	Independent Member
Beatriz Santos Martini	68	Independent Member

1. Composition in 12/31/2022.

Composition of the Statutory Executive Board at CSN Mineração S.A.[1]

	Age	Position
Enéas Garcia Diniz	63	Superintendent Director
Ricardo Grossi Neves	48	Director of Operations
Hironori Makanae	52	Director of Strategic Planning
Pedro Barros Mercadante Oliva	37	Director of Finance and Investor Relations Officer
Otto Alexandre Levy Reis	57	Director of Investments

1. Composition in 12/31/2022.

Composition of the Board of Directors at CSN Cimentos S.A.[1]

	Age	Position
Benjamin Steinbruch	69	Chairman of the Board of Directors
Helena Olímpia de Almeida Brennand Guerra	46	Effective Member
Victoria Steinbruch	30	Effective Member
Yoshiaki Nakano	78	Independent Member
Miguel Ethel Sobrinho	76	Independent Member

1. Composition in 12/31/2022.

Composition of the Statutory Executive Board at CSN Cimentos S.A.[1]

	Age	Position
Marcelo Cunha Ribeiro	45	Superintendent and Investor Relations Director
Edvaldo Araújo Rabelo	64	Operational Director
Luis Fernando Barbosa Martinez	59	Commercial Director

1. Composition in 12/31/2022.

GRI 3-3

Executive assessment and compensation

CSN does not have formally established processes and mechanisms for evaluating the performance of the members of the Board of Directors. However, the reelection of members considers performance and attendance at meetings during the previous term. On top of that, the Board of Directors has complete autonomy to discuss the individual performance of each member and, therefore, propose measures to improve its mandate.

The Audit Committee's performance is measured through an annual self-assessment procedure, based on an individual questionnaire included in the body's meeting minutes. Subsequently, the responses are discussed among all members to identify opportunities for improvement. The Audit Committee's most recent assessment took place on May 25, 2022.

In order to strengthen performance and the level of knowledge on strategic topics, including sustainability aspects, in 2022 CSN inaugurated the Corporate University (learn more on page 92). This content is available to 100% of employees, including members of the Board of Directors and Committees. One of the available schools contains digital content on ESG and sustainable development, contributing to broadening the Board of Directors' understanding of this topic.

The compensation practice of these instances considers the compatibility between the compensation offered and the responsibility exercised and the time dedicated to the position.

Directors are individually evaluated, based on specific work and projects and differentiated goals – financial, ESG and others. This process is supported by the People & Management Department, which evaluates the results and advises on the permanence or promotion of executives in their respective positions.

The compensation practice of both statutory and non-statutory Directors seeks to be compatible with the market and the responsibility exercised by the position, considering their responsibility and their commitment to fulfill the Company's strategic objectives.

The Directors' performance compensation is determined according to the achievement of financial and non-financial targets established in the strategic and budget planning.

The amounts to be paid follow market studies carried out every two or three years, by consultants specializing in compensation, and are approved by the Board of Directors.

The compensation of the members of the Board of Directors and the Audit Committee is fixed, defined based on market practices. The compensation of the Fiscal Council is established by the General Shareholders' Meeting and is based on the amount of 10% of the average value of the fixed compensation of the Executive Directors, in accordance with the legal provision. There is no share-based compensation plan for the Board of Directors and Statutory Board of Executive Officers.

Faria Lima office (SP)

The Directors' performance compensation is determined according to the achievement of financial and non-financial targets, including ESG

GRI 2-17 | 2-18 | 2-19 | 2-20 | 3-3

Ethics and compliance

To ensure integrity, transparency and alignment with best practices, as well as the effectiveness of anti-corruption and anti-bribery controls in all units and businesses, CSN maintains a consistent compliance Program, which seeks to guarantee the organizational reputation and ensure the exercise activities in a sustainable way, in compliance with the legal system and applicable rules, and with the highest ethical standards. The mechanism is based on eight pillars, in constant improvement, which aim to certify that the internal rules and controls in force are known and complied with and mitigate the risks inherent to the Company's processes. The program was developed in accordance with the parameters of the Brazilian Anti-Corruption Law (Law No. 12,846/13) and international legislation, such as the Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act, and undergoes periodic external assurance.

Among the initiatives for disseminating an ethical culture are awareness and guidance projects through training, internal communication and monitoring of corporate activities and conduct. The initiative is carried out by all areas of the Company, being coordinated by the Audit, Risks and compliance Department, supported by the Legal and People & Management, Communication and Occupational Safety areas.

The main theoretical reference responsible for disseminating the Company's principles is the Code of Conduct. The material is applicable to all employees, directors and members of the corporate governance bodies, in Brazil and abroad, in addition to establishing responsibilities for third parties, considering suppliers, service providers and any intermediary agents and associates. In 2022, the document underwent revision and, as of 2023, it will be named the Code of Conduct and will be applicable to all CSN Group businesses.

All employees, when admitted, are presented with the Code of Conduct, which formalizes their knowledge and agreement on a mandatory basis, which is renewed annually. In addition to being trained upon integration, new training on the Company's Code of Conduct and Anti-Corruption Policy is provided annually. Employees allocated in areas of the Company classified as being exposed to risks receive targeted training. They are currently taught through the School of Excellence in Results at the Corporate University. In this way, employees have the opportunity to be in continuous contact with the guidelines of the Code of Conduct.

In 2022, the Code of Conduct was revised and can be accessed on all the Company's main websites, **access here.**

Employee at the Faria Lima office (SP)

Combating discrimination

It is strictly prohibited, in all units, any mention or manifestation of discrimination based on origin, religion, ethnicity, race, gender, sexual orientation, union status, social class, age, marital status, political party positions, ideological positions, physical appearance and disability of any nature. 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.

GRI 2-23 | 2-24 | 3-3 | 205-1 | 205-2
SASB EM-MM-510a.1

Faria Lima office (SP)

How to access the Whistleblowing Channel:

0800-884-2006

canal_denuncia@csn.com.br

https://www.canalconfidencial.com.br/csn

C/O Risk and Compliance Department
Rua Engenheiro Francisco Pitta Brito, 138 – Jardim Promissão – São Paulo/SP – CEP 04753-900

For questions and additional information regarding compliance, e-mail compliance@csn.com.br.

The Company also maintains a Compliance Ambassadors Program, which aims to strengthen an ethical culture in all spheres of the organization. Through training and monthly meetings, this team of professionals receives training to promote and multiply the Company's internal principles and values. In 2022, the program had 255 volunteers.

For external audiences, the Company makes specific pages available on its website Institutional, Investor Relations and ESG for broad dissemination of its programs, ensuring the achievement of 100% of its stakeholders with communications related to its compliance and anti-corruption policies and practices.

In 2022, the number of employees trained in the Compliance Program increased 21%, reaching 21.841 professionals in Brazil (83% of the headcount on December 31). In the operations abroad, Lusosider and SWT, these trainings are not yet systematized, therefore there was no accounting of training in these units.

The Compliance Program also includes the Whistleblowing Channel – available 24/7 – for internal or third-party reports received through physical and electronic mail, telephone or via the website. The first response to the whistleblower takes place within 15 days after the opening and the conclusion may depend on the investigation process of each case. In line with best practices, an external and independent company is responsible for recording and transcribing reports in order to obtain the best possible information to enable the investigation. When necessary, professional psychologists provide victim-focused care so that all necessary support is available in a welcoming and professional manner. Then the dealings will be defined through investigation and assertiveness, always focusing on the safety of the victim so that the "accused" receives the appropriate disciplinary measure, always guaranteeing secrecy, and non-retaliation to the whistleblower.

All information is stored on an external server, to ensure confidentiality and impartiality in dealing with issues and it is up to the complainant to choose to report the complaint identified or anonymously, respecting secrecy and the policy of non-retaliation in all cases, as provided in the Code of Conduct.

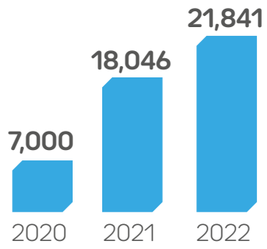
Concluding investigations is the responsibility of the Audit, Risks and Compliance Board and the conclusions are forwarded to the Audit Committee or Ethics Committee, which act as supervisory bodies for corporate governance activities.

GRI 2-25 | 2-26 | 3-3 | 205-2
SASB EM-MM-510a.1

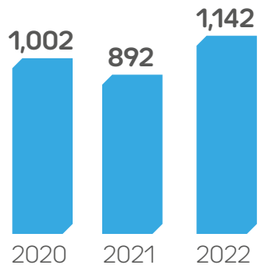
The result of investigation and the channel's statistics are presented every two months to the Audit Committee, ensuring the independence and impartiality of the process. For cases determined to be valid, the appropriate disciplinary measures are applied. In 2022, 1,142 manifestations were received, of which 294 (26%) were considered valid or partially valid at the end of the respective investigations.
Of the total number of manifestations received, 36 were related to possible cases of discrimination, 100% of which were investigated, with the application of disciplinary measures according to the result of each investigation of the facts. No cases of corruption were identified during the period, nor were the CSN Group or its employees the target of legal proceedings related to the matter.

Requests for guidance and clarification on how to act in line with the Company's conduct guidelines are received by e-mail by the Compliance team. In the last year, the number of requests more than doubled, reaching 2,144 compared to 791 in the previous period. This increase was mainly related to questions about revision of contractual clauses, conflicts of interest and gifts/gifts, presenting itself as a positive result of actions that were improved and strengthened to raise awareness of all spheres of the organization.

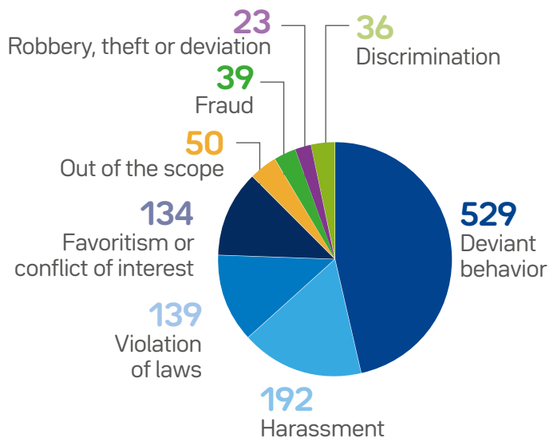
Employees trained in ethics and compliance



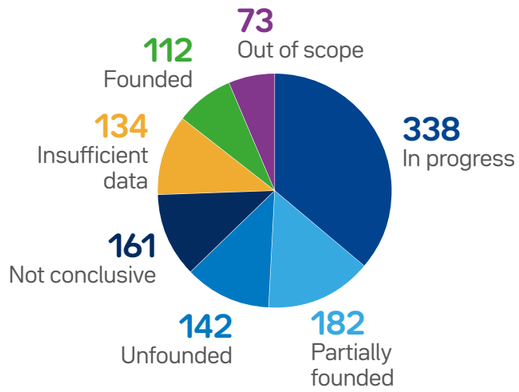
Manifestations received by the Whistleblowing Channel



Manifestations received by the Whistleblowing Channel in 2022 by category



Manifestations received by the Whistleblowing Channel in 2022 by treatment status



Measures taken in relation to the cases of the Whistleblowing Channel investigated by the Audit, Risks and Compliance Board

	2020	2021	2022
Written notice	11	9	10
Verbal warning	13	9	4
Resignation	49	45	54
Dismissal for just cause	8	17	30
Guidance	33	29	25
Suspension	3	3	11
Job transfer	2	7	6
Training	0	0	9
Total	**119**	**119**	**149**

Requests for clarification received by email

	2020	2021	2022
Reply from due diligence of business partners	514	705	936
Review of contractual clause	0	53	203
Conflict of interest	0	13	250
Questions related to the area of compliance	0	8	14
Compliance with standards	0	6	9
Documentation request	0	3	27
Information leak	0	2	0
Freebies / Gifts	0	1	205
Outside the scope of compliance	0	0	5
Donation	0	0	495
Several	0	0	0
Total	**514**	**791**	**2.144**
Percentage of requests answered	**100%**	**100%**	**100%**

GRI 2-25 | 2-26 | 3-3 | 205-3 | 406-1
SASB EM-MM-510a.1

Employee in Mogi das Cruzes (SP)

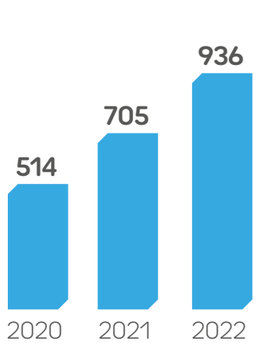
Integrity of suppliers and related parties

The Compliance area executes Compliance and Anti-Corruption Background Check and Know Your Customer (KYC) processes through tools to assess the integrity of suppliers, third parties and other related parties, with a focus on identifying adherence to the ethics, integrity and compliance criteria established by the Company, as well as detecting conflicts of interest, since One of the focuses of the Compliance Program is to ensure full respect for human rights and good labor practices, combating child or forced labor, or work analogous to slavery in the supply chain.

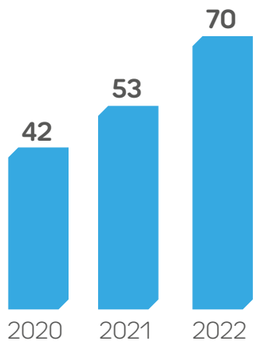
All contracts formalized with suppliers include clauses related to good ethical practices and anti-corruption. Nevertheless, before they are signed, a prior assessment is carried out using the Compliance Form, based on the National Classification of Economic Activities (NCEA), all suppliers considered critical in relation to ethics and compliance issues must be screened by the Company's Compliance area.

In merger, acquisition and corporate restructuring processes, the Company adopts procedures to identify vulnerabilities and risk of irregular practices in the legal entities involved, which are provided for in the Prevention and Combating Fraud and Corruption standard. Among the practices adopted, the prior execution of due diligence, compliance and Anti-Corruption Background Check and KYC for any corporate transaction, aimed at identifying and evaluating any irregular practices in legal entities. The Audit, Risks and Compliance Department and the Legal Department are responsible for evaluating this process, and may rely on advice from law firms or specialized consultants.

Suppliers evaluated in Compliance (due diligence)



Monthly average of contracts analyzed



Compliance Day

For the seventh consecutive year, CSN held the Compliance Day, which for the third time was held together with the ESG Week schedule (learn more about this event on page 52). The event was attended by employees from all areas in which the Company operated.

Through lectures, the event enabled important reflections and reinforced how compliance is part of the employees' daily lives. The event, which had 800 participants, was held remotely and broadcast live on the Company's internal social networks and communication channels. The lectures dealt with subjects such as Ethics in Organizations, Fraud and Reporting Channels. The Company also has a program of ambassadors of compliance which, through 255 volunteer employees, disseminate ethical values in a natural and mature way in operations.

GRI 3-3 | 205-1
SASB EM-MM-510a.1

Conflict of interests

CSN's Code of Conduct establishes specific rules on conflict of interests applicable to all employees and members of the Board of Directors and Executive Board. All directors and directors sign a term of adherence to the Code of Conduct, as well as a Declaration of Conflict of Interests when they take office in their respective positions.

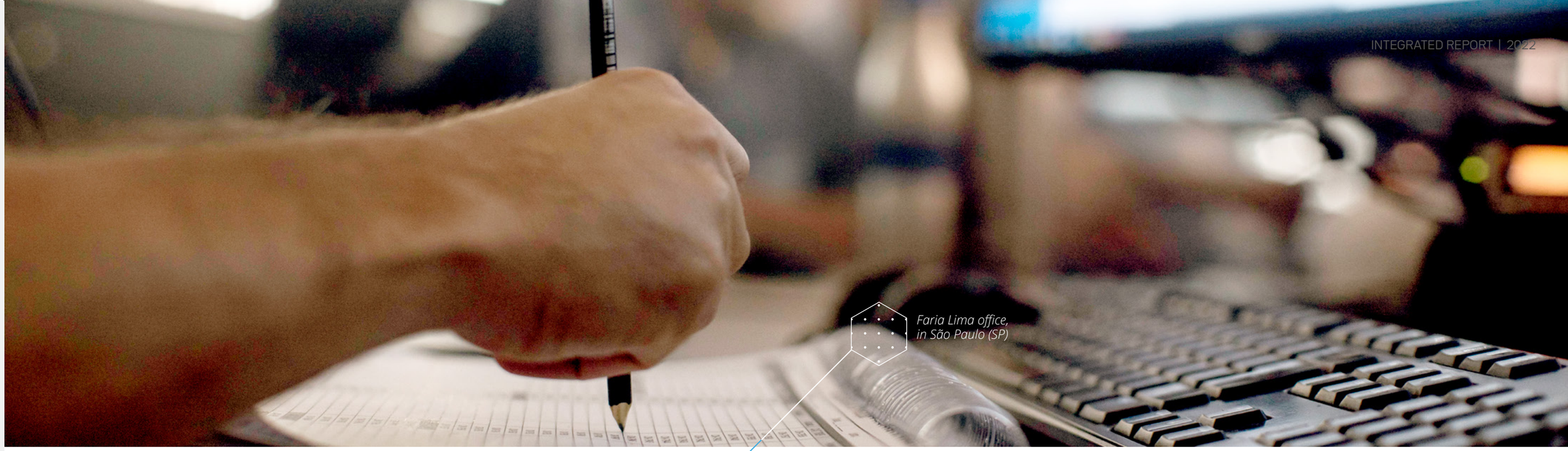
By means of this adhesion, the members of the Board, the Board of Executive Officers and employees undertake to report any actual or potential conflict with CSN's interests in situations involving family or personal relationships, financial, commercial or any other type of interest. If there is a situation of conflict of interest, the members of the management must abstain from deliberations, with the need to be included in the minutes if the case involves a member of the Board of Directors.

If any member of the management does not manifest the conflict of interest, any other person may do so, if they are aware of the case. In 2022, there were no cases of conflicts of interest managed by the Company.

Specific rules on conflict of interest are set out in our Code of Conduct

GRI 2-15 | 3-3

Faria Lima office, in São Paulo (SP)



Faria Lima office, in São Paulo (SP)

Risk management

CSN has a Risk Manual prepared based on the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The document recommends, for example, periodic risk assessments, which include the identification, assessment, reporting and mitigation of risks inherent to the operations of the CSN Group, not restricted to financial risks, but including operational, compliance and strategic risks, including ESG opportunities linked to the Company's material topics.

The identified risks are evaluated and classified according to the probability of occurrence and the magnitude of the impacts arising from their materialization, allowing those of greater relevance to be treated with priority. The Audit, Risks and Compliance Board conducts the general risk analysis process, supporting those responsible for the business areas, and audits the business processes, in accordance with the Annual Audit Plan, with the results periodically reported to the Audit Committee, which advises the Board of Directors. In this way, the entire organizational structure is directly or indirectly related to the risk management process:

First: the business areas and units – the risk owners – which are responsible for the direct management of the risks inherent to their processes, having as their attribution the management and execution of mitigation actions.

Second: the Audit, Risks and Compliance Board, which 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.

Third: Board of Directors, which considers the impacts of the Company's activities to define guidelines and strategic objectives, aiming at perpetuity and sustainable growth; and the Audit Committee, which supports the Board of Directors in monitoring the effectiveness and quality of internal controls, supervising the risk management structure and activities.

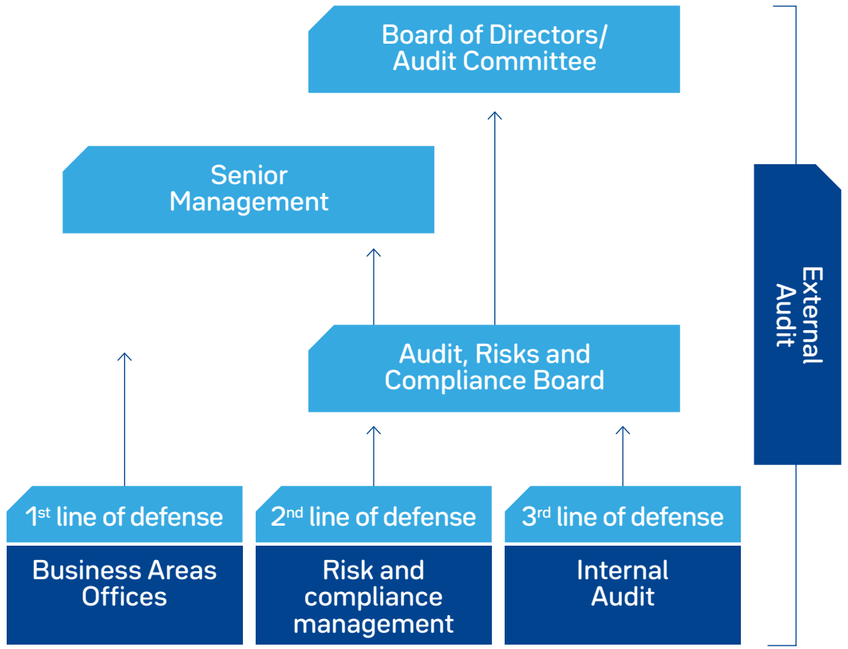
This structure is annually certified by external auditors, in compliance with the Sarbanes Oxley Act (SOx) – section 404.

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

- Control environment
- Risk assessment
- Control activity
- Information and communication
- Monitoring

GRI 2-12 | 2-16 | 3-3

CSN's risk management structure is operated in a partially decentralized manner, based on the concept of lines of defense, with risk control and management activities carried out at all levels of the Company and at different stages of corporate processes.



Click here to learn more about the details of the risks identified by the Company in item 4.1 of its Reference Form.

Information Technology employee at SWT, Germany

Following the best market practices and internationally recognized methodologies, the Company listed four strategic risks that could directly impact (if materialized) its business:

Cyber Risks

CSN's operations depend on telecommunications, information technology systems and automated machines. Disruptions to these systems caused by cyber-attacks can have a negative impact on activities, reputation and stakeholder interactions.

Climate Change

Extreme weather events and the transition to low-carbon economy can significantly impact not only productive activities, but society, the economy and the environment. In this way, the Company is committed to contributing to a more sustainable future, investing efforts and resources to reduce greenhouse gas emissions and mitigate impacts related to changes in climate patterns.

Market

The Company is exposed to various market risks that are natural to the business. There are risks arising from changes in interest rates, exchange rates, as well as prices of raw materials and goods that may adversely affect the value of its financial assets and liabilities, cash flows or future results.

Productive chain

External factors, such as wars, pandemics and geopolitical events, may affect the supply chain, logistical operations and demand for CSN's products, materially impacting the business.

GRI 2-12 | 2-16 | 3-3

Climate risks management

Since 2021, CSN has carried out a comprehensive mapping and assessment of risks and opportunities related to climate change which are more relevant in the context of activities, sectors and regions in which its businesses operate. The risks and opportunities process includes aspects of transition (Market, Technology, Reputation, Regulatory and Legal) and changes in climate patterns (Acute and Physical), as outlined by the TCFD. In 2022, new essential elements for climate management were incorporated, such as the Study of Climate Scenarios. The new version of the assessment of climate risks and opportunities includes four phases as follows:

Click here for more information about the climate scenarios elaborated.

Phase 1

Methodology of the climate risks and opportunities process

From which it is possible to delimit the granularity and scope of the analyzes, time horizon, elaborate the glossary of risks and opportunities, define the taxonomy, definition of the impact rule and the evaluation/prioritization approach.

Phase 2

Mapping and prioritizing climate risks and opportunities

Based on pre-established criteria in Phase 1, potential risk factors and opportunities that could impact CSN's business were mapped. In this step, these risk and opportunity factors are evaluated and distributed in a 5x5 matrix.

Phase 3

Assessment of Climate Scenarios

The risk and opportunity factors arranged in the critical quadrants were evaluated from the perspective of different climate scenarios. The purpose of our scenario study is to encourage the Company's managers to consider factors related to climate change when making strategic decisions.

Phase 4

Climate Adaptation

This component incorporated in the new version of the climate risks and opportunities process is essential for CSN's climate change strategy. In 2023, the company will continue its climate vulnerability study, systematically mapping adaptation actions and consolidating a climate adaptation plan, which corresponds to phase 4 of the risks and opportunities process.

In 2022, an extensive benchmark with about thirty companies and internal discussions in the Climate Change & Air Thematic Group in which CSN mapped new risks and opportunities. besides the benchmark, as a source for the survey of potential risk factors, strategic reports were used (from the Intergovernmental Panel on Climate Change – IPCC, in its acronym in English; and from the Institute for Advanced Studies – IEA, of the University of São Paulo), as well as from previous studies already carried out by CSN. 39 climate risk factors and 33 climate opportunity factors were identified, which were divided following the taxonomy set forth in the Task Force on Climate Related Financial Disclosures (TCFD).

The risks identified as critical were analyzed, considering three climate scenarios –Business As Usual (BAU), Stay On the Fence (SOF) and Net-Zero Emission (NZE) – and monetized.

Risk/Opportunity Matrix

Probability of occurrence x Impact magnitude

Low (1-15) | Average (16-44) | High (45-79) | Critical (80-125)

PROBABILITY OF OCCURRENCE					
Very high	25	50	75	100	125
High	16	32	48	64	80
Medium high	9	18	27	36	45
Medium	4	8	12	16	20
Low	1	2	3	4	5

IMPACT MAGNITUDE

Low	Medium	Medium high	High	Very high
Short (1 to 3 years)		Medium (4 to 5 years)		Long (over 6 years)

A 5x5 matrix for each time horizon

Granularity

Risks at a local level, with granularity by business:

1. Steel industry
2. Steel industry (abroad)
3. Cement
4. Mining
5. Energy
6. Ports
7. Logistics

Corporate-level risks:

8. CSN
9. CMIN

GRI 3-3 | 201-2

Overall, 10 physical risk factors were identified, characterized by impacts arising from changes in weather patterns and separated into chronic (long-term changes in weather patterns that may cause, for example, rising sea levels or changes in weather patterns) precipitation) and acute (extreme weather events such as cyclones, hurricanes or floods); and 29 transition risk factors, which arise on the way to a low-carbon economy, which can be regulatory, legal, technological, market and reputational.

33 opportunity factors were also observed, such as the use of resources more efficiently, consumption of energy from renewable sources, creation of products and services to meet the needs of changes in climate patterns or the accelerated transition to a low-carbon economy, among others related to adaptation measures to curb potential impacts arising from changes in climate patterns.

CSN completed a comprehensive mapping and assessment of risks and opportunities related to climate change

GRI 3-3 | 201-2

Employee at Prada Mogi das Cruzes (SP)

The risk factors and opportunities that were categorized as critical are as follows:

Risks located in the highly relevant quadrants[1]

Climate risk factor	Actions and strategy to mitigate the potential impact	Sector / Business	Time horizon
1. Absence of a product portfolio aligned with different climate scenarios and future society's need for eco-friendly products	1.a. Diversification of businesses and locations 1.b. Development of new products and low-carbon technological routes	**Steel Industry**, **Mining**, **Cement**, **Energy**, **Logistics**	Long-term
2. Market creation or implementation of carbon taxation in international markets (New pricing)	2.a Elaboration of emission reduction targets for CSN Mineração 2.b Investment in the Itabirito beneficiation plant to produce premium ore and in technologies to reduce GHG emissions 2.c Long-term iron ore sales contract 2.d Construction of strategic partnerships aimed at selling high quality iron ore to direct reduction routes	Steel Industry, **Mining**, Cement, Energy, Logistics	Short-term
3. Creation of the market and/or implementation of carbon taxation in Brazil (New Pricing)	3.a Emission reduction targets for the Cement segment aligned with sectoral roadmaps 3.b Integrated circularity strategy to reduce the clinker factor 3.c Acquisition of new low-carbon plants 3.d Development of MAC Curve and decarbonization roadmap to implement feasible technologies	Steel Industry, Mining, **Cement**, Energy, Logistics	Mid-term
4. Water scarcity and droughts due to changes in precipitation patterns	4.a Acquisition of new power generation plants in different geographies 4.b Diversification of the power generation energy matrix 4.c Elaboration of a climate vulnerability study considering different climate scenarios	Steel Industry, Mining, Cement, **Energy**, Logistics	Long-term
5. Increased intensity and frequency of extreme weather events (Urban, River and Coastal Floods)	5.a Rain prevention plan at CSN Mineração for critical periods 5.b. De-characterization of dams and stacking of tailings	Steel Industry, **Mining**, Cement, Energy, Logistics	Mid-term
6. Creation of the market and/or implementation of carbon taxation in Brazil (New Pricing)	6.a Emission reduction targets for the Steel segment 6.b Investment in green H2 applied to energy efficiency 6.c MAC Curve Development and roadmap decarbonization to implement feasible technologies 6.d. Building strategic partnerships with a focus on decarbonization	**Steel Industry**, Mining, Cement, Energy, Logistics	Mid-term
7. Loss of competitiveness due to the delay in developing more sustainable production routes compared to the practices of national and international competitors	7.a Emission reduction targets for the Steel segment 7.b Investment in green H2 applied to energy efficiency 7.c MAC Curve Development and roadmap decarbonization to implement feasible technologies 7.d. Building strategic partnerships with a focus on decarbonization	**Steel Industry**, Mining, Cement, Energy, Logistics	Mid-term

1. The seven risk factors presented in the table above are the most critical for the Company, but do not eliminate the occurrence of these for other sectors. For example: the water scarcity risk factor in Mining (which exists for Energy in this table) was categorized as low, because in the future climate scenario it is estimated that the average precipitation will be higher in the region of greater exposure. Thus, the risk factor exists in the process, but is not explained in the table because it is not critical from the perspective of a climate risk.

Opportunities located in quadrants of high relevance

Climate opportunities	Sector/Business	Time horizon
1. Operational continuity and stability projects in the Steel Industry	**Steel Industry**, Mining, Cement, Energy, Logistics	Mid-term
2. Use of Hydrogen as an element of the decarbonization strategy and new production routes	**Steel Industry**, Mining, Cement, Energy, Logistics	Long-term
3. Load plating strategy (ore quality, HBI etc.)	**Steel Industry**, Mining, Cement, Energy, Logistics	Mid-term
4. Product portfolio aligned with different climate scenarios and the needs of future society	**Steel Industry**, **Mining**, **Cement**, **Energy**, **Logistics**	Long-term
5. Reduction of the clinker factor from the use of slag or other cements in order to reduce CO emissions and promote circularity	Steel Industry, Mining, **Cement**, Energy, Logistics	Short-term
6. Demand for higher quality ore by the market	Steel Industry, **Mining**, Cement, Energy, Logistics	Mid-term
7. Investment in renewable energy and energy matrix diversification	Steel Industry, Mining, Cement, **Energy**, Logistics	Mid-term
8. Circular economy and integration between sectors promoting efficiency and impact reduction	**Steel Industry**, **Mining**, **Cement**, **Energy**, **Logistics**	Short-term

The climate risk process is integrated into corporate risk management. The work reflects the entry of the risk area into the Climate Change Thematic Group, whose meetings are monthly, and results in a unified risk matrix. In 2022, a thematic subgroup on Climate Risk and Opportunity Management was created as an operational governance instrument to specifically address this topic. Due to this proximity, the climate risks and opportunities process talks directly with the Company's risks process, allowing the incorporation of these in the corporate matrix. Find out more in the Climate Change chapter under the scope of the TCFD, on page 137 of this report.

The management of climate risks and opportunities, as well as the decarbonization journeys in each of the operating segments make up the Strategic Climate Action Plan (PAC) and are monitored by the Climate Change & Air Group, one of the thematic groups that make up the ESG Committee, linked directly to the Board of Directors – to which it is periodically reported to performance of emissions from each segment, among other sustainability indicators and externalities related to the topic.

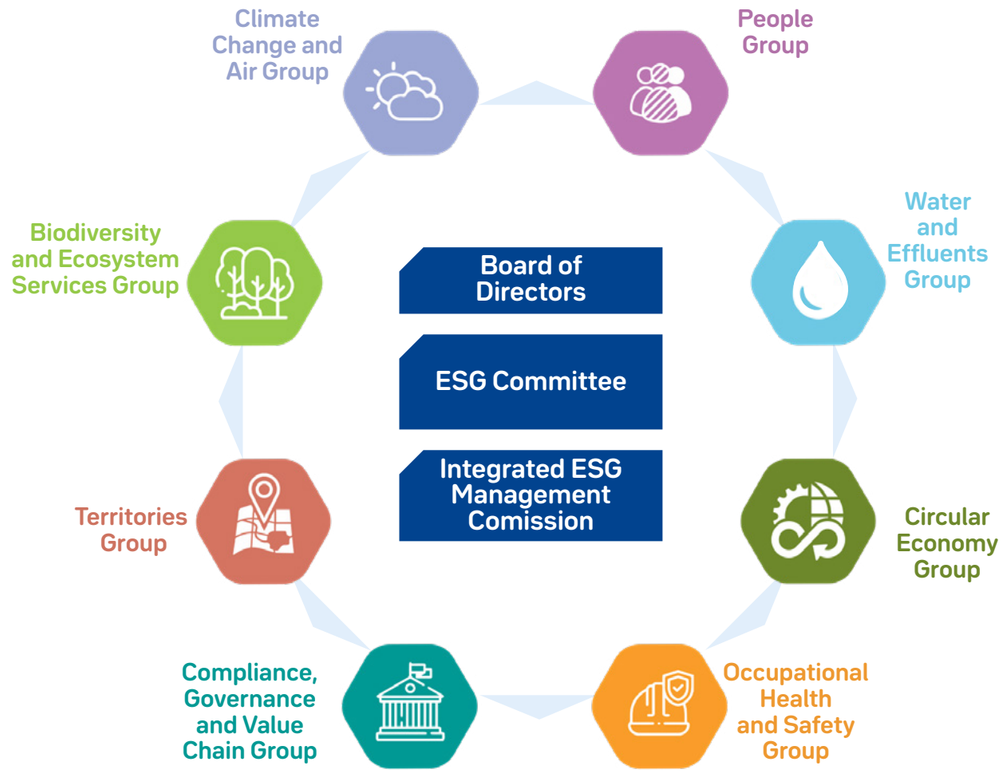
HPP Itá (SC)

GRI 3-3 | 201-2

Strategic pillars

Sustainability

CSN's ESG agenda includes 12 priority topics, identified in a broad materiality process (see more on page 5), which reports directly to the CEO of CSN. The Committee acts directly in the management of indicators, assessment and identification of ESG risks and opportunities in the development of projects to leverage the innovation agenda. 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. In order to support the decisions of the Board of Directors, the ESG Committee is responsible for presenting to this body the advances, challenges, risks and opportunities for ESG.



This Committee is currently composed of 17 members, most of whom are directors, and may call on external participants to strengthen the technical-scientific perspective when relevant. The committee's structure is also complemented by the ESG Integrated Management Commission, formed by the CSN Inova Bridge team and the Sustainability Board, and complemented by eight thematic groups, whose themes are in line with the Company's materiality matrix, coordinated by 25 ESG ambassadors. The main function of the Commission is to standardize concepts, disseminate good practices in all segments of activity and make the connection between the eight action groups and the members of the Committee, focusing on the acceleration and evolution of themes and the achievement of ESG goals in a strategic and structured way.

In 2022, the first year of operation, six ESG Committee meetings were held, 1,400 hours of training and workshops with the 25 ambassadors and 67 initiatives mapped. For 2023, another 25 ESG ambassadors will be incorporated, reaching a total of 50 participants in the eight thematic groups

GRI 2-23 | 2-24 | 3-3

CSN Araucária (PR)

The guidelines for solid growth and commitment to the Company's priority themes are also set out in the Sustainability Policy (available **here**). The document was approved by the Board of Directors in 2021 and its pillars, represented by the acronym **ALWAYS** (SEMPRE in Portuguese), guide employees, own and third parties, as well as suppliers and other stakeholders, for the proactive incorporation of the best socio-environmental, competitive, ethical and governance practices in its decisions and the strengthening of the culture of prevention and control of risks to health and safety, respect for the environment and safe behavior.

Pillars of CSN's Sustainability Policy

- **S** Sustainability in business
- **E** Ethical, transparent and inclusive company
- **M** Continuous improvement
- **P** Environment protection, prevention of pollution and occupational accidents
- **R** Respect for the legislation
- **E** Educating and training

GRI 2-23 | 2-24 | 3-3

Management systems

Processes, procedures and tools, created and monitored by the Environmental Management System (SGA) and by the Health and Safety Management System (SGSS), materialize the Sustainability Policy in the day-to-day business. The EMS was developed based on the highest standards, especially the NBR ISO 14001:2015 standard. Around 95% of the Group's production units are certified under this standard, with two of them achieving this feat in 2022: CSN Cimentos Volta Redonda (RJ) and CSN Cimentos Alhandra (PB). With the acquisition of the Brazilian operations of LafargeHolcim Brasil, another 11 operations certified in ISO 14001:2015 are now accounted for in this indicator. The system ensures full compliance with environmental legislation, maximum efficiency in the use of natural resources, protection of biodiversity and employee awareness.

The Green Line – a channel open to all audiences for clarifications, denouncements, complaints, suggestions and other contacts related to environmental and social issues – complements the SGA. Occurrences are received by specialized teams in each unit, assessed and investigated confidentially, so that a solution or justification can be provided within a maximum of 15 working days. The volume and content of the calls, as well as the internal guidelines resulting from each one of the calls, are periodically reported to Senior Management and monitored in meetings to manage operational, environmental and social indicators.

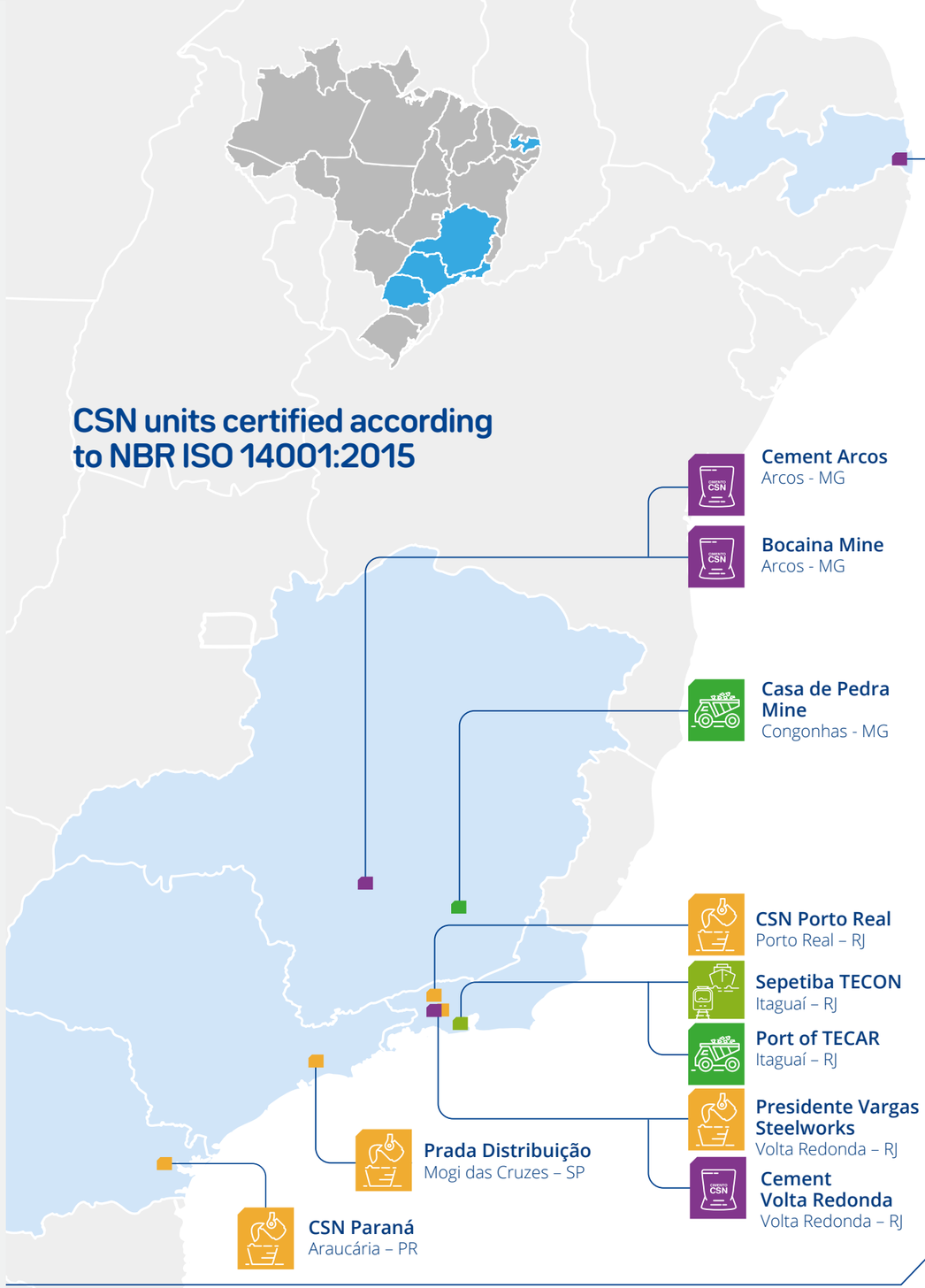
Green Line CSN
0800 282 4440

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

GRI 2-25
SASB EM-MM-160a.1 | EM-CM-160a.1

CSN Cimentos Alhandra (PB)

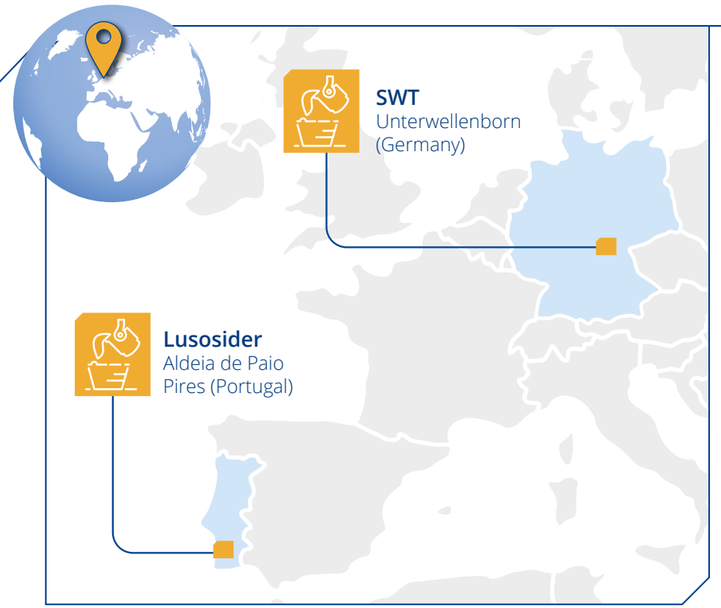
CSN units certified according to NBR ISO 14001:2015



The SGSS, on the other hand, is structured in accordance with the guidelines of the Sustainability Policy and has its procedures and structures described in the Occupational Health and Safety Management Manual – which establishes procedures to guarantee the safety of employees, third parties and communities in all areas. units. Operations in Portugal (Lusosider) and Germany (SWT) hold ISO 45.001:2018 certification, the seal that CSN has been seeking for its businesses in Brazil, starting with the Arcos unit, which in 2022 began the process of adapting to standard with a focus on achieving certification in 2023.

CSN also has a Quality Management System certified to ISO 9001:2015 at the following Brazilian units – Arcos, Sepetiba TECON and Port of TECAR, Fundição ERSA, CSN Mineração (Casa de Pedra and Pires), CSN Presidente Vargas Steelworks, CSN Porto Real, CSN Paraná, Prada Resende, Prada Camaçari, Prada Uberlândia, Prada Santo Amaro, Prada Valença and Prada Mogi – and abroad, at the Lusosider and SWT units. With the acquisition of the Brazilian operations of LafargeHolcim Brasil, another 11 operations will be certified under ISO 9001:2015. In addition to environmental and quality certification, LafargeHolcim units also arrive with API certification at the Cantagalo unit, ISO 17.025:2017 certification at the waste management platform and Ecological Seal in Vitória (ES).

Click here and access the Occupational Health and Safety Management Manual.



SASB EM-MM-160a.1 | EM-CM-160a.1

ESG engagement initiatives

In addition to the management systems, several internal initiatives are undertaken in order to engage employees in the ESG theme. In 2022, for example, the third ESG Week was held, which already marks the Group's annual corporate calendar, with attractions led by external guests and the participation of internal teams and specialists in the topics covered. The event was opened by the Sustainability Director of the CSN Group, who clearly explained the entire ESG strategy of the Company with a presentation of the material topics and actions taken in relation to each of them during the year. In the Social pillar, Innovation in Social Development was addressed, with the presentation of the Corporate University and the Theory of Change and Territorial Development, projects structured during the year 2022 (find out more on page 92).

Projects developed by the CSN Foundation were also presented with a focus on the results of the Capacitar Program. In the Environmental pillar, Climate Change was the main topic presented by an external guest and Circula+ was addressed by CSN specialists as the main incentive for the Group's circular economy. In the Innovation pillar, the week featured a presentation by Inova Ventures on the theme "Cities of the Future" with the participation of startups of green hydrogen, graphene and energy, as well as addressing the importance of these factors to people's lives.

Also during ESG Week, events were held such as: CSN Day, aimed especially at the external public and investors with the presentation of the year's main results; and Compliance Day, focused on employees and discussed in detail in the chapter "Management of ethics and compliance", on page 37.

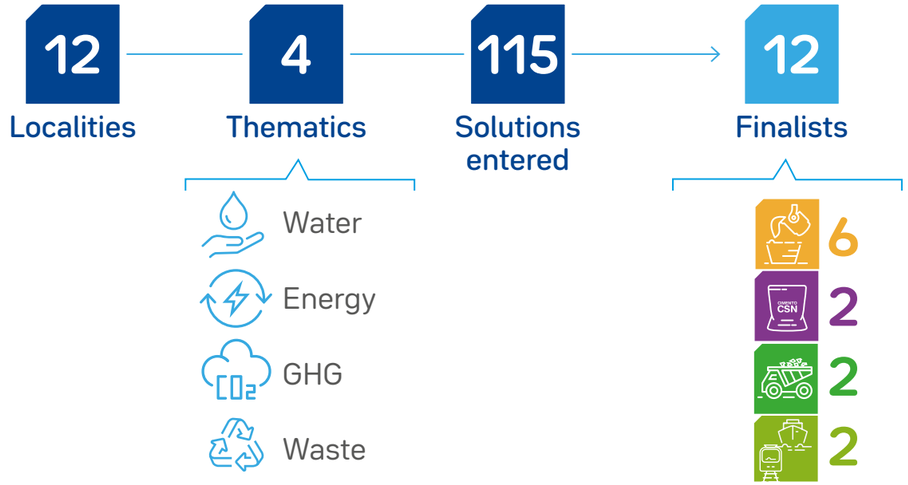
Another highlight is CSN Conecta, a program launched during the 2021 ESG Week with the support of the ESG Committee, with the aim of identifying ESG initiatives that could transform the daily lives of the CSN Group and the entire industry, based on projects proposed by the employees. The themes worked on in 2022 included: water, energy, emissions and waste.115 projects were entered, with 12 finalists. The top three positions and the launch of the new cycle were announced during ESG Week 2022. For 2023, the themes for the program will be: water and effluents, energy efficiency, waste management, climate change and atmospheric emissions, diversity and inclusion, biodiversity and forests and occupational health and safety.

CSN.conecta esg

The three 2022 winners received financial recognition as a prize, in addition to having their projects implemented in the operation in a structured and engaged manner by the Company's main leaders. The three winning projects were:

- Intelligent monitoring of equipment running idle and consuming unnecessary energy;
- Reduction in the generation of tailings in cement grinding at the unit in Arcos (MG);
- Scalper Sieving Unit (UPE): hybrid.

Given the quality of the 12 finalist projects, CSN decided to implement all of them. In addition, the Company is studying the possibility and viability of implementing the other 103 projects that did not advance to the final stage.



GRI 2-29

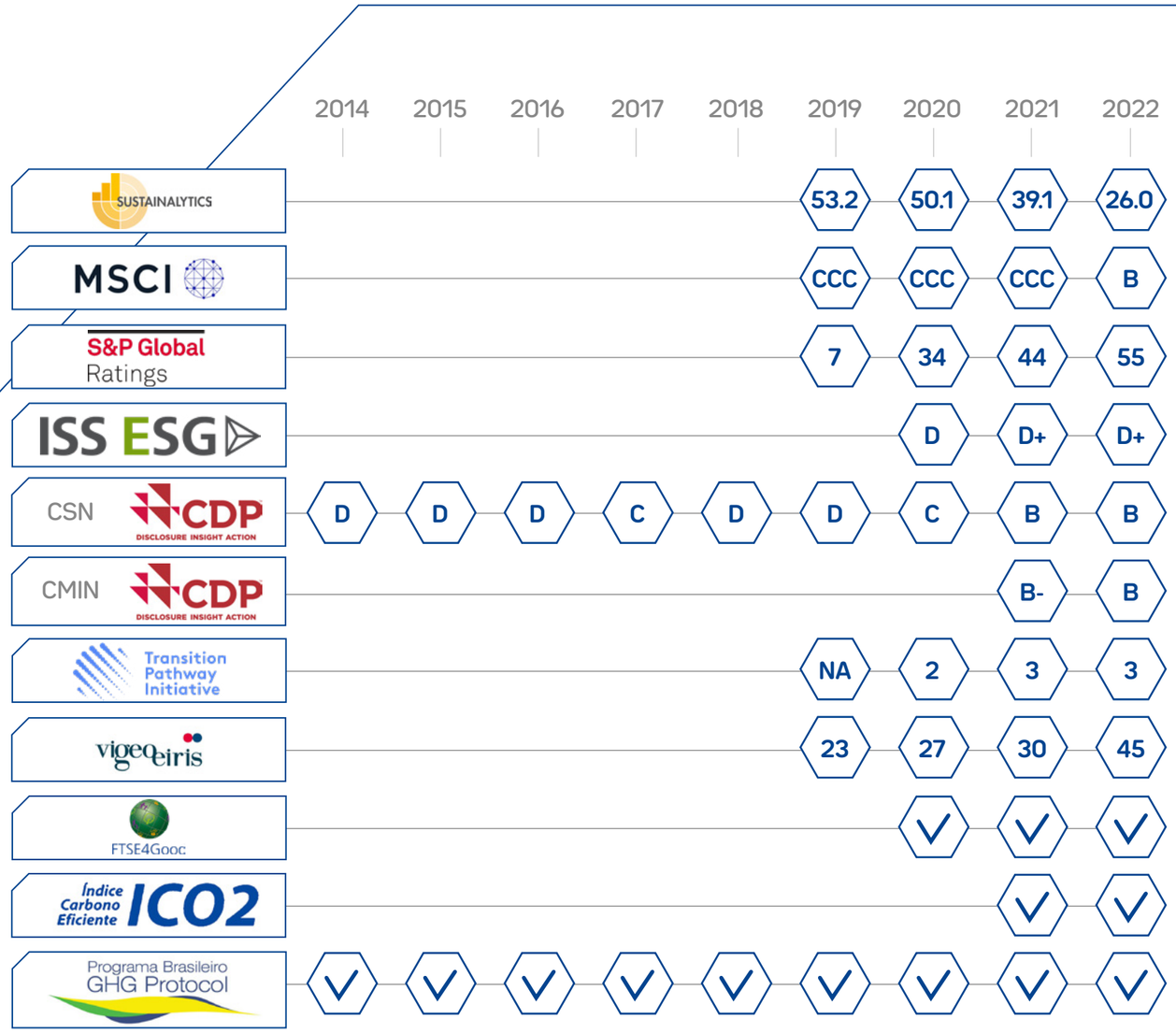
Performance in indices and ratings[1]

External recognition in indexes and ratings demonstrate that the Company is evolving in transparency and reporting of the main ESG actions and indicators, and in line with sustainable development.

In 2022, CSN received a new rating from the Sustainalytics agency, reducing from 39.1 to 26.0 the score related to ESG risks. Of the 155 steel and mining companies assessed globally, CSN reached the 4th best score of the sector. CSN was also the only Brazilian company in the steel, mining and civil construction sectors nominated for the S&P Global Sustainability Yearbook 2023, being classified as the company in the steel industry that has made the most progress in ESG in the world, receiving the categorization of "Industry Mover". And, at Morgan Stanley Capital International (MSCI), CSN achieved progress, moving from the "CCC" score to "B".

Responding to external requests from investors and other stakeholders, the Company reports to Disclosure Insight Action (CDP) on the guidelines followed in relation to climate change and water security. In 2022, the score of CSN Mineração reached an evolution from "B-" to "B" in climate change and in relation to water security the score evolved from "C" to "B". CSN maintained the scores reached in the year of 2021. In addition, in 2022, for the eighth year of reporting the GHG emissions inventory, CSN received the gold seal of the GHG Protocol, which demonstrates the achievement of the highest level of qualification of the greenhouse gas emission inventory and which also supported the Company's adherence to the ICO2, B3's Carbon Efficient Index, for the second year, demonstrating commitment to the transparency of the Company's GHG emissions.

1. The information provided is for informational, non-commercial purposes only, does not constitute investment advice.



In 2022, CSN remained a signatory to the Global Compact. Within the Global Compact Brazil Network, CSN participates in the Action for Climate, Water, Human Rights and Communication and Engagement platform, aimed at boosting the agendas in the strategic objectives of the participants

GRI 3-3

Innovation and technology

Innovation is another strategic pillar for CSN and leverages the Company's sustainable growth. For this reason, since 2018, CSN has been strengthening CSN Inova, an innovation platform that catalyzes the transformation of businesses towards management that is even more focused on ESG aspects.

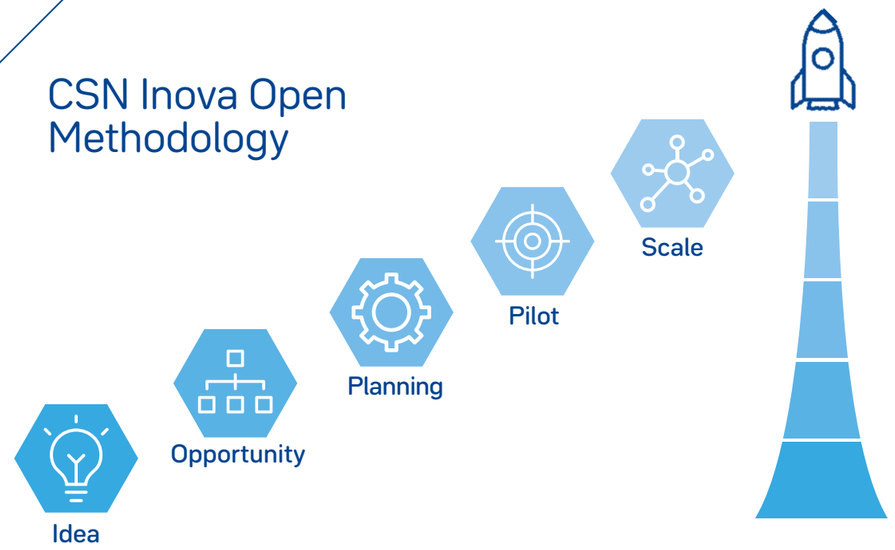
With four pillars of action focused on bringing solutions to the CSN Group's challenges, CSN Inova has complementary tools to implement innovation strategies with impact in the short, medium and long term. Aiming at the journey of decarbonizing CSN's production processes and generating more efficiency in operations, CSN Inova prioritizes development projects, partnerships and investments in technologies with industry 4.0 solutions, new production routes, digital transformation and circular economy.

On the first front, the **CSN Inova Open** conducts a systemic and collaborative innovation process, aimed at solving strategic challenges that represent a high operational, socio-environmental and financial impact for the Company. The challenges currently prioritized are: reducing the consumption of fossil fuels and electricity, increasing the availability of assets, reducing logistical expenses, digitization, optimizing processes for decision-making based on data, new products and materials, environmental recovery and reuse of waste and new forms of payment and financing to increase sales.

The innovation management methodology takes into account the elements of open innovation and is based on an in-depth diagnosis, which involves mapping the processes of the various segments, areas and operations of the company and analyzing related indicators. Based on this, pilot projects with reduced scope and quick implementation are built and executed. After evaluating these pilots using measurable indicators, the initiatives are scaled up in an organized manner within the businesses.

In 2022, of the 55 ongoing initiatives, 21 were in the planning phase, 23 were piloted and 11 were being scaled – which demonstrates the maturity of CSN Inova's portfolio. The main objective of innovation management is to prioritize challenges and projects that are in fact relevant to the company, and such prioritization is carried out based on strategic alignment with the business, the materiality matrix, technological maturity, economic potential and above all in operational and financial indicators.

Employee at the Research Center in Volta Redonda (RJ)



GRI 3-3

Projects under development

Green hydrogen to scale

The application of hydrogen in the Company's production processes is an example of how the innovation strategy organized by CSN Inova boosts ESG benefits for the business. Since 2020, CSN has been studying the UC3® (Ultimate Cell® Continuous Combustion) technology, developed by the Portuguese company UTIS and which consists of introducing controlled amounts of hydrogen (H2) green and oxygen (O2) in Furnace 2 at the Arcos unit of CSN Cimentos. The results obtained showed improvements in the main indicators of the production process due to increased flame stability, reduced fuel consumption and reduced greenhouse gas emissions. As a step forward, in 2022, the technology was assigned to CSN Alhandra, in the cement segment; and its installation will begin as a pilot at the Presidente Vargas Steelworks (UPV), being a pioneering application in the steel industry. Learn more on page 124.

Advanced Control Expert System

With the objective of optimizing the control of the variables of our production process and, consequently, reducing the consumption of fuel, raw materials and other inputs, CSN Inova Open conducted a pilot project in 2022 which consists of the application of an advanced control in cement operation equipment. The use of that system made it possible to reduce energy consumption, improve the quality of the material produced, reduce process variability, increase productivity, and also enhance thermal substitution with alternative fuels. With the success of the pilot project, it is expected to apply similar systems in other equipment in the various segments of the CSN Group.

Selene Decarbonization Project of CSN Paraná

The Selene Project aims to decarbonize the Paraná production unit through the use of green hydrogen in combustion processes. The strategy also focuses on the synthesis of green ammonia as a zero-carbon fuel alternative to meet the energy demand of the future.

Virtual tour at the Presidente Vargas Steelworks (RJ)

Sinter Feed Moisture Reduction

Water is a widely used input in the iron ore production process. This results in a product with a higher amount of moisture for material transport and use, which in turn implies heavier ore and higher rail and sea freight costs. In addition, there is a humidity limit at which the ore can be loaded onto the ships that transport the product for export. With this challenge in mind, CSN Inova contributed to the installation of a water drainage technology in the sinter-feed piles at the Casa de Pedra Mine. The success of the initiative has already been proven, generating not only operational and financial gains, but also environmental ones, since all the water recovered by the system is reused in the production process.

GRI 3-3

On the second front, the **CSN Inova Ventures** is one of the first corporate vehicles of venture capital Brazilian focused on industry 4.0. and responsible for bringing the Group closer to startups and solutions in Brazil and abroad, in addition to agents that are a reference in the Venture Capital ecosystem, such as Endeavor, ABVCAP, BR Angels and investment funds and accelerators. The objective is to capture the best investment opportunities in disruptive technologies with high growth potential and that allow the transition from traditional industries to a more intelligent, connected and sustainable future.

From the constitution of ESG Committee in February 2021, CSN Inova Ventures was also consolidated as one of the first corporate vehicles for venture capital in the world, one of whose theses, the ESG Transition, is integrated to act as a transition tool, seeking technologies that boost the agenda of goals and strategy of each of the material topics of the CSN Group. The integration of the fund's operations with the socio-environmental transition strategy provides greater flexibility in the CSN Group's sustainability agenda.

Employee at the Research Center in Volta Redonda (RJ)

GRI 3-3

CSN Inova Ventures' thesis focuses on companies in the Seed, Series A and Series B stages; and whose solution is aligned with one of the investment verticals, also having part of its capital committed to adjacent opportunities. In 2022, most of the investors in its portfolio already operated and worked together with the Company.

CSN Inova Ventures ended 2022 with eight companies in its portfolio, with investments made through contributions between R$ 2 million and R$ 5 million, with new contributions expected to be made throughout 2023, keeping the focus on investment verticals.

CSN Inova Ventures Portfolio

Contributions between R$ 2 million and R$ 5 million made throughout 2022

GRI 3-3

On the third front, with the aim of ensuring the continuity of the Group's operations and the evolution of its development purpose, the **CSN Inova Bridge** is responsible for the integrated management of the Group's ESG innovation strategy and works together with various leaders and business areas in order to identify the main challenges and transition ESG opportunities related to the Company's material issues. The ESG Committee, which advises CSN's Board of Directors, for example, is the result of extensive research on governance models in sustainability and innovation in public companies, funds and academia, conducted by CSN Inova Bridge. The Committee operates as a socio-environmental innovation laboratory, whose risks and opportunities are discussed based on the Company's materiality matrix in a systemic, integrated, experimental and participatory manner. Always in a network and with multidisciplinary teams from operations to corporate, it unlocks and leverages resources for critical structural projects, mobilizes the connection between knowledge of the social innovation ecosystem and trains employees in order to stimulate the dissemination and scale of the culture of sustainability. In addition, it centralizes the ESG communication activities of the businesses, in an effort to establish transparent communication with its stakeholders.

ESG Ambassadors at the annual meeting at the Faria Lima Office (SP)

CSN Inova Bridge is responsible for the integrated management of the Group's ESG innovation strategy

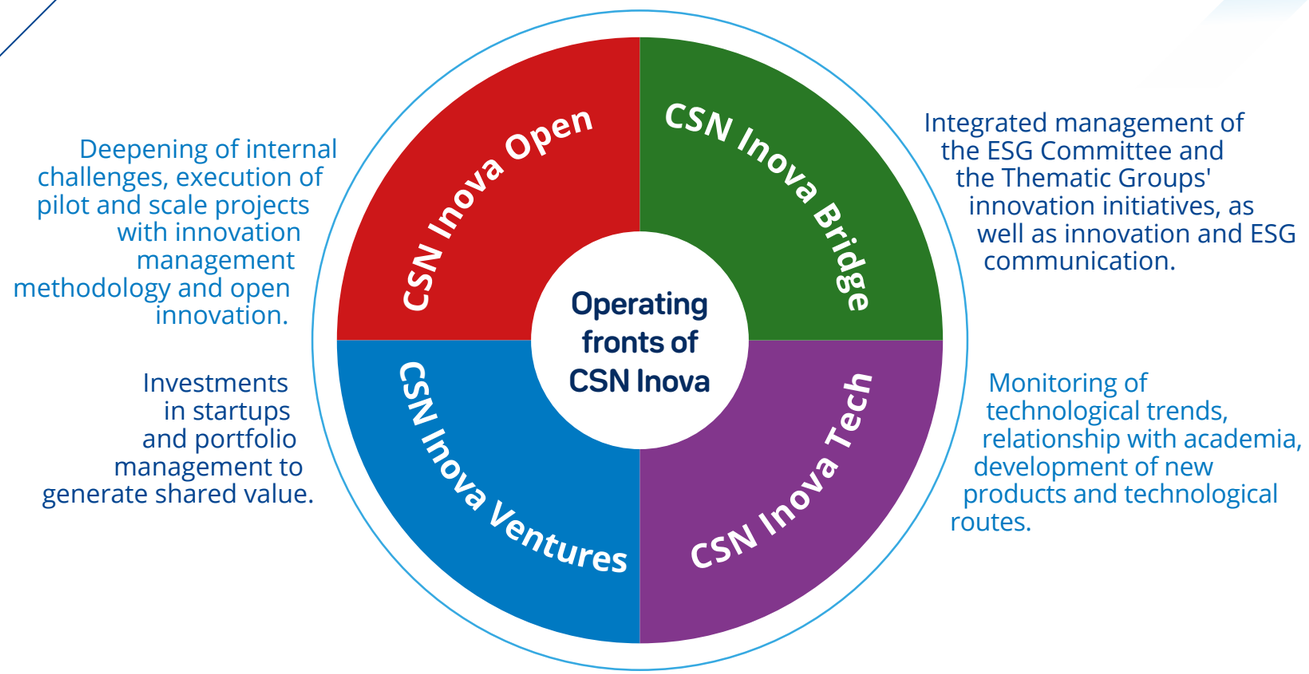
GRI 3-3

Clinker kiln at CSN Cimentos Arcos (MG)

Lastly, on the fourth front, the **CSN Inova Tech** evaluates technologies and executes projects for the development of technological routes. In 2022, more than 10 different types of technologies were evaluated for new technological routes and new materials/fuels. Among the prioritized projects, the projects for the use of Green Hydrogen in the Steel Industry stand out, such as the implementation of Utis technology and the Selene Project, created to decarbonize a lamination unit of the Group. In addition, the project portfolio includes the development of new routes for the processing of steel slag and the evaluation of technologies for the production of pellets and cold agglomerated briquettes, that is, without the consumption of fossil fuels.

Furthermore, CSN Inova Tech acts as a radar for trends in the most promising technologies for the sectors in which CSN operates. In this sense, for 2023, technologies associated with carbon capture will be evaluated and possibilities of use at CSN will be considered for the implementation of new projects in the Group.

CSN Inova Tech acts as a bridge between businesses, universities and research centers in Brazil and abroad, encouraging the evolution of projects and the development of new technologies that still have a lower level of maturity and require R&D.



GRI 3-3

Research and Development Center

CSN has maintained, for 73 years, a Research, Development and Innovation Center in Volta Redonda (RJ) whose main objective is the development of new steel products, keeping the portfolio of steel solutions up-to-date for all market segments served for the company.

In the last six years, around R$ 20 million has been invested in new technologies to expand analysis capacity and innovation opportunities.

The first major result of these investments was the Simulation and Virtual Reality Laboratory, which began operating in 2021. The new tools for computer simulations – 3D technology combined with various software items numerical simulation – provide an immersive experience and contribute to the prevention of risks inherent to the steelmaking process, both in product applications and in the different stages of steel manufacturing. These tests, which were previously performed on real parts, can now be computationally simulated and presented in virtual reality, enabling the evaluation of various applications and bringing agility in identifying inconsistencies. These new technologies make it possible to reduce or even eliminate losses in production processes at CSN and its customers, in addition to generating financial gains more efficiently.

In 2022, the installation and commissioning of a Vacuum Induction Melting Furnace (VIM – Vacuum Induction Melting) was completed, which enables the Research Center to produce, on a pilot scale, steels with the most varied chemical compositions. This asset increases CSN's competitiveness, as it reduces lead-time and product development costs, as experimental new alloys eliminate melt shop leakage.

In the first quarter of 2023, the installation of the most advanced Gleeble® thermomechanical simulator in Latin America will be completed. The equipment makes it possible to reproduce, on a laboratory scale, a wide range of steelmaking processes, such as casting, hot rolling and annealing, among others.

The investments presented, when used synergistically and with the help of other resources, make it possible for the entire steel production flow to be carried out, on a reduced scale, within the Research Center.

With a team of highly qualified technicians and engineers and a large availability of advanced resources for simulations and analysis, CSN's Research, Development and Innovation Center ranks the Company among the steel companies best prepared to meet the growing demands of the market worldwide.

Employee at the Laboratory of ERSA Fundição (RO)

GRI 3-3

Research Center composed of
17 laboratories,
the Environmental Laboratory being certified by the State Institute of the Environment (INEA), a body of the State Government of Rio de Janeiro, linked to the State Secretary for the Environment

The most complete
thermomechanical simulator
of steelmaking processes in Latin America, which, together with other resources, allows the simulation of the entire steelmaking process on a pilot scale

Approximately
8 thousand hours
dedicated to research

6 new types of steel
developed (released to the MPA – Authorized Products Manual)

93 new types of steel
under development

ESG goals

Supported by its business and innovation strategy aimed at applying new technologies and greater efficiency in its processes and operations, in addition to its commitment to socio-environmental development around its operations, CSN is committed to goals connected to the ESG agenda that guide its journey towards more efficient, innovative, inclusive, integrated and sustainable management:

Goals Reached

Topic	SDG	Segment	Goal	Indicator (Base-year)	Indicator (Goal-year)	Indicator in 2022	Performance in 2022	Status
Environmental performance	12	CSN Group	By 2022, achieve ISO 14001:2015 certification at the following units: CSN Cimentos de Volta Redonda (RJ) and CSN Cimentos Alhandra (PB)	2020	2022	2 units certified	The CSN Cimentos units in Volta Redonda and Alhandra were certified in 2022	
		CSN Cimentos	Carry out the study of the Water Footprint, according to the ISO 14.046:2017 standard at the Arcos and Volta Redonda units by 2022	2021	2022	Studies carried out	Study carried out in 2022	
Technology and innovation	9, 12	CSN Inova	Develop two new products/services on the ESG theme, by 2022	2020	2022	2 new products/ services	Circula + and i9 Mining (under development)	
			Conduct six weeks of training on Innovation, ESG and Venture Capital topics at CSN Group units, by 2022	2020	2022	Six weeks of training	Accomplished	
Local communities	8, 10	CSN Foundation and CSN Inova	In 2022, develop a pilot project based on the Theory of Change for the main operating units of the Company	2021	2022	Two pilot projects developed	Deployment scheduled for 2023	
			By 2022, train guardianship counselors from six municipalities and their regions in which we are present, as well as an update course for institutions in Congonhas, Arcos, Bonito and Coxim	2021	2022	Accomplished	In 2022, two courses on public policies, project development and fundraising were held with the presence of 115 participants from the following cities: Bonito, Coxim, Bodoquena, Bela Vista and Jardim	
Biodiversity	14, 15	CSN Group	In 2022, carry out a diagnosis of the conservation areas and/or areas protected by the Company and the protection areas close to CSN's operations, with a systematized database for structuring the strategic planning of biodiversity at CSN.	2021	2022	Accomplished	In 2022, a diagnosis was made of conservation areas and areas close to CSN's operations, which optimized our information base.	

GRI 3-3

Short Term Goals

Topic	SDG	Segment	Goal	Indicator (Base-year)	Indicator (Goal-year)	Indicator in 2022	Performance in 2022	Status
Governance, ethics and transparency	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	CSN Group	Conduct compliance training with 90% of active employees in the CSN Group, covering code of conduct and anti-corruption policy	30% (2020)	90% (2023)	83% of employees trained	The goal was postponed to be achieved in 2023	
Local communities	8 DECENT WORK AND ECONOMIC GROWTH; 10 REDUCED INEQUALITIES	CSN Foundation	Increase in 39% the attendance of children and adolescents through the Garoto Cidadão project	2,300 (2020)	3,197 (2023)	2,533 children served	+11% compared to the 2020 base year. The goal was postponed to be achieved in 2023	
Biodiversity	14 LIFE BELOW WATER; 15 LIFE ON LAND	CSN Group	Improve the diagnosis, aiming at details regarding recovered areas and monitored species	2022	2023	New goal		
		CSN Group	Prioritize the most relevant dependencies and impacts on ecosystem services for each of the Company's operating segments	2022	2023	New goal		

ARIE Cicuta Forest in Volta Redonda (RJ)

GRI 3-3

Long Term Goals

Topic	SDG	Segment	Goal	Indicator (Base-year)	Indicator (Goal-year)	Indicator in 2022	Performance in 2022	Status
Health and safety	3 GOOD HEALTH AND WELL-BEING; 8 DECENT WORK AND ECONOMIC GROWTH	CSN Group	Reduce the accident frequency rate by at least 30% (CAF+SAF – own and third parties per 1MM hht)	2.46 (2020)	1.72 (2030)	1.79	-26.5% referring to the base year	
		CSN Group	Reduce by at least 30% the number of days off due to accidents with own employees	2,541 (2021)	1,779 (2030)	24,827 days lost	-	
		CSN Group	Continually achieve the zero fatality rate across the CSN Group (own and third parties)	2020	Continuous		4 fatal accidents involving own employees and third parties	
		CSN Mineração	Reduce the accident frequency rate by at least 30% (CAF+SAF - own and third parties per 1MM HHT)	1.96 (2021)	1.37 (2030)	1.30	-33% referring to the base year	
Governance, ethics and compliance	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	CSN Group	Continuously increase the Compliance Index to the best governance practices provided for in CVM Instruction No. 80/2022	41% (2018)	Continuous	76%	In 2022, total and partial compliance was 76% of the items	
Dams	11 SUSTAINABLE CITIES AND COMMUNITIES; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 14 LIFE BELOW WATER; 15 LIFE ON LAND	CSN Group	Carry out the complete de-characterization of dams built upstream of CSN by 2030	1 (2020)	6 (2030)	Two dams de-characterized	Completed the de-characterization of the Auxiliar do Vigia dam. So far, two of the six upstream dams have already been de-characterized	
Environmental performance	6 CLEAN WATER AND SANITATION; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	CSN Mineração	Reduce new water withdrawal in iron ore production by at least 10% per ton of ore produced[1]	0.24 (2018)	0.22 (2030)	0.26	8% increase compared to the base year	

1. Water intensity is calculated based on the production of iron ore (wet + dry) and the abstraction of water intended only for the production process of the ore, considering the water used in the Central Plant, in the Pires Complex and drinking water.

GRI 3-3

Long Term Goals (continued)

Topic	SDG	Segment	Goal	Indicator (Base-year)	Indicator (Goal-year)	Indicator in 2022	Performance in 2022	Status
Climate change	12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 13 CLIMATE ACTION	Steel Industry	10% reduction in CO_2e emissions per ton of crude steel by 2030, according to the methodology of the World Steel Association (WSA)	2.10 (2018)	1.89 (2030)	1.99 tCO_2e/ ton of steel	-5% referring to the base year	
		Steel Industry	20% reduction in CO_2e emissions per ton of crude steel by 2035 according to the World Steel Association (WSA) methodology	2.10 (2018)	1.68 (2035)	1.99 tCO_2e/ ton of steel	-5% referring to the base year	
		CSN Mineração	30% reduction in CO_2e emissions per ton of ore produced by 2035 (scopes 1 and 2)	5.77 (2019)	4.04 (2035)	7.92 kg CO_2e/ ton of ore	+37% referring to the base year	
		CSN Mineração	Carbon Neutral in scope 1 and 2 emissions by 2044	191,812 tCO_2e (2019)	Carbon Neutral (2044)	208.487 tCO_2e	+8% in absolute emissions compared to the base year	
		CSN Cimentos	28% reduction in CO_2e emissions per ton of cement by 2030, reaching 375 $kgCO_2$ e/t of cement, according to the methodology of the Global Cement and Concrete Association (GCCA)	519 (2020)	375 (2030)	481 $kgCO_2e$/ ton of cement	-8% compared to the base year, even with the start-up of operations at the CSN Alhandra unit	
		CSN Cimentos	Reduce the clinker factor in cement by 16%	58.2% (2020)	48.8% (2030)	55.9% of clinker factor	-4% referring to the base year	
Atmospheric Emissions	3 GOOD HEALTH AND WELL-BEING; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 13 CLIMATE ACTION	Steel Industry	40% reduction in particulate matter emissions per ton of crude steel produced at the UPV	0.78 (2019)	0.47 (2030)	0.99 ktPM ton of steel	+27% referring to the base year	

GRI 3-3

Long Term Goals (continued)

Topic	SDG	Segment	Goal	Indicator (Base-year)	Indicator (Goal-year)	Indicator in 2022	Performance in 2022	Status
Energy Efficiency	7 AFFORDABLE AND CLEAN ENERGY; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 13 CLIMATE ACTION	CSN Mineração	Maintain consumption of electricity from 100% renewable sources at CSN Mineração	2020	Continuous	100% renewable electricity consumption	Sustained	
		CSN Cimentos	Reduce the intensity of electrical consumption by 5% (kwh/ton of cement)	85.66 (2020)	81.12 (2030)	70.38 kwh/ton of cement	-18% compared to the base year. The target was reached and it was established to maintain this level until 2030	
		CSN Cimentos	Reduce the intensity of thermal consumption by 1% (GJ/ton of clinker)	3.27 (2020)	3.22 (2030)	3.31 GJ/ton of clinker	+1.2% referring to the base year	
Diversity and inclusion	5 GENDER EQUALITY; 10 REDUCED INEQUALITIES	CSN Group	Achieve 28% female representation in the CSN Group	14.3% (2020)	28% (2025)	20.5% female representation	+43% referring to the base year	
		CSN Mineração	Double the percentage of female representation at CSN Mineração	13% (2019)	26% (2025)	21.8% female representation	+67% referring to the base year	

GRI 3-3

Business model

Click on the blue boxes to find out more about inputs and the value generated by CSN in the six capitals covered by the Integrated Report, in addition to learning about the Company's corporate guidelines and management differentials.

GRI 2-6

Employee at Presidente Vargas Steelworks (RJ)

Created and shared value

Growth Consolidation

CSN ended the year consolidating its position as one of the most resilient companies in the market. In 2022, closed the best three-year period in its history with an average EBITDA of 15.7 billion reais, much higher than the previous three-year period with an average EBITDA of 6 billion reais. In the same period, there was also an increase in EBITDA margins, which jumped from 26% to 38%, driven by a warmer commodity market and improvements in the operational efficiency of assets.

The Company continues on a path to become even stronger, with efforts converging with the bold investment thesis that prioritizes business diversification and greater levels of vertical integration, which aim to mitigate the risks of market volatility and reduce the costs and inefficiencies of the chains of the businesses, from M&As and organic growth.

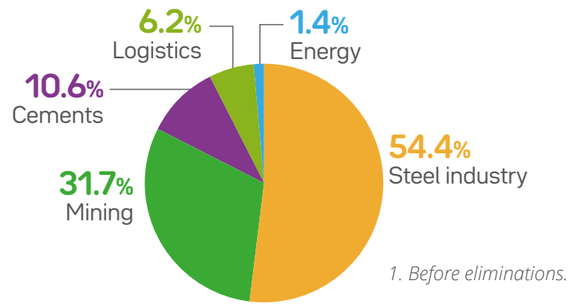
In 2022, it made significant progress in this regard, with the acquisition of assets from LafargeHolcim Brasil and energy assets (CEEE, some SHPs and HPP Quebra-Queixo), from which net revenue is now represented by approximately 20% of Cement, Energy and Logistics businesses – advancing on the representativeness of less than 10% they had in 2021.

Thus, we were able to consolidate the CSN Group's new levels of profitability, modernize the company and prepare it for an increasingly volatile and competitive market.

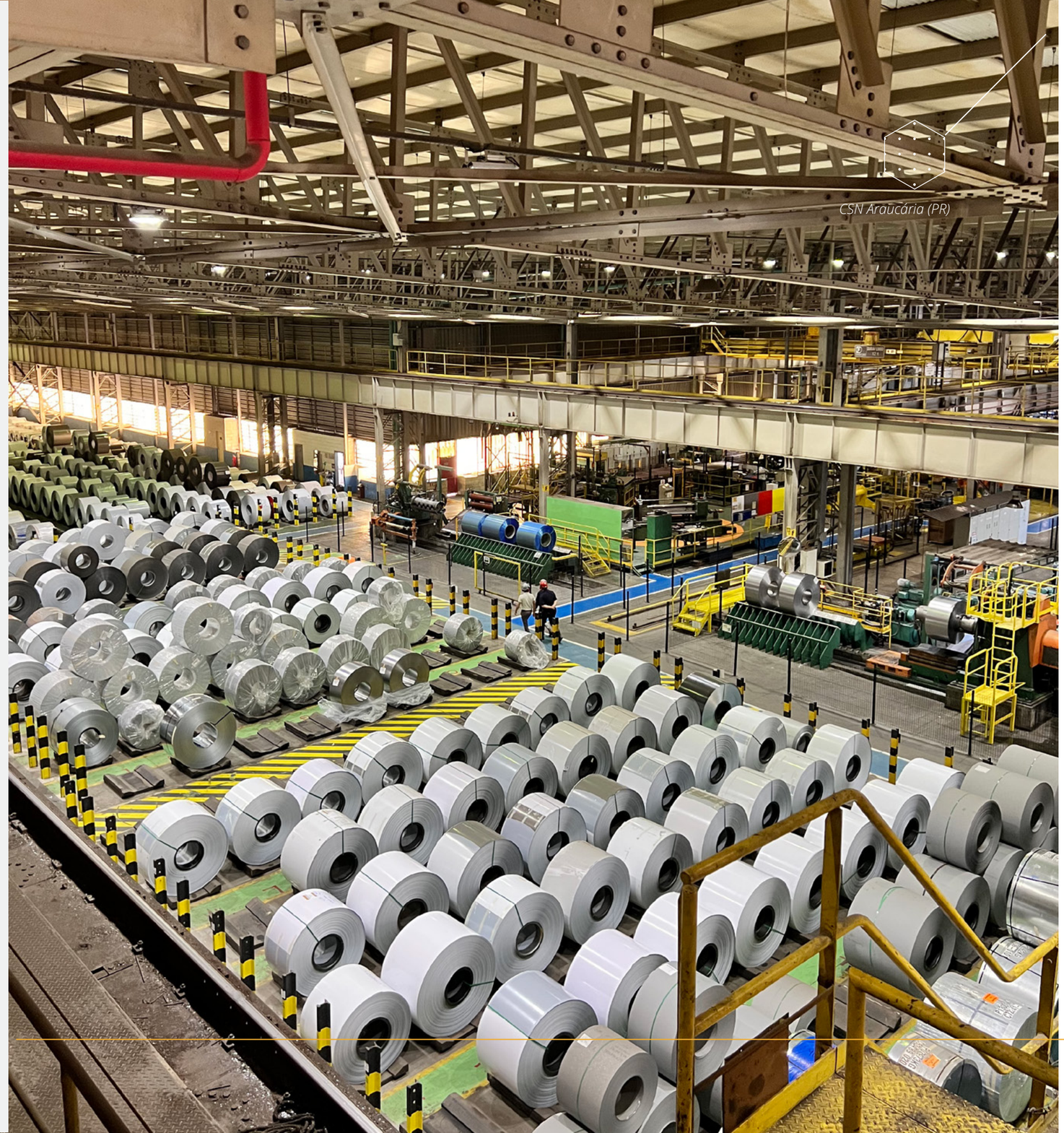
HPP Canastra of CEEE-G, Rio Grande do Sul

In 2022, CSN achieved the second best historical result, with EBITDA of R$ 13.8 billion, positively impacted by business diversification

Net revenue by segment[1]



1. Before eliminations.



CSN Araucária (PR)

Steel industry

Global crude steel production in the year, according to the World Steel Association (WSA), totaled 1.8 billion tons, a decrease of 4.4% compared to 2021, reflecting the effects of the conflict between Russia and Ukraine and its direct consequences for the lower production volume in European countries. China, responsible for more than half of global production, followed the same retraction movement of 2.1 p.p., compared to the period of 2021 – direct impact of production interruptions due to the zero Covid policy, in addition to the lower dynamism of the real estate market, which reduced steel consumption in China. Brazil ended the year with 36.1 million tons produced, an amount also lower than that recorded in 2021, a decrease of 5.8%.

In this scenario, CSN achieved net revenue of R$ 29.3 billion and adjusted EBITDA of R$ 6 billion, setting an EBITDA margin of 20.5% – a lower result compared to 2021, which had an EBITDA of R$ 9.9 billion and a margin of 32, 9%. These results reflect the pressure on production costs throughout the year, which reduced the Company's margins, the 11% lower sales volume in the annual comparison, totaling 3.7 million tons, and an 8% reduction in the sector of flat steel, which totaled 216 thousand tons.

Net revenue of
R$ 29.3 billion

Despite the downturn in the sector, this behavior is positive as it indicates a stabilization of steel prices higher than those found in the pre-pandemic triennium. This indicates a more stable horizon for the Steel Industry, with domestic demand sustained by the recovery of industrial sectors, heating up of the civil construction sector and normalization of automobile production.

The planned resumption will be monitored, in 2023, by CSN, based on the strategy of diversification movements: portfolio, focusing on products with greater added value; of segments, expanding the Company's market share in markets with favorable commercial conditions (such as civil construction); and geographic, increasing the representativeness of SWT and Lusosider operations in the business's EBITDA.

A highlight of 2022 was the full incorporation of Metalgráfica Iguaçu – one of the largest manufacturers of steel food packaging in Brazil, located in Ponta Grossa (PR). The acquisition, therefore, materializes operational and commercial synergies, in addition to taking a strategic step towards expanding CSN's packaging production capacity.

Metalgráfica Iguaçu (RS)

CSN ERSA Fundição (RO)

The year was also one of sustaining investments. In Volta Redonda (RJ), projects such as the revamp of Plate Furnace 2, the onset of the reform of the coke batteries, breakthroughs in supplies for the reform of the sintering and a pilot to be used by the Green Hydrogen in Blast Furnace 3.

For the future, CSN is executing a robust plan to modernize its industrial park at Presidente Vargas Steelworks (UPV). Until 2028, 7.3 billion reais of investments are mapped, which include: conclusion of the reform of the coke batteries, revamp of the hot strip mill, revamp of sintering, mini-reforms of Blast Furnace 2 and modernization of Blast Furnace 3.

These investments have the potential to increase operational efficiency, increasing slab production capacity by almost 20% and reducing slab cost by more than 20%. These numbers will give UPV strong competitiveness and modernization.

Modernization of the Industrial Park

2023-2029
Battery Program
Recovery and preservation of current batteries construction of new batteries (#3, #2 and higher)

2023-2027
Revamp LTQ#2
Automation system, hydraulic winding plate ovens (+120ktpa)

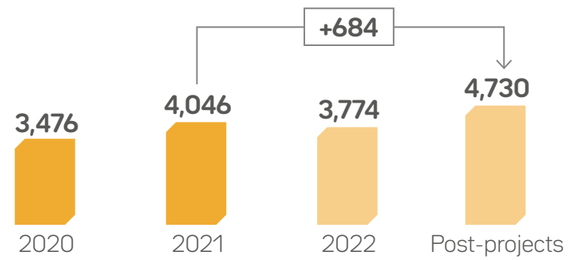
2024
Mini Makeover AF#2
Campaign modernization and extension

2025
Sintering and Granulator
Revamp of Sínter and construction of the Intensive Granulator

2025 - 2026
AF#3 regenerators
Campaign modernization and extension

Planned investment of **R$ 7.5 billion**

Plate production (KTPA)



Mining

From the point of view of the global iron ore scenario, 2022 was marked by great volatility in iron ore prices on the world market, mainly due to China's Covid Zero policy and the impact of the conflict between Russia and Ukraine.

In this context, CSN Mineração achieved net revenue of R$ 12.5 billion and EBITDA of R$ 6 billion, with an EBITDA margin of 48.5% – a lower result compared to 2021, when EBITDA was 10.7 billion and the margin was 59.5%.

In the period, sales by CSN Mineração totaled 33.3 million tons of iron ore. This volume is 0.3% higher than in 2021, boosted by inventory consumption and greater purchases of ore from third parties. Despite the better commercial result, the production volume had a reduction of 7% in relation to the previous year, a direct consequence of the impacts of the rains registered at the beginning of the year, in addition to the ramp-up of the projects connected to the Central Plant (CMAI 3, spirals and crushing).

CSN Mineração, Pires Complex (MG)

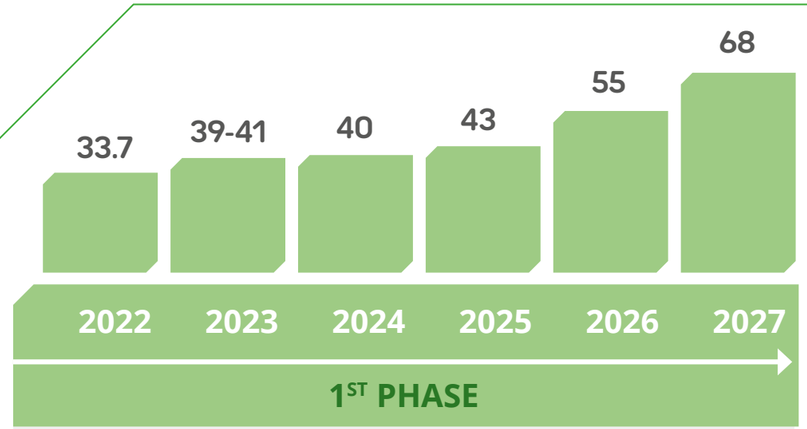
Phase 1 Projects

	Fe content	Volume (mtpa)	Startup
Rec. of Ultrafine	66%	1.0	4T 2024
Itabirite P15	67%	15.0	4T 2025
Rec. of Tailings Pires	65%	1.5	4T 2025
Rec. of Tailings B4	66%	2.5	2T 2025
Itabirite P4+	65%	4.4	3T 2026
Rec. of Tailings COP	65%	2.5	1T 2028
Total	**66%**	**26.9**	

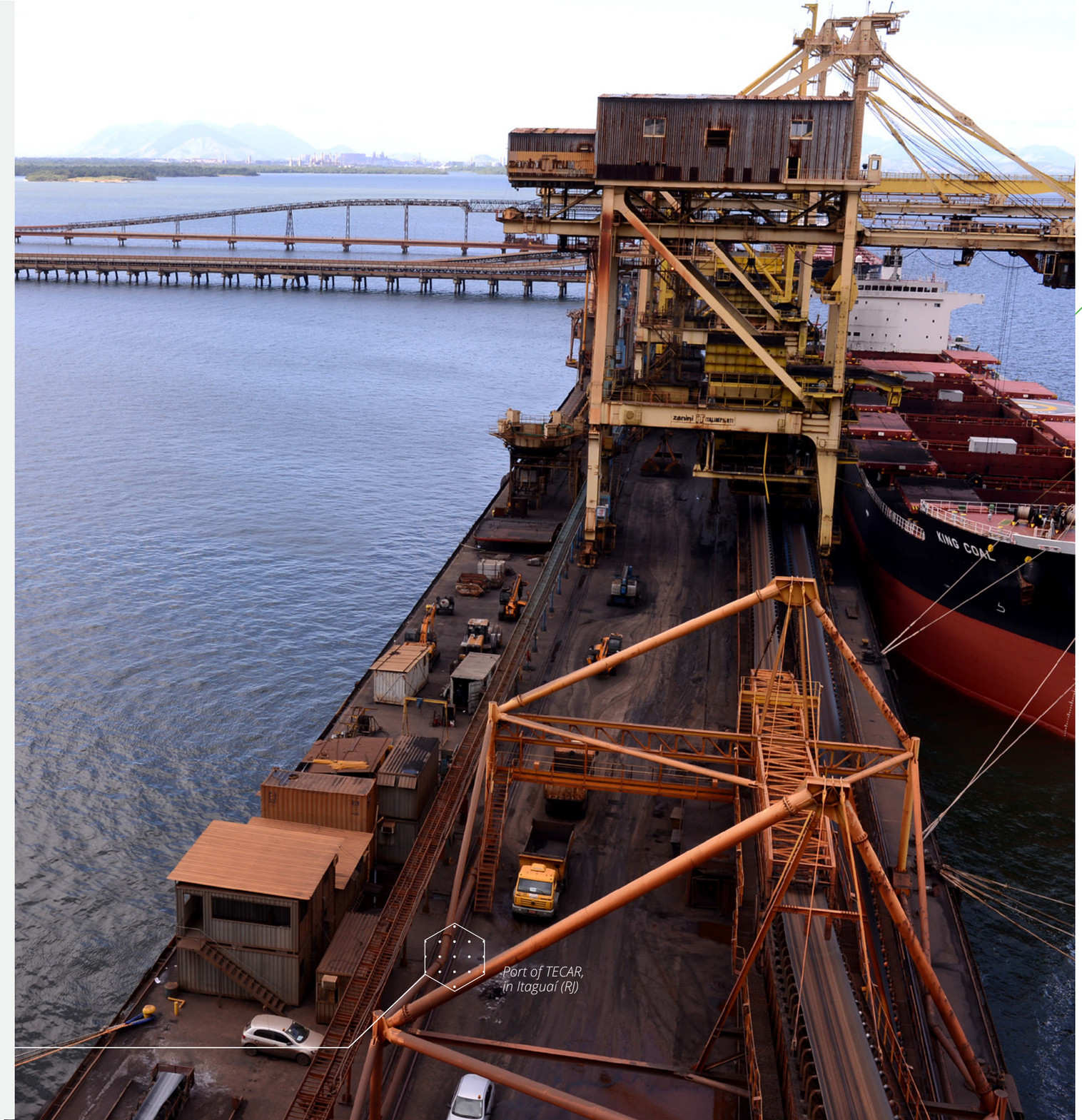
For the future, the Company's focus in the segment is on expansion. In 2022, an updated CAPEX of R$ 13.8 billion was announced for the period from 2023 to 2027. This investment refers to the first phase, which comprises projects to improve the itabirite reserves, currently stored at the Casa de Pedra Mine, which will provide a very high quality ore with up to 67% iron content – essential to support the decarbonization journey of the steel sector in the world.

With this announcement, CSN Mineração's Expansion Program schedule was updated; this was done to translate the Company's desire to capture the best moment in the market to commission this type of project. Additionally, the schedule improvement also reflects the higher level of engineering of these projects, taking into account new considerations of locational and resource optimization.

Production volume + purchases / MTPA



R$ 13.8 billion
investment
Average of R$ 2.76 billion/year



Port of TECAR, in Itaguaí (RJ)

In 2022, CSN Mineração renewed the TECAR concession for another 25 years

Nominally, the first phase of the plan includes projects such as the development of plants for processing itabirite (P15 and P4+), as well as projects for the recovery of tailings and ultrafines that are currently disposed of in dams. At the same time, the expansion of production capacity is followed by an increase in the capacity to ship production to the transoceanic market, thus, investment will also be made in Port of TECAR to reach the capacity of 60 Mtpy in this phase.

To strategically support this process, in 2022, CSN Mineração renewed the TECAR concession for another 25 years (until 2047), guaranteeing the use of this strategic asset and committing itself to the modernization of the port terminal. The concession of the MRS Railroad was also renewed for another 33 years, guaranteeing viability and competitive costs in the transportation of ore.

Cements

The cements segment in Brazil showed great dynamism in 2022, driven by movements favorable to consumption that offset higher interest rates – an obstacle to new loans. The real estate market is the most important driver of demand, although infrastructure projects also influenced a significant increase in targeted sales.

In this context, CSN achieved net revenue of R$ 2.8 billion and adjusted EBITDA of R$ 780 million, with an EBITDA margin of 27.8%. Revenue closed almost twice as high as the previous year, but with a margin of 8 p.p. smaller. These values derive mainly from the inorganic growth pursued by the Company, but also from the good performance of the Company's cement assets.

Aerial view of CSN Alhandra (PB)

The main highlight of the year was the full incorporation of LafargeHolcim operations in Brazil in September 2022, which brings many synergies to the CSN Group, in addition to providing greater competitiveness for cement operations.

Now with seven integrated plants and six mills located in the Southeast (São Paulo, Rio de Janeiro, Minas Gerais and Espírito Santo), Northeast (Bahia and Paraíba) and Midwest (Goiás) regions, in addition to high quality limestone reserves and 19 concrete and 6 aggregate units, now form part of what is now called CSN Cimentos Brasil S.A., with an installed production capacity of 17 million tons of cement.

In this condition, CSN leaves the seventh position to become the second largest cement producer in Brazil, reaching a favorable position to compete with the leading companies in the market.

The acquisition of the assets of LafargeHolcim Brasil comes with a strong strategy to make the Business competitive. The strategy encompasses six important concepts: **synergies, capillarity, expansion, portfolio, brands and decarbonization**.

The synergies of CSN's operations with LafargeHolcim have the potential to increase 50% of the EBITDA of the sum of the separate operations. This is because it will be possible to explore the reduction of electricity costs, better contracts integrated in procurement and reactivation of the capacity of the plants that are inactive.

In expansion, greenfield projects with the potential to materialize will complement the footprint, reaching regions such as the South and North. Thus, these plans constitute a portfolio of projects that is mature and adaptable to future needs for additional capacity.

Employee at CSN Alhandra (PB)

CSN Cimentos Arcos (MG)

The deepening of CSN Cimentos' capillarity will expose the company to the main cement consumer markets (Southeast and Northeast), which translates into an opportunity to optimize assets and grow market share

The realization of a **portfolio** more diversified (considering customer base, mix of sales/channels and types of products) is a strategy of the CSN Group and CSN Cimentos to reduce risks and capture attractive margins.

As **brands** CSN – which recently conquered the market due to the public's trust in the CSN name – associated with the traditional brands carried by LafargeHolcim Brasil demonstrate potential for customer retention, loyalty and expansion of the customer portfolio.

On standby, CSN Cimentos already has cement products with greenhouse gas emission levels far below those practiced in the market and in Brazil. The delivery of cement **decarbonization** projects (such as co-processing and reduction of the clinker factor) will significantly reduce cement production costs and position the company with awards for green products.

This strong rationale that permeates CSN Cimentos will be essential for navigating the domestic market in 2023. The prospects are for it to heat up, due to high levels of new real estate launches and financing from the Brazilian System of Savings and Loans (SBPE). In addition, there are prospects for new investments by the Brazilian government in the Minha Casa Minha Vida Program and the New Growth Acceleration Program (PAC) for Infrastructure, which should also be responsible for a good period next year.

Logistics

CSN's Logistics operates on two fronts: port and rail logistics. As port logistics, Sepetiba TECON, one of the largest container handling terminals in Brazil, located in Itaguaí (RJ). In the rail segment, the Company has Ferrovia Transnordestina Logística (FTL), Transnordestina Logística S/A (TLSA), and Malha Regional Sudeste (MRS). The first is the cargo transport operation, which connects the Ports of Itaqui, Pecém and Mucuripe.

The second is the concession for the construction and operation of the Nova Transnordestina railway, in partnership with the Federal Government, for the establishment of the railway line that connects Piauí to the Port of Pecém. And the third, in which CSN holds a 37.27% direct and indirect stake, connects the states of Minas Gerais, Rio de Janeiro and São Paulo, shipping mainly ore and steel products to ports in the southeast.

Regarding **Port Logistics,** the financial results were satisfactory. The net revenue obtained was consolidated, which remained at the current level of R$ 308 million, with adjusted EBITDA of R$ 90 million. These numbers, when compared to 2021, demonstrate a better EBITDA margin, which went from 29.1% to 29.3%.

Port of TECAR (RJ)

In 2022, 1,322 thousand tons of steel products, 62 thousand containers, 42 thousand tons of general cargo and 918 thousand tons of bulk were operated. That is one shift of the cargo profile of the port terminal which, in the previous period, was handling twice as many containers. This change takes place to ensure portfolio diversification and shield the company from the volatility of the transoceanic market for shipowners.

To make this strategy viable, investments were made to modernize the port. In 2022, TECON received nine new Rubber Tire Gantry Cranes (RTGs) – a mobile crane with rubber tires – to reinforce its infrastructure in the backyard. With the new equipment, it will be possible to increase service capacity, making cargo movements more agile.

The new RTGs, which will be in operation in the first quarter of 2023, combine diesel and electric technology, electric spreaders and tires that allow for minimum ground pressure, which generates less GHG emissions and gains for the environment. The modernization of the park confirms the strategy of expanding its business with the opportunity to diversify loads and verticalize the logistics chain.

Port of TECON (RJ)

Regarding **rail logistics**, the results achieved were net revenue of R$ 2.3 billion and EBITDA generation of R$ 1 billion, reaching a margin of 47.8%.

These figures are only proportional to CSN's 37.27% stake in MRS, a profitable asset with high cash generation capacity. As a highlight for 2022, with the signature of the MRS federal concession renewal contract, guaranteeing the beginning of the execution of the planned investment projects, which will bring several benefits to the country's competitiveness.

FTL also significantly and satisfactorily supported the financial results, with the transport of 2.9 million useful tons (TU), of which 1.7 million of cellulose, 578 thousand of fuels and 280 thousand of cement and 171 thousand of clinker.

Finally, TLSA continues to advance in the largest linear work being carried out in Brazil. In 2022, the work continued in two different stretches promoting around 1,000 jobs (with around 700 own and 300 outsourced). The Ceará section of the railroad concluded the assembly of superstructures (rails, sleepers and gravel) on a total plot of 50km, in addition to the construction of bridges, viaducts and drainage systems. In Piauí, the infrastructure work advanced and completed 125 km of the Eliseu Martins - Trindade section. The future is heating works. With the construction of the next lots, it is expected to reach a workforce totaling 2,500 direct jobs and the need for around 825 pieces of equipment (including tractors, excavators, trucks and rollers). It is, therefore, one of the main national projects for the development of the Northeast, which generates opportunities for economic development in its region of influence.

Energy

CSN started 2022 with five energy assets, of which three were for energy recovery at the Presidente Vargas Steelworks and the others were stakes in the Igarapava and Itá Hydroelectric Power Plants. Together, the assets had an installed capacity of 733 MW, distributed in Rio de Janeiro, São Paulo and Santa Catarina.

In effect, until 2022, the Energy business, within the Company's model, had as its main function to supply the demand of the industrial businesses, while secondarily producing revenue from the settlement of contract surpluses and from the settlement of the Generation Scaling Factor (GSF) of the Itá HPP.

During 2022, CSN consolidated the Energy segment as a business, the fruits of which will be harvested in 2023. In total, R$ 4 billion were invested in the acquisition of strategic assets that increase installed capacity by around 300%, thus reaching 2,164 MW.

The entry of the assets SHPP Sacre II, SHPP Santa Ana, SHPP Cachoeira dos Macacos, HPP Quebra-Queixo and CEEE-G conceive the execution of the strategy in consumption of 100% renewable energy of the CSN Group. With these acquisitions, the Company achieves self-sufficiency to support the group's operations and consolidate itself as a solid player in the generation and sale of surplus energy in the free energy market.

Aerial view of the HPP Itá (SC)

Administrative installation at HPP Itá (SC)

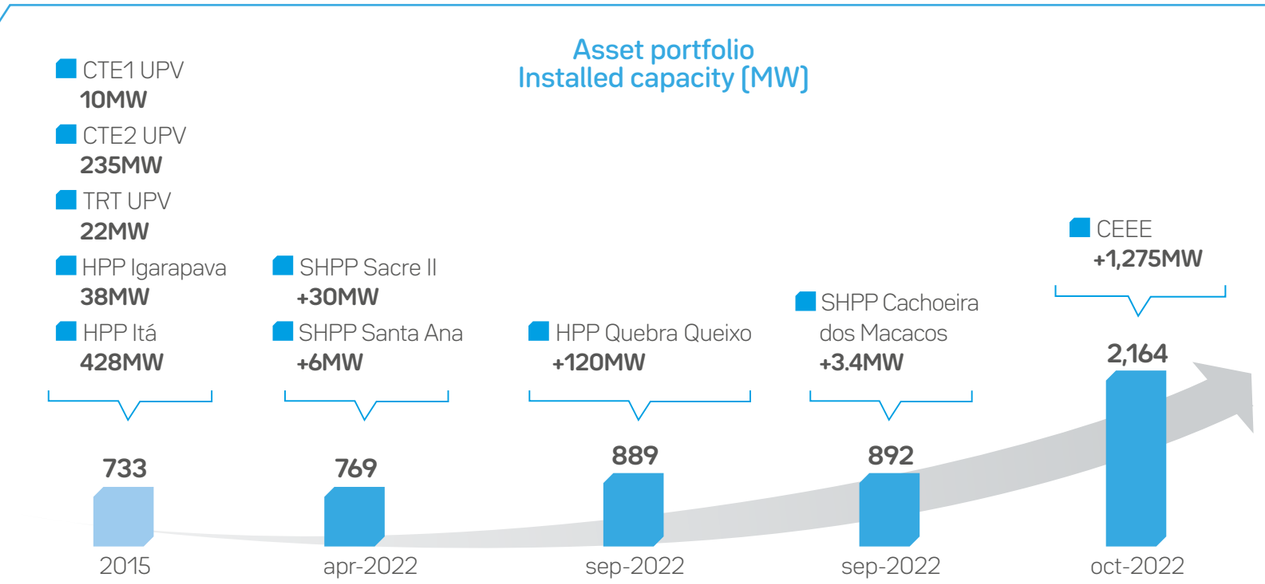
will have an installed capacity of 1.2 GW in one of the regions with the best incidence of sunlight in Brazil, reflecting in the generation of around 370 MW on average.

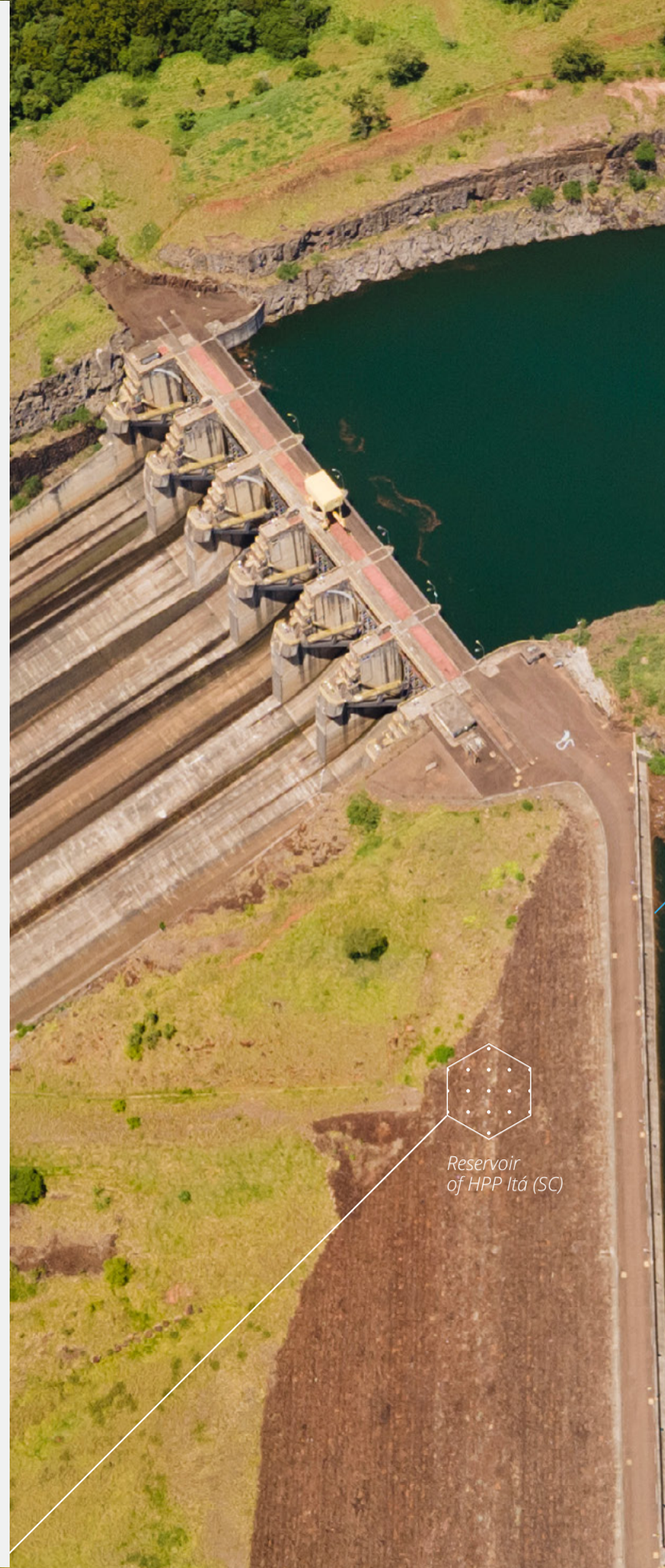
The new composition of the energy business takes CSN to a new level. This new position implies a company with **100% of its energy matrix renewable**, provides greater predictability of costs and solidifies a new business front that is robust and intensive in cash generation.

This movement ensures, for the coming years, including, a 50% reduction in energy billing costs, with returns of increased EBITDA in the CSN Group of R$ 512 million for the coming years, of which around R$ 150 million is expected as a result of the sale of surplus energy and the rest as part of the EBITDA of the businesses benefiting from the cost reduction.

During the year, the Energy business reached net revenue of R$ 293 million and EBITDA of R$ 3 million, configuring an EBITDA margin of 1.1%, representing only one quarter of the incorporation of CEEE-G. This result is based on the exposure to the Settlement of Differences Price (PLD), which in 2022 was overturned by heavy rainfall and the consequent increase in the level of reservoirs in the country.

The future is one of more investments, such as the Floriano Project, in the State of Piauí, a complex that





Reservoir of HPP Itá (SC)

CSN's Energy Strategy

The pursuit of self-sufficiency and competitiveness based on the acquisition of renewable energy generation projects supports the growth of CSN's operations and energy pillar.

Attractive investment

Returns above **20%** with potential upside.

Low risks (excellent generation histories, no market risk).

Industrial competitiveness

Self-sufficiency reduces volatility.

Relevant **cost reduction** (self-production).

Sustainability

Reduction of CO_2 emissions.

Allocation of **100%** renewable energy.

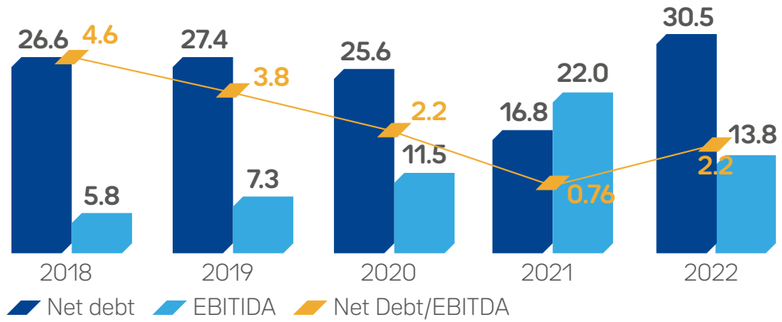
Business diversification

Energy as a **strategic pillar** for CSN Energia as a cash-intensive business.

Financial management

In 2022, the consolidated net debt reached the leverage indicator measured by the Net Debt/EBITDA ratio of 2.2x. This increase is a consequence of the disbursements made in the period, with the payment for the acquisition of CEEE-G, for the distribution of dividends, and for the issuance of new debts, such as the 12th and 13th issues of CSN debentures and the first debentures of Prada and CEEE-G.

Indebtedness (R$ billion)



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

	2021	2022
Revenues	57,886.65	51,013.43
Inputs purchased from third parties	(30,817.30)	(35,174.50)
Gross added value	27,069.36	15,838.93
Withholdings	(2,212.41)	(2,870.23)
Net added value produced	24,856.95	12,968.70
Added value received in transfer	2,151.53	3,489.31
Total added value to be distributed	**27,008.49**	**16,458.01**
Added value distribution		
Personnel and charges	2,307.07	2,862.78
Taxes, fees and contributions	7,183.93	4,655.50
Remuneration of third-party capital	3,921.86	6,772.03
Equity return	13,595.62	2,167.70
Total added value distributed	**27,008.49**	**16,458.01**

GRI 201-1


CSN Araucária (PR)

Net Revenue

2020
R$ 30.1 billion

2021
R$ 47.9 billion

2022
R$ 44.4 billion

Net profit

2020
R$ 4.3 billion

2021
R$ 13.6 billion

2022
R$ 2.2 billion

Adjusted EBITDA

2020
R$ 11.5 billion

2021
R$ 22.0 billion

2022
R$ 13.8 billion

Investments

In 2022, CSN invested a total of R$ 3.4 billion, a level 16% higher than in 2021. Highlights were the acquisition of large equipment for a cement factory in Arcos (MG), accompanied by current investments in CSN Cimentos operations. In terms of logistics, acquisition of Gantry cranes on wheels for handling containers at Port of TECON, and ongoing investments in the rail network at the Transnordestina Railroad.

In Mining, contributions were made to advancing the P15 itabirite projects, filtering tailings and expanding the Port of TECAR, which should be more concentrated in early 2023. In the steel industry, the main investment was made in repairs to the operations and in the coke batteries of the UPV.

Port of TECON (RJ)

Tax management

CSN's tax management aims to ensure compliance with the tax rules and requirements set forth in the legislation and to determine and pay the taxes due in a correct, controlled and timely manner, while seeking to capture tax incentives that promote greater competitiveness in the business segments. This work is carried out by the General Tax Management, with the consent of the Financial Board, guided by good faith, value creation, risk management and strict compliance with local laws.

The Company's tax strategy is reviewed by the Chief Financial Officer together with the Tax Legal Department. The Board of Directors and Executive Board oversee strategic tax matters. The tax strategy is continuously linked to various spheres of business plans, including corporate restructuring projects, contracting services, establishing partnerships and obtaining tax incentives that promote greater competitiveness.

The Tax and Fiscal areas, together with the Legal Department, constantly monitor and evaluate changes in federal, state and municipal legislation applicable to the business, as well as compliance rules established by the tax authorities in the jurisdictions where the Company is present and possible concerns about behavior and practices related to the fiscal and tax spheres. The objective is to strengthen the process of identifying, managing and mitigating (or minimizing) fiscal risks and tax impacts. Tax management practices are submitted to review on a quarterly basis by external audit, in accordance with the balance sheet review calendar and cover direct or indirect taxes, as well as aspects of tax compliance. Additionally, the Tax Department team regularly interacts in sectoral forums, via entities such as the Federation of Industries of the State of Minas Gerais (FIEMG), the National Confederation of Industry (CNI) and the Association of Large Industrial Energy Consumers and Free Consumers (ABRACE) in which the Company is an active member and offers stakeholders the e-mail address **tributariocsn@csn.com.br** for comments on tax and fiscal aspects.

Tax management practices are submitted to external audit on a quarterly basis

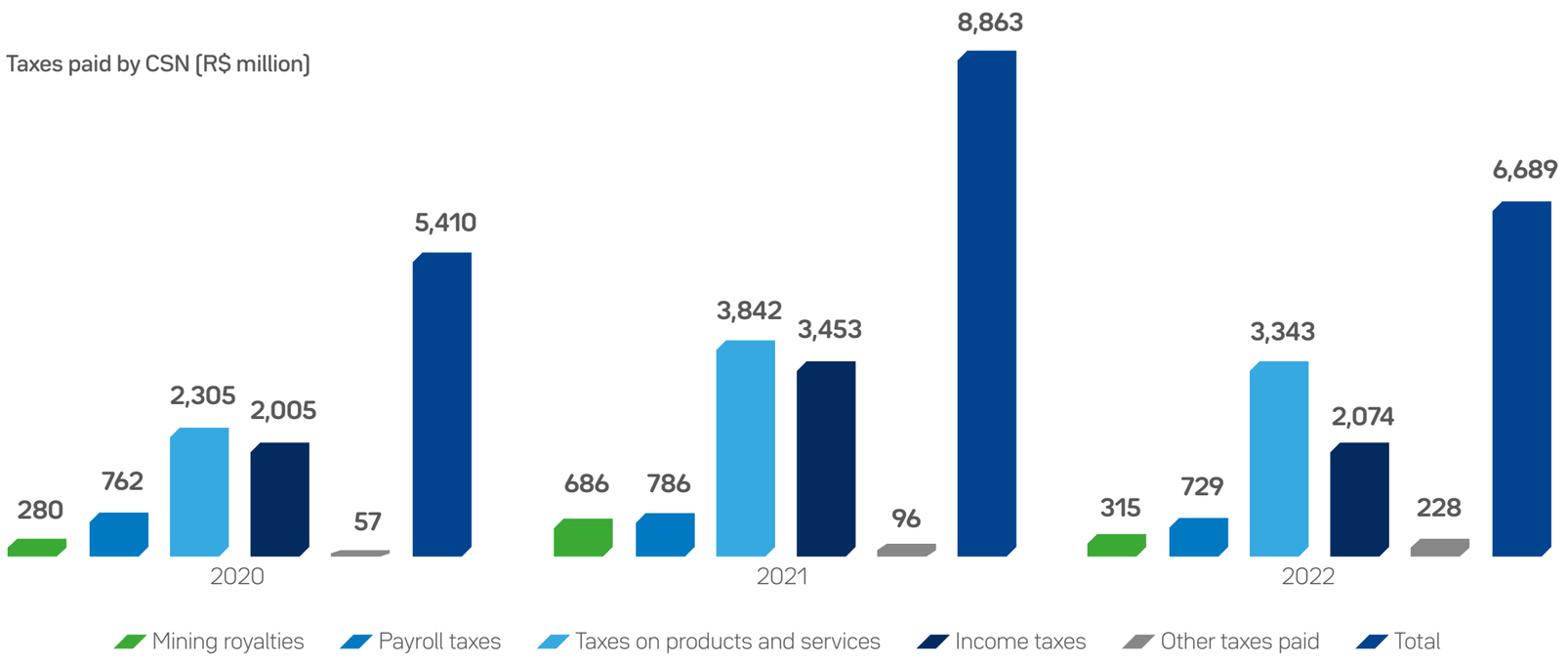
GRI 3-3 | 207-1 | 207-2 | 207-3

CSN Alhandra (PB)

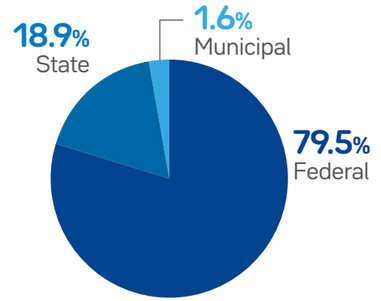
With operations in the United States, Portugal and Germany, the Company observes the legislation and local rules to calculate the transfer price between international transactions and complies with the Country-by-Country Declaration – an accessory obligation for the tax administration in Brazil. The Company is also subject to the Universal Bases Taxation rules (CFC rules) and the debt limits established by Brazilian legislation, whose impacts can be evaluated in the Group's Financial Statements available on the Investor Relations website **here**.

The tax strategy is also continuously linked to corporate restructuring projects, contracting services, establishing partnerships and obtaining tax incentives that promote greater competitiveness in the sector. The Company supports, through the CSN Foundation and Incentive Laws, several initiatives that contribute to the strengthening of public policies such as incentives for culture, sport, defense of the rights of the elderly, children and adolescents (learn more about the actions of the CSN Foundation on page 105).

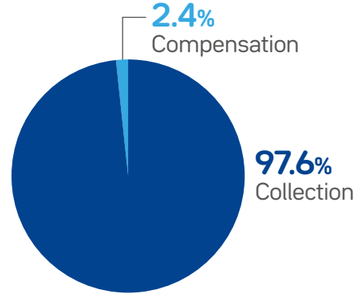
Taxes paid by CSN (R$ million)



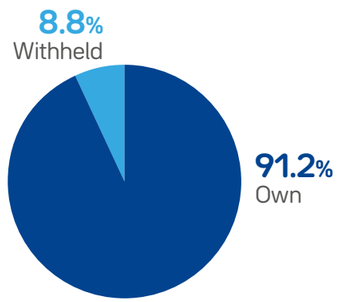
Destination of taxes paid in 2022



Payment method for taxes in 2022



Tax classification in 2022



GRI 3-3 | 207-1 | 207-2 | 207-3 | 207-4

Stakeholders management

Human capital

In 2022, CSN had 25,720 own employees in Brazil and 2,060 abroad, which constitute its most precious asset. The relationship with this audience is managed based on a robust model, based on five pillars:

- Attracting
- Aligning and engaging
- Developing
- Assessing
- Recognize and rewarding

Attraction and selection

The Young Apprentice, Internship and Trainee programs are the main entry points for CSN's workforce. The first, an initiative by the CSN Foundation, is regulated by the Learning Law and aims to generate job opportunities and social transformation for young people aged between 14 and 24 who are looking for their first job. Under the program, young people undergo practical activities within the business and participate in theoretical training on the chosen area, the job market, personal and professional development. Lasting up to two years, the program is carried out in partnership with the National Industrial Apprenticeship Service (SENAI). In 2022, the first group of apprentices made up entirely of women was undergoing training at Transnordestina. The 15 chosen students of the Railroad Maintenance Electricians course, went through different locomotive maintenance processes throughout the year: heavy, light and component repair. In total, 1,296 apprentices were participating in the initiative in one of the businesses in 2022.

Employee at CSN Mineração, at Casa de Pedra (MG)

GRI 2-7 | 3-3

The internship program aims at the development and inclusion of undergraduate students in a structured learning path, which addresses behavioral skills and business topics in training given by the Company's executives, in addition to providing experience in the profession through practical experiences, participating actively involved in the routine, processes and projects carried out by the Group's teams. With a view to diversity and inclusion, since 2020, selection is completely blind and focused on identifying and valuing what is unique about each candidate. During the year, 616 interns were part of the CSN team.

Lastly, the Trainee Program is aimed at the entry of recent graduates without restriction of courses, being chosen candidates who show greater adherence to CSN's culture. The program lasts for 18 months, during which those selected go through a development journey that includes technical content, behavioral skills and hackathons which aim to put into practice all the acquired knowledge. The 2022 edition of the Trainee Program reached a record number of enrollments with more than 20,000 candidates and ended with 48 trainees developing projects in different areas of CSN at the end of the year.

Trainees at Casa de Pedra, Congonhas (MG)

CSN has been adopting attraction and selection practices with a view to increasing diversity and inclusion

GRI 3-3

In addition to entry programs, the Company has been innovating in the attraction and selection of talents, allied to the promotion of diversity and inclusion. In order to increase opportunities for professional development and contribute to the employability of young people, the **Citizen Mentorship** project was launched in the previous year for students of Garoto Cidadão – an education through culture project by the CSN Foundation.

Mentor employee of the Citizen Mentorship Program, in São Paulo (SP)

For 4 months, between October 2021 and January 2022, each of the young participants was closely monitored by a Company employee, who had the mission of voluntarily sharing the practical and guiding vision of the corporate world. To become a mentor, the professional needed to be a specialist or manager (supervisor, coordinator, manager or executive) and work for at least one year in one of the Group's companies. The first cycle of the program consisted of four sessions, lasting a total of two hours, between the mentor-volunteer and two student-mentees, in addition to four training sessions, lasting two hours a month, with specialists in Human Resources, who shared various contents about employability. Of the participants in the first edition of the project, 100% are employed and most were hired as apprentices in the CSN Group's businesses. The second edition has already started in 2022 and has 45 participants.

All opportunities to join the Company's team are published at the website (**www.csn.com.br/nossas-pessoas/trabalhe-conosco**). However, they are also disclosed internally, as the Company seeks to promote the internal movement of employees, expanding opportunities for professionals aligned with the corporate culture to be recognized and strengthen the business.

GRI 3-3

People development

The team's performance is periodically evaluated in processes that establish a transparent and purposeful dialogue, with a focus on professional development and alignment between the Company's and individual objectives. The methodology varies according to each functional level:

- Executive Directors; Directors; General Managers and Managers undergo a 360° Assessment in which they perform a self-assessment and receive an assessment from their immediate manager, peers, team and internal customers/suppliers.
- Coordinators and Supervisors undergo a 180° Assessment in which they perform a self-assessment and receive an assessment from their immediate manager and team.
- Trainees undergo a 270° Assessment in which they carry out a self-assessment, receive an assessment from the manager, peers and internal customers and suppliers.
- Specialists; Higher level; Administrative and Operational Level undergo a 90° Assessment in which they carry out a self-assessment and receive an assessment from their immediate manager.

5,070 promotions
provided through performance evaluation and other forms of recognition and merit

This process makes it possible to map potential leaders to strategic positions in the business, in addition to allowing the definition of parameters for the recognition of talents, up to the level of supervision, and the evaluation of leaders so that they can guide the development of these employees on a daily basis. day of operations.
In 2022, 91% of employees in Brazil underwent a performance evaluation process, which resulted in promotions, performance-based salary increases and the implementation of a Company talent retention program, reaching 186 retentions and 716 merits.

Percentage of CSN Group employees submitted to performance evaluation

	2021	2022
By gender		
Men	85.0%	91.4%
Women	74.0%	88.7%
By functional level		
Executive	78.9%	100%
Leadership	95.0%	99.5%
Specialist	90.0%	97.3%
Engineer	92.2%	98.3%
Higher level	91.4%	97.0%
Technician	92.0%	95.7%
Administrative	85.9%	95.0%
Operational	82.4%	89.1%
Capacitar Program	47.8%	20.7%
Total	**84.7%**	**90.9%**

1. Considers all effective employees of the CSN group in the CLT and Capacitar Program categories. Does not cover SWT and Lusosider. The percentage is calculated as the total number of employees evaluated in the year divided by headcount on December 31, which includes professionals who are not eligible for the performance evaluation cycle.

Employee at CSN Araucária (PR)

GRI 3-3 | 404-3

With a focus on promoting the constant development of employees, in October 2022 CSN's Corporate University was inaugurated, an online platform which has various contents and training, which will contribute to the development and improvement of fundamental skills and competences for the career of each professional.

During the last three months of the year, the University was responsible for more than 79,000 hours of training. In addition to promoting face-to-face training, including mandatory and safety training, the online platform has already made available more than 40 virtual contents in the modality on demand for employees to build their own learning journeys.

The Corporate University structure is divided into five schools: **Excellence in Results School, Leaders School, Business School, ESG School and Innovation School**. This division allows the direction of contents according to the organizational structure of the company. From the launch, some training initiatives that occurred independently in the operational units were integrated into the University.

Corporate University

escola DE EXCELÊNCIA EM RESULTADOS

- At the **Excellence in Results Schoo**l, in addition to training online, the People and Management Stewardship promoted two learning days, aimed at analysts and specialists, covering more than 370 employees. Within the scope of the Knowledge Plant, content was also offered via stream, such as Excel training, technical content webinars and live sessions.

escola DE LÍDERES

escola DE INOVAÇÃO

- At the **Leaders and Innovation Schools**, the year was one of planning: the contents, priorities and actions began to be mapped out for the construction of personalized trails, with the "Being a CSN Leader" program, which aims to encourage employees in a position of leadership to act as business owners and work with ethics and transparency and resilience and creativity in the solutions that fit their responsibilities. This program will be expanded to all Company units in 2023.

escola DE NEGÓCIOS

- The **Business School**, on the other hand, held three meetings in São Paulo for senior management of the entire group. The training included the participation of directors and executive officers of the Company, who contributed to the formation of the leadership skills necessary for the strategic challenges mapped out for the future of the company.

escola ESG

- At the **ESG School**, the highlight was the revitalization of Compliance training, which achieved a greater reach of the Group's employees. For 2023, the plan is to expand ESG engagement and awareness to all of the Company's stakeholders, through training related to the company's material topics and the interactive presentation format of the Integrated Report, encouraging employees to understand the period's activities and achievements at functional levels.

GRI 3-3

Employee at CSN Cimentos Arcos (MG)

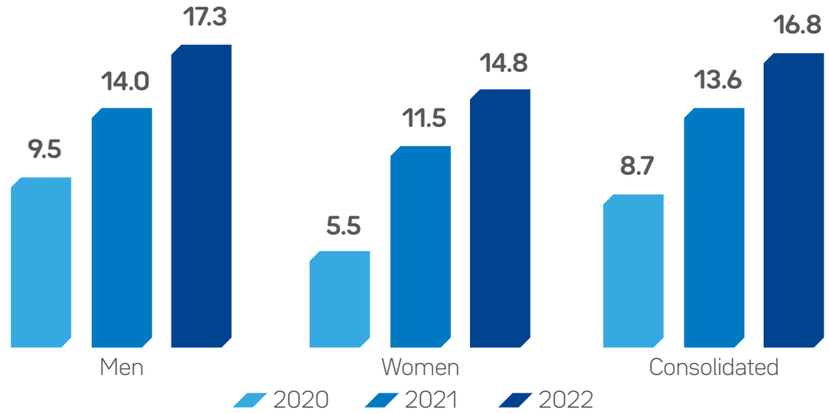
Through the Corporate University, total hours of training for CSN Group employees in Brazil rose 25% compared to 2021. It is worth highlighting the strengthening of initiatives aimed at training women, evidenced by the 126% increase in average hours of training among female employees compared to 2020.

SWT and Lusosider conduct their own training programs. In the German operation, training needs are defined with the support of the Vocational Training and Corporate Education Committee. In 2022, the units provided 36,000 hours of training.

In total, the CSN Group's investment in training its people was R$5.4 million, resulting in 441,000 hours of training.

Human rights issues are addressed in the mandatory training of the Compliance Program and in diversity and inclusion training. In 2022, the Corporate University offered an online course specific to the ESG School, addressing topics such as unconscious biases, race, gender, LGBTQIAP+, culture and religion, people with disabilities (PWDs) and generations. With two hours of workload, the course registered more than 3,800 enrollments.

Average hours of training per employee of CSN Group[1]



1. Does not cover SWT and Lusosider operations.

CSN Group Human Rights training indicators

	2021	2022
Training hours promoted	5,611	28,644
Number of trained employees	5,838	20,150
Percentage of trained over the headcount	22.4%	76.7%

GRI 3-3 | 404-1 | 412-2

Employee compensation and benefits

CSN's compensation practice is to provide internal balance (among employees) and external balance (in a competitive manner in relation to the market), seeking to reconcile the compensation offered with the responsibility exercised by the position, in order to attract, retain and motivate talent.

Employees are entitled to fixed compensation, consisting of a nominal monthly wage, vacations and thirteenth wage - as provided for in the Brazilian Consolidation of Labor Laws, with the aim of ensuring the compatibility of the function performed with the compensation paid; and variable, paid annually as a result of the results of the Company's and individual targets and the result of the skills assessment.

The Company respects the conventions of the International Labor Organization (ILO) in relation to labor laws, including not allowing employees to have a weekly workload of more than 48 hours in regular time and 60 hours including overtime.

Wage adjustments are also carried out in accordance with the base date of the applicable agreements or collective agreements, in addition to wage increases due to qualifications, merits and promotions according to the performance and level of employee engagement.

Additionally, CSN offers all employees hired for a fixed and indefinite period of time benefits in line with market practice and agreements entered into with unions, which include daycare assistance, meal vouchers, health plan, dental plan and life insurance. All professionals hired by the Company in Brazil and abroad are covered by collective bargaining agreements.

The benefit package also includes supplementary pension plans, managed by the CSN Employee Beneficent Fund (CBS) – a private, non-profit pension fund whose members are employees and former employees of the CSN Group. The objective is to support employees in their retirement plans.

Employee at Presidente Vargas Steelworks (RJ)

100% of employees, in Brazil and abroad, are covered by collective bargaining agreements

GRI 2-30 | 3-3 | 401-2
SASB EM-MM-310a.1

Diversity and inclusion

For CSN, the diversity of ideas and people on the team is a lever for innovation and business growth. For this reason, it has been seeking to increase the presence of women, people with disabilities (PWDs) and representatives of minority groups in operational positions and in leadership positions, through the evolution of the processes of recruitment, evaluation and recognition of talents. The governance of the theme is the responsibility of the Diversity and Inclusion Management, which develops engagement and training actions and projects, in all businesses, within the scope of the Diversity Program; and the ESG Committee, in which one of its thematic groups has the People theme as its scope, in which it contemplates the debate of strategies and results of ongoing actions.

In 2022, the Company continued a series of meetings and discussions with leaders to promote awareness and knowledge about the importance of an inclusive and diverse work environment. In this sense, the live video conference on racial literacy, held at the ESG School of the Corporate University (see more on page 92) was added to more than 3,000 training sessions in diversity and inclusion on the platform in 2022, engaging more than 300 leaders and approximately 4,000 employees.

Employee at CSN Mineração

GRI 3-3

Investing in training young people between the ages of 18 and 24 is also CSN's strategy within the scope of the **Capacitar Program**, developed in partnership with SENAI and the CSN Foundation. The initiative qualifies people from the communities close to the operating units to enter the job market in the areas of mining, steel, cement and logistics. In addition, in the quest to ensure the achievement of the goal of female representation in the group, the Capacitar Mulheres Program was essential, reaching 339 women trained and prepared to be included in CSN.As fundamental points, CSN also works to promote the inclusion of people with disabilities from the Capacitar PcD Program, developed with the same premises in relation to the gender focus, in 2022, 15 people were trained. CSN currently has 475 employees who were trained and hired by the Capacitar Program.

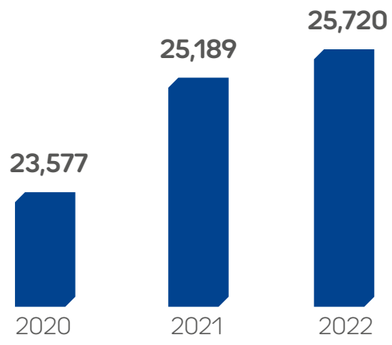
Employee at CSN Araucária (PR)

As a result of all these efforts, the Company has made significant progress towards its goals:

42.6% growth in gender representation in the CSN Group compared to 2020 (target base year), reaching 20.5% of women in the total staff in 2022

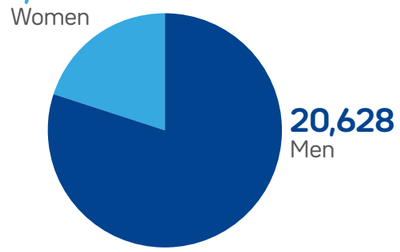
20% increase in people with disabilities at CSN compared to 2021

Total number of employees[1]

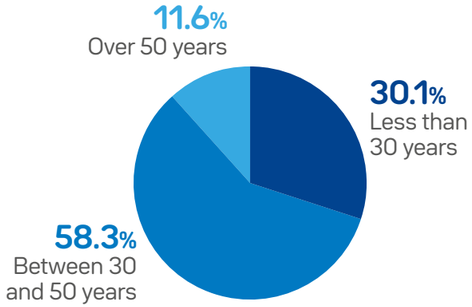


1. Considers only employees allocated in Brazil. Does not consider SWT and Lusosider operations.

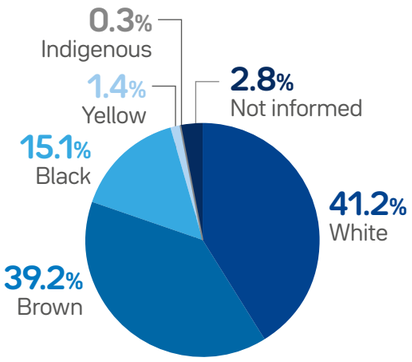
Employees by gender in 2022[1]



Employees by age group in 2022[1]



Employees by race in 2022[1]



GRI 2-4 | 2-7 | 3-3 | 405-1

Employee at Faria Lima office, in São Paulo (SP)

Ethnic-racial diversity is also a front strongly worked on by the CSN Group. With a view to expanding opportunities and promoting the inclusion of the black population in leadership positions and positions, in 2021, CSN was one of the founding companies of MOVER – Movement for Racial Equity.

Commitments of MOVER:

- Create **10,000 leadership** positions for black people by 2030
- **Employ and train** through opportunities that balance the visibility of black professionals
- **Make the population aware** of the topic, bringing diverse and relevant content

In partnership with MOVER, in 2022 the Company created opportunities for 111 black employees to study English in a 12-month course. Adherence to the protocol of the Global Pact for Racial Equity also reinforces CSN's commitment to this issue.

In 2022, CSN increased the participation of black people in the workforce by 3% compared to the previous year, reaching 54% of black talent on the team. Additionally, the Company reinforces through its Code of Conduct that it repudiates cases of discrimination in its business and takes the necessary measures to investigate and curb such situations (see more on page 37).

GRI 3-3 | 405-1

Health and safety

For all of the Company's businesses, health and safety at work is a priority issue, being treated as a top priority in terms of deadlines, costs and production quality. The main guidelines on the subject are set out in the Sustainability Policy (**here**) and in the Occupational Health and Safety Management Manual (**here**) and Occupational Health and Safety Manual for Suppliers (**here**), which reinforce the role of leadership in the management of health and safety aspects and establish mechanisms for monitoring performance and action plans by the Board of Directors, the ESG Committee and the Board of Directors. The theme is also monitored by the Health and Safety Management System (SGSS), which covers 100% of own employees and third parties who work in all CSN units in Brazil, and disseminated through programs focused on accident prevention, risk mitigation and training of leaders and employees.

The theme is also monitored by the Health and Safety Management System (SGSS), which covers 100% of own employees and third parties who work in all CSN units in Brazil, and disseminated through programs focused on accident prevention, risk mitigation and training of leaders and employees.

Click here to learn more about the Sustainability Policy.

Click here to access the Occupational Health and Safety Management Manual.

GRI 3-3 | 403-1 | 403-7 | 403-8

The 10 Strategic Elements of the SGSS

1 Commitment and leadership
It reinforces the engagement and commitment of all employees, both their own and third parties, in the daily challenge of making the work environment increasingly safe and healthy.

2 Communication
It aims to reduce health and safety risks through efficient communication with all interested parties.

3 Standards and procedures
Standardizes clean, safe and healthy work practices through standards and procedures, involving routine or non-routine work for operational and administrative activities.

4 Behavioral development
It aims to establish requirements for the behavioral development of employees, employees and suppliers, focused on prevention and continuous improvement in occupational health and safety.

5 Risk management
It aims to establish a system to identify, assess, control, minimize or eliminate risks and impacts related to processes, activities, facilities, services and products and their possible consequences for people's health and physical integrity.

6 Change management
It aims to ensure that all changes in facilities, technology, processes, the work environment and people are carried out in a controlled manner, so that risks or impacts are maintained at acceptable levels and in order to promote improved performance in occupational health and safety.

7 Legal requirements
It aims to ensure the identification, analysis and adequacy to the legal requirements related to health and safety at work.

8 Planning
It aims to establish a system that ensures that strategic, operational and routine actions are planned in order to minimize the impact and keep process hazards and risks under control.

9 Management of service providers
It aims to ensure that service providers are committed to practices, procedures and perform in line with CSN's values and principles.

10 Management skills and abilities
It aims to systematize a continuous process of training, qualification, qualification and adaptation, so that own employees and third parties are able to carry out their activities in a clean, safe and healthy way.

CSN ERSA Fundição (RO)

With a focus on mitigating impacts on health and safety at work for employees or third parties, guidelines included in the Occupational Health and Safety Management System and established in the Occupational Health and Safety Manual for Suppliers and General Conditions for Provision of Services, published in 2022, define minimum requirements and procedures, as well as provide the necessary information so that suppliers and sub-suppliers can adequately prepare to perform their duties safely at CSN's facilities.

The Manual and the General Conditions undergo an annual internal audit and apply to every supplier that participates in bids at CSN and its units in Brazil, who must receive the documents and other specific materials relevant to the service unit in order to know their responsibilities in aspects related to quality, health and physical integrity of employees.

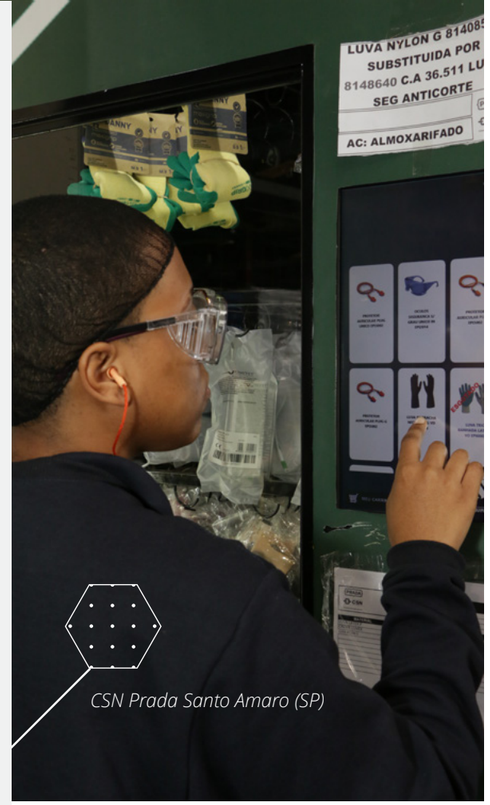
A multidisciplinary team performs health and safety risk analyzes that consider the entire life cycle of the projects, based on a methodology that adheres to ISO 31.001:2018. Based on it, several programs are implemented to prevent risks and ensure a safe work environment, such as preliminary risk analysis, work permits and supply of equipment for individual and collective protection. The company's risk management ranges from critical risks (constituting a categorization of the main risk groups) to the risks associated with a task, which are identified and mitigated through specific controls and documented in operational procedures or cross-audits between units, among other practices.

Worker involvement is encouraged and ensured through different consultation and engagement mechanisms. Among them, the Daily Safety Dialogues (DDSs), the annual promotion of the Internal Week for the Prevention of Accidents at Work and Environment (SIPATMA), the periodic safety meetings between leaders and teams and the representation of 100% of the workforce on committees, such as Internal Commissions for Accident Prevention (CIPAs), body made up of members protected by employment stability, in accordance with the Regulatory Standard (NR05).

Click here to access the Health and Safety Manual for Suppliers.

Click here to access the General Conditions for Provision of Services.

GRI 3-3 | 403-2 | 403-4



CSN Prada Santo Amaro (SP)

All employees and third parties are trained and informed about safety procedures

Occupational Health and Safety initiatives to reduce the risk of accidents and occupational diseases:

- **Readiness Test**
  Online tool that combines science and technology to assess readiness for work and predict possible alterations in the state of attention and response that could aggravate the risk of accidents resulting from personal factors. The test is carried out daily with employees who perform critical activities at the UPV (Volta Redonda/RJ) and Casa de Pedra (Congonhas/MG) units and, in 2023, will be extended to the other units in Brazil..

- **Awakening Program**
  For work, a good night's sleep is a determining factor in the good performance of tasks as it preserves reflexes, concentration, memory, agility and prevents fatigue. The implementation of the Program showed a significant reduction in the number of fatigue and distraction events, contributing to the reduction of incidents.

- **Alcohol and Narcotics Prevention Program (PPAE)**
  Program with the objective of preventing, accepting for treatment and combating the undue consumption of alcohol and/or other narcotics, aiming at the physical and psychological integrity of employees and suppliers. This program is carried out respecting all criteria of medical secrecy, respect and support for those involved, and guidelines for compliance from the company.

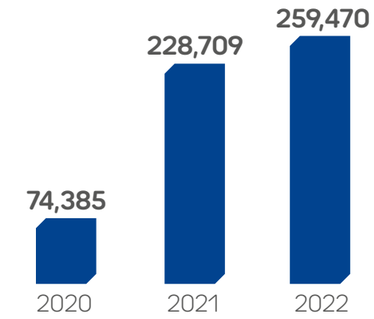
- **Health and Safety Performance Index (IPSS)**
  The indicator measures the health and safety results of the CSN Group's businesses and units on a consolidated basis and allows viewing, in addition to the reactive indicator, compliance with and adherence to preventive and legal health and safety programs.

- **Smart Lock System**
  Automated system that allows the blocking of hazardous energies, making the steps safer, more agile and guaranteeing the reliability of authorized professionals

- **Virtual reality training**
  The company started implementing training on a virtual platform with the application of games and a virtual assistant as a facilitator of theoretical content, rules with animation pills and the use of 3D glasses for simulations, providing experience in a virtual environment. Implementation began in the Mining segment and will be extended to other businesses in 2023.

In addition, all employees and third parties are trained and communicated about the preliminary risk assessment procedures and encouraged to contribute with the indication of behaviors or installations eventually unsafe, being advised not to start or stop an activity if they identify a hazardous situation. **The right of refusal is also guaranteed to third parties working on the Company's premises. 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 guarantee the systematic assessment of risks. During the year, 244.7 thousand hours of training were provided in Brazil, in addition to 1.2 thousand hours in Portugal and 13.5 thousand hours in Germany.

Hours of health and safety training[1]



1. As of 2021, includes Lusosider and SWT.

GRI 3-3 | 403-2 | 403-4 | 403-5

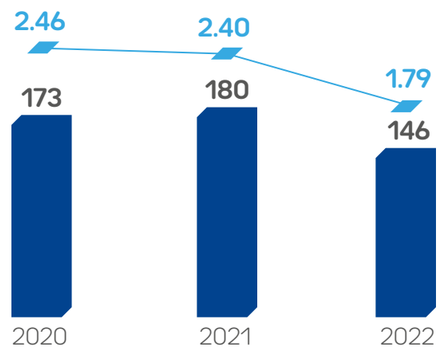
As a result, in 2022, the CSN Group recorded the lowest accidents frequency rate in the last eight years. The target, by 2030, is to reduce the indicator by 30% compared to the base year 2020, reaching a rate of accidents with and without leave of absence for own and outsourced employees per million HHT of 1.7. In 2022, the rate was 1.79, a decrease of about 27% compared to 2020.

In 2022, 146 accidents were recorded in Brazilian operations, 17 of which involved removal of the injured professional from his duties for a period exceeding six months and, unfortunately, four fatalities, three of which were own employees and a third party, all of which occurred in the operations of Railroad Transnordestina Logística S&A. In Tamboril (CE), an employee accompanying intersection maneuvers was hit by a pickup truck at high speed that had lost control and left the road after colliding with the Company wagon. Also in Ceará, the train that made the route between Ibiapaba and Crateús needed to carry out a maneuver procedure for uncoupling and separating the locomotive and wagons – which reached an employee. In Piauí, in Altos, a trailer collided with the Company's locomotive, hitting an employee. The third worker was affected by an electrical discharge when he was performing an electrical welding service in the recovery of a wagon truck.

All occurrences went through a process of investigation and analysis by a team of specialized and multidisciplinary professionals, also counting on members of the organizational structure where the accident occurred, with the involvement of specialists and employees through the Internal Commissions of Accident Prevention (CIPAs). The occurrences were shared through meetings with employees and leaders and, based on the investigations, comprehensive actions were defined that must be obligatorily complied with by all areas and businesses of the Company.

The Occupational Health and Safety Management Manual defines principles and procedures for evaluating and investigating accidents in operations. The methodology varies according to the severity of each case and the results must be documented and kept on file for 30 years. In addition, the Company undertakes to establish mechanisms for sharing lessons learned.

Frequency rate[1, 2]



1. Covers own employees and third parties. Rate calculated with the factor of 1 million man-hours worked.
2. Does not include SWT and Lusosider.

Click here to access the Occupational Health and Safety Management Manual.

Occupational health and safety indicators – Brazil[1]

	2020	2021	2022
Total man-hours worked (MHW)	70,382,735	75,024,175	81,431,271
Number of reportable accidents (with and without leave)	173	180	146
Number of accidents with serious consequences (except deaths)[2]	8	12	17
Number of deaths resulting from accidents at work	1	2	4
Total number of days lost and debited	11,391	17,174	33,664
Frequency rate of reportable accidents at work[3]	0.49	0.48	0.36
Frequency rate of reportable accidents at work[4]	2.46	2.40	1.79
Frequency rate of accidents with serious consequences (except deaths)[3]	0.02	0.03	0.04
Frequency rate of accidents with serious consequences (except deaths)[4]	0.11	0.16	0.21
Frequency rate of deaths resulting from accidents at work[3]	0.00	0.01	0.01
Frequency rate of deaths resulting from accidents at work[4]	0.01	0.03	0.05
Accident severity rate[3]	32	46	83
Accident severity rate[4]	162	229	413

1. Covers own employees and third parties.
2. Accidents with leave of absence for at least six months.
3. Rates calculated with the 200,000 MHW factor.
4. Rates calculated with a 1 MM MHW factor

GRI 3-3 | 403-2 | 403-9

Health programs

The routines and intervals for evaluating the health conditions of employees and third parties, according to the functions performed and occupational risks mapped, are established within the scope of the Medical Control and Occupational Health Program (PCMSO), developed in accordance with the Management Program of Risks (PGR).

Employees also have access to a series of initiatives aimed at preventing and reducing illness, increasing well-being and preventing accidents at work, which are offered through CSN 10+, a program to support and encourage quality improvement. of life. The services are made available through the occupational medicine team and may occur on demand from medical evaluations or on the initiative of the employees themselves.

The CSN 10+ was born in 2017 at CSN Mineração, with the mission of supporting and encouraging employees to maintain a balanced and healthy life, based on physical, social and emotional well-being. The program brings together several initiatives and subprograms whose main objective is to promote the improvement of quality of life, the reduction of illnesses and accidents at work, and which also result in increased productivity and performance of employees.

CSN also offers Viva+, a program carried out in partnership with a network of gyms that contributes to the physical, mental and social health of employees and their first-degree relatives; and the Personal Support Program (PAP), which provides free telephone assistance in situations involving personal and professional issues, with psychological, financial and legal guidance.

Annually, vaccination campaigns are carried out at the units, with emphasis on the trivalent flu vaccine. In partnership with the municipal secretariats, we carried out vaccinations for covid, meningitis C, yellow fever, hepatitis B. In 2022, in partnership with public health entities, CSN continued to strongly encourage adherence to vaccination against Covid-19 and other diseases transmissible diseases, including carrying out the vaccination gesture within the units. In addition, internal flu (H1N1) vaccination campaigns were carried out, with the participation of more than 17,000 employees.

CSN 10+

1. Alcohol and Narcotics Prevention Program
2. Awakening Program
3. Ergonomic Management and Labor Gymnastics Program
4. Fit and Healthy Plate Program
5. Hearing Conservation Program
6. Itinerant Medicine
7. Healthy Program
8. Skin Health Program
9. Anti-tobacco Program
10. Management of Leave

GRI 3-3 | 403-3 | 403-6

Employee at Presidente Vargas Steelworks (RJ)

Social and relationship capital

Suppliers

Respect for human rights, ethics and best market practices is demanded by CSN from all its partners in all business. In 2022, the Group had 4,443 active suppliers in Brazil, totaling R$ 31.1 billion. Abroad, R$ 4.7 billion were spent with 4,038 suppliers by Lusosider and SWT.

The Company prioritizes hiring local suppliers (located in the same State as the Company's unit), as it encourages the generation of wealth in the vicinity of operations while bringing benefits such as agility, reduced delivery times and close relationships. However, some demands require hiring global partners or specialized companies that are not installed close to the units. In 2022, the percentages of local purchases by CSN in Brazil, Portugal and Germany were 27.8%, 40% and 82%, respectively. Furthermore, national suppliers accounted for 66% of CSN's purchases and contracts in Brazil.

Before contracts are established, suppliers undergo an evaluation and approval process, in addition to being asked to declare their agreement with the Code of Conduct and the Anti-Corruption Policy. When applicable, registration includes presentation of ISO 9001:2015 and ISO 14001:2015 certificates, self-assessment questionnaire and environmental licenses.

Companies that have a high level of criticality are evaluated by the area of Compliance (learn more on page 37), a process that 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.

GRI 2-6 | 3-3 | 204-1 | 308-1 | 414-1

During the year, 451 suppliers, in the Brazilian operations, were considered highly critical and 100% of them were evaluated in terms of environmental criteria. Regarding social criteria, 100% of contracted suppliers were assessed, avoiding any significant risk of violation of fundamental labor rights, such as freedom of association and collective bargaining, and degrading practices, such as child, forced or slave labor, in addition to preventing its chain from acting in breach of the applicable laws.

Additionally, in 2022, an ESG Assessment questionnaire was developed with a focus on measuring risks in relation to ESG issues, with a focus on health and safety management, engagement with communities, diversity and inclusion, presence of a reporting channel, code of ethics, certifications, climate risk management, water scarcity, biodiversity, among others. The level of exposure to ESG risk will be defined based on a matrix created based on the SASB methodology, which defines the level of risk exposure by material ESG topic, depending on the sector in which the company operates.

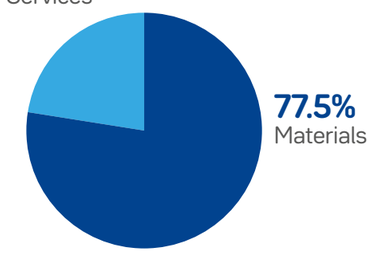
As of 2023, our ambition is for this questionnaire to be answered by all critical suppliers. The diagnosis will help CSN improve its assessment of potential socio-environmental and reputational risks, as well as influence its supply chain to adopt the best market practices.

CSN also has a Third Party Management Center (NGT), responsible for monitoring compliance with labor obligations, such as tax collection, payment of employees, transfer of collective and social security agreements, among others, by suppliers.

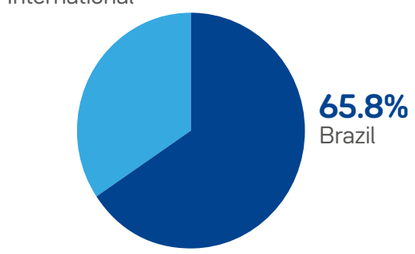
Employee at Presidente Vargas Steelworks (RJ)

X-ray of CSN operations suppliers in 2022[1]

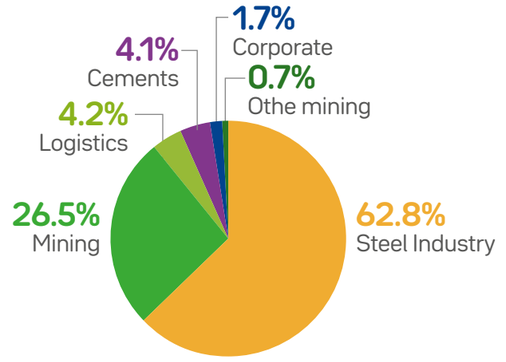
Expenditures by category of supply



Expenditures by geographic location



Expenditures by business segment



1. SWT and Lusosider operations are not considered.

GRI 2-6 | 3-3 | 308-1 | 407-1 | 408-1 | 409-1 | 414-1

CSN Foundation student in Arcos (MG)

Communities and territories

Through the CSN Foundation, the CSN Group creates relationships and partnerships with local communities, following the purpose of transforming lives through social, educational and cultural development. In 2022, R$ 35.5 million were invested in social responsibility projects and the granting of scholarships, which benefited 4,600 young people.

CSN Foundation's methodology starts from the territorial vision, understood from the perspective of space, economy, politics, culture and community relations; and seeks to engage public authorities and the local community, as well as partners who, through networking, generate social transformation.

The performance is sustained in the axes of education, culture, articulation and curatorship. Through the projects developed, it connects investments to the agenda of the Sustainable Development Goals (SDGs) and to the principles of the UN Global Compact.

The CSN Group's growth has created opportunities for the CSN Foundation to work. In 2022, after the acquisition of CEEE-G and LafargeHolcim Brasil, a process of integration was initiated between the initiatives carried out by the Força e Luz Foundation, an institute maintained with the support of CEEE-G, the LafargeHolcim Institute and the actions of the Foundation itself CSN seeking synergies to maximize the social impacts of ongoing actions.

GRI 3-3 | 413-1

Also in 2022, the CSN Group, together with the Center for Human Rights and Business of the Getúlio Vargas Foundation (FGV), started a Due Diligence in Human Rights (DDHR) in the Municipality of Congonhas (MG), where CSN Mineração is located, following the framework of the United Nations Guiding Principles on Business and Human Rights. Established based on the UN Guiding Principles, it is the main tool for identifying risks and impacts to human rights associated with business activity, including in the value chain. The objective of the project encompasses a broad diagnosis of impacts, risks and opportunities adverse to human rights in the Company's business model and the opportunities to influence internal decision-making and business partners based on this diagnosis.

The initiative began with the training of 22 employees in the methodology regarding tools for the application of the DDHR and normative and judicial trends in Brazil and abroad. Throughout 2023, the Company will start implementing the methodology with direct monitoring by Senior Management.

The CSN Foundation also understands the importance of political articulation in the search for a harmonious relationship with public authorities, local businessmen and other institutions. On this front, it manages the CSN Support House, in Congonhas (MG), focused on CSN Mineração's relationship with the local community.

GRI 3-3 | 412-1 | 413-1 | 413-2
SASB EM-MM-210a.3

Impact Assessment on Local Communities

In accordance with applicable legislation and industry best practices, prior to the implementation or expansion of its projects, and as part of the Environmental Impact Study (EIA), the Company carried out an in-depth socioeconomic diagnosis of the region and the communities that inhabit it. This is done through the Socioeconomic Environment Diagnosis, divided into two main stages:

Diagnosis of indirect influence area, regarding:

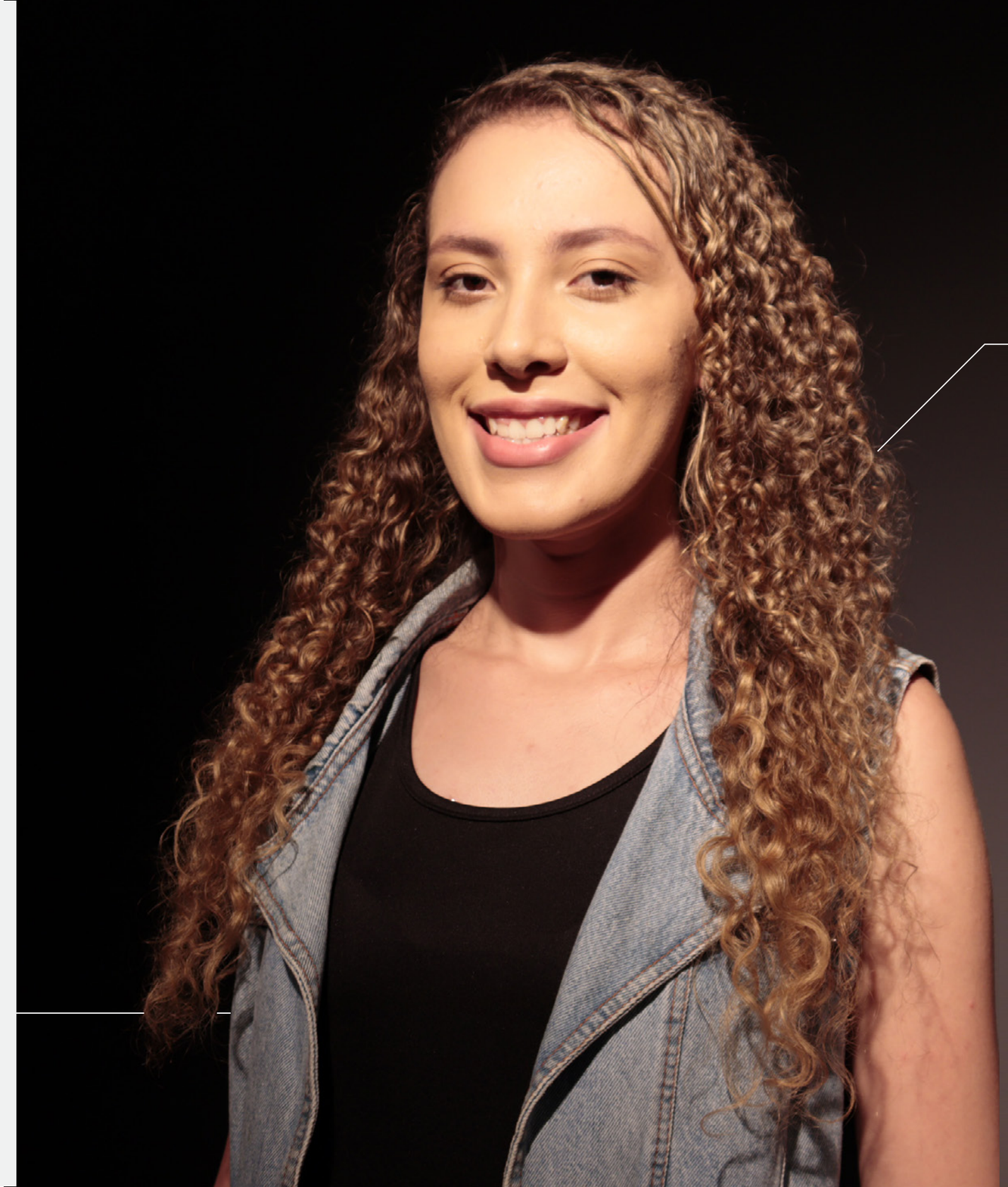
- City living conditions: population dynamics, migration, economy, education, sanitation infrastructure, energy and services, housing deficit, health, social assistance, public security socio-political and institutional organization; It is
- Presence and/or impacts on traditional communities.

Diagnosis of direct influence area, regarding:

- Characterization and land use;
- Environmental perception of the surrounding community and;
- Natural and cultural heritage; and
- Socio-environmental aspects and impacts.

Based on this in-depth analysis, a continuous improvement plan is established in relation to the points identified in this diagnosis, defined as priorities and/or critical to that territory and community, so that the Company can promote what is positive to the territory and mitigate, adapt or remedy the negative impacts caused by the operation and/or expansion.

Submerged church towers at the HPP Itá (SC)



Education

The CSN Foundation manages two schools: Escola Técnica Pandiá Calógeras (ETPC), in Volta Redonda (RJ), which since 1944 has offered secondary education with a technician, subsequent technicians, quick technical training, free courses and training for companies; and the Technological Education Center (CET), in Congonhas (MG), which since 1961 has offered Elementary Education II (6th to 9th grade), Secondary Education and Technical Education, in addition to professional training courses for companies.

Seeking to contribute to the democratization of access to quality education, the two schools offer discounts based on analysis of the socio economic profile, in addition to having a scholarship program – which, in 2022, benefited 640 students, accounting for 64% of students. During the year, CET also increased the number of scholarships offered for the Trilhas do Futuro program, carried out in partnership with the State Government of Minas Gerais and aimed at candidates who wish to enroll in Technical Courses in Mining and Industrial Mechanics. Students from the 2nd year of high school and young people who have just finished high school can participate. In total, the two schools had 1,007 students enrolled during the year.

Larissa Lima, approved in 1st place in Mechanical Engineering at the Fluminense Federal University

GRI 3-3 | 203-1 | 413-1

Student at the CSN Foundation Hotel-School in Volta Redonda (RJ)

With the understanding that professional qualification, education and opportunities are the key to finding a first job, the CSN Foundation also opens the doors of the job market to young people aged between 16 and 29 who wish to enter the hotel and services sector through the Program Empower Hospitality & Services. During one semester, around 80 students participate in theoretical and practical classes in various hotel and service sectors, such as reception, events, kitchen, maintenance and customer service, totaling 228 hours of free course with certification.

To conclude the learning path, students participate in the Inova Challenge, in which they are encouraged to think about actions that positively impact the results of one or two hotels managed by CSN in Volta Redonda (RJ) – the Hotel-School Bela Vista and the Vila Business Hotel – where the program takes place. Students are referred by the Social Assistance Reference Center (CRAS) in the region, which includes the municipalities of Barra Mansa, Barra do Piraí, Piraí, Pinheiral, Quatis, Resende, and Porto Real, in addition to Vassouras and Itatiaia, all located in RJ – which began to be covered in 2022. Vacancies are intended for young people referred by the General Department of Socio-Educational Actions (DEGASE), the Specialized Reference Center for Social Assistance (CREAS), the LGBTQIA+ Middle Paraíba Citizenship Center, the Specialized Center for Assistance to Women (CEAM) and the Program for the Eradication of Child Labor (PETI). During the year, 136 students completed training. Since the beginning of the project, 1,603 young people have been trained.

The CSN Foundation is also responsible for the initiatives aimed at the first employment of young people in the Group's businesses, such as the Young Apprentice Program, Citizenship Mentorship and Internship Integration
(learn more on page 88)

GRI 3-3 | 203-1 | 413-1

Environmental Education Program (PEA)

In 2022, the CSN Foundation started the Environmental Education Program (PEA) in Volta Redonda (RJ), together with the local city hall, through the Education and Environment departments. The PEA is composed of three fronts: socio-participatory diagnosis, awareness activities and environmental education with students from the municipal education network and teacher training. It is, therefore, a channel for dialogue between the Company and the community.

With the launch of the program, several environmental education activities were carried out inside and outside the Company, such as cleaning the Córrego do Bugio; exhibition "Capturing the past: water and CSN", at the Raul de Leoni Municipal Library; and workshops on the importance of water for elementary school students from the municipal public network. CSN also released 10,000 fingerlings in the Paraíba do Sul River, which contributes to its repopulation and maintenance of its ecosystem functions and biodiversity. The action included six species, two of which are threatened with extinction – the *lambari* and the *curimbatá* – , which are native to the region.

Employee in a preserved area at the CSN Cimentos Arcos unit (MG)

Environmental Education Program in Arcos (MG)

The CSN Foundation also undertakes the Environmental Education Program (PEA) in several communities located in the mining towns of Congonhas, Belo Vale, Ouro Preto and Arcos with socio-environmental activities through lectures, events and workshops in public schools and for CSN employees. CSN.

In 2022, the PEA carried out in these municipalities served 12,169 people through various programs, including: Environment, Experiences, Tour in the Areas, Fauna in Focus, If This Street Were Mine, Pensar Eco É Lógico and Mininge Você. These programs covered various activities, such as revitalization of public spaces, composting, reuse of rainwater, construction of community gardens, training in the manufacture of low-cost solar heaters, handicraft classes, awareness actions on commemorative dates, among others, carrying out a total of 563 activities during the year.

In total, the program assisted 66,761 people in environmental education initiatives in the 563 activities carried out during the year

GRI 3-3 | 413-1

Culture

On the Culture front, the main initiative undertaken by the CSN Foundation is Garoto Cidadão, a sociocultural project that offers music, theater, dance and visual arts activities after school hours with the aim of providing the human development of children and adolescents in vulnerable situations. , aged between 9 and 18, referred by the Social Assistance Reference Centers (CRAS) of the partner municipalities. Among the activities developed are choral singing, soirées, dancing, practice of musical instruments, dramatization, body expression, literary production, among others. In the last years of their stay at Garoto Cidadão, students participate in the "Life Project", when they outline their goals and objectives for their future. In total, in 2022, 2,533 young people benefited from the program, which will continue to expand next year, especially in the Northeast region.

In the last year, Garoto Cidadão was expanded with two new spaces: the urban area of Coxim (MS) and in the needy community of Heliópolis in the capital of São Paulo (SP), in addition to seven other municipalities served: Arcos and Congonhas, in Minas Gerais; Volta Redonda and Itaguaí, in Rio de Janeiro; Araucaria, in Paraná; Bonito and Porto Murtinho, in Mato Grosso do Sul. Another novelty in the year was the partnership with Escola Superior de Artes Célia Helena, which awarded the three students with the best performance in Garoto Cidadão with full scholarships in the Degree in Theater Course, lasting four years. The CSN Foundation paid for travel and lodging for the selected youths to São Paulo (SP), where the classes are being held. In addition to receiving an allowance for the first month in São Paulo, the students were hired as young apprentices at the Prada unit, so that they have income to continue their studies.

Felipe Arcanjo, formerly of Garoto Cidadão, is currently with the Symphonic Orchestra of the Municipal Theater of Rio de Janeiro

In 2022, Garoto Cidadão was extended to two new spaces in Coxim (MS) and São Paulo (SP)

GRI 3-3 | 413-1

As a result of Garoto Cidadão in Volta Redonda (RJ), "Tambores de Aço" is yet another CSN Foundation program that involved, in 2022, 19 young scholarship holders aged between 15 and 20 years in intense training with theoretical and practical classes on languages music and dance, as well as body language and stage presence. There are 12 hours of weekly activities, including rehearsals. During the year, Tambores de Aço held 34 musical workshops, with a total audience of 23,087 people.

The CSN Foundation also maintains, in Volta Redonda (RJ), the CSN Foundation Cultural Center, a multidisciplinary space dedicated to the formation and dissemination of art, education and culture. In addition to the developed cultural production, the Center opens its space, through public notice, to collectives and artists, increasing the visibility of its cultural manifestations.

In 2022, with the launch of the public notice "Ocupa 2022!", the venue was used free of charge to carry out rehearsals, research, creative processes, theater performances, dance, music, seminars, training, storytelling, soirées, among others. The initial forecast was to select 14 activities, but the high demand allowed 22 to be covered. During the year, 189 cultural activities were held in the space, reaching an audience of 93,063 people.

The CSN Foundation also promotes the program "Stories that Stay", which includes consultancy, promotion and dissemination of Brazilian documentaries. In 2021, the third edition was launched, in a new format in partnership with the São Paulo International Documentary Meeting (DOCSP). Four documentaries were selected to participate in three training processes in impact campaigns between 2021 and May 2022. The final prize of R$ 108,000 was destined to promote the documentary named "Asexybilidade", which addresses the sexuality of people with disabilities. The CSN Foundation monitors the finalization of the four films selected in the call for proposals through creative consultations.

GRI 3-3 | 413-1

Youth assisted by the CSN Foundation's Garoto Cidadão program

189
cultural activities, reaching an audience of 93,063 people

Articulation

The CSN Foundation understands the importance of political articulation in the search for a harmonious relationship with public authorities, local businessmen and other institutions. On this front, it manages the Espaço Comunidade CSN Support House, in Congonhas (MG), focused on CSN Mineração's relationship with the local community; and contributes to the development of the VR Gastronomic Center, in Volta Redonda (RJ), to strengthen the local economy through gastronomy and tourism.

In 2022, with the aim of better capturing the demands of society and stakeholders and increasing the development of public policies, the CSN Foundation created the Articulation Management, aimed at promoting good relationships between public authorities, local businessmen, institutions and CSN.

In this line, the CSN Foundation also carried out training on the Regulatory Framework for Civil Society Organizations (MROSC) for 115 participants from the cities of Bonito, Coxim, Bodoquena, Bela Vista and Jardim, in Mato Grosso do Sul State.

CSN Foundation articulation in Volta Redonda (RJ)

GRI 3-3 | 413-1

Territorial Economic Development

In 2022, a new instrument to aid the strategic planning of Private Social Investment was created in the CSN Foundation's Articulation pillar: the **CSN Group's Theory of Change**. The work reflects the support of several areas of the Company (CSN Inova, Sustainability, Institutional Relations, People and Management) and an external partner, which established the changes and the legacy that CSN wants to leave in all the places where it operates.

The Theory of Change – CSN's Territorial Development Strategy proposes yet another way for the CSN Foundation to develop socio economic projects in the territories where the CSN Group is present, using the expertise from the CSN Foundation and CSN Inova, promoting the dynamization of the local economy and the generation of income for vulnerable communities in these territories.

The Theory is based on three strategic pillars: Urban Entrepreneurship, Urban Employability and Rural Productive Inclusion. In 2022, two projects in urban entrepreneurship were started:

- **Cultural Innovation Hub**
  Strengthen the artistic businesses of Volta Redonda

- **Street Art Tourist Center**
  Build the "Beco do Batman" in Volta Redonda

CSN seeks to strengthen impact mechanisms and confirm the construction of a positive legacy for everyone around it. Through the collaborative construction of an innovative local economy, which strengthens the autonomy of communities, social development and local environmental sustainability, individuals, organizations and systems can be impacted with projects based on capital, financial, human, natural, social and institutional. With the Theory of Change, the Company's social action gains a new horizon, maintaining the Company's essence in Doing well, Doing more, Doing forever.

Click here to learn more about Theory of Change.

Collaborative Construction Process

Involvement of different audiences and internal and external spheres → About **70 people** involved in an active listening model → Training and educational actions with **37 employees** focused on the development of:

- Design and Facilitation of Collaborative Processes
- Listening and Dialogue
- Systemic Mapping
- Systemic and Collaborative Leadership

→ **Conclusion** of a living, comprehensive and sophisticated Theory of Change

Young people assisted by the CSN Foundation

GRI 3-3 | 413-1

Curatorship

On the curatorship front, support is provided to CSN in selecting projects from other entities to expand its social activities through tax incentive laws. In this sense, CSN Foundation receives, analyzes and pre-selects projects from other institutions so that CSN can define which projects will be sponsored through tax incentive laws, ensuring alignment with the objectives of each business.

The Foundation welcomes all projects covered by the incentive laws and forwards them to CSN's Executive Board for consideration, which defines which ones will be awarded. In 2022, highlights include the Anne Frank exhibition at the Ted Yad Beneficent Institute, the restructuring of the Ipiranga Museum for the Bicentennial of Independence, the 26th Tiradentes Film Festival, Hospital do Amor, Craque Cidadão, the São Paulo Biennial, the Palácio das Artes 50 Years of the Clóvis FoundationSalgado, the Nadando com Thiago Pereira project, the Angelina Caron Hospital, among others.

Sport Encouraging

In 2022, CSN was recognized by the Federal Government with the **Commendation of Encourager of Sport by the Ministry of Citizenship** in an event that awarded the five companies that most invested in the Sports Incentive Law (LIE) throughout 2021, CSN was recognized second place among the five. This is the first edition of the award intended to honor institutions and legal personalities that stood out in supporting sports projects through the LIE. The CSN Foundation provides consultancy to the Audax club for maintaining the training club certificate, in addition to encouraging, through this law.

GRI 3-3 | 413-1

Youth benefited by the CSN Foundation's Garoto Cidadão program

Highlights in 2022:

R$ 35.5 million
in social responsibility

The CSN Foundation is present in
32 cities
with direct actions

425
cultural actions carried out with 246,916 public reached

644
students covered by Scholarship Programs in Formal Education

4,643
young people benefited by projects carried out by CSN Foundation

Relationship with communities at units abroad

In order to guarantee a good relationship with the community, Lusosider, in Portugal, annually promotes a context assessment, mapping potential impacts and relevant demands of the community. SWT, in Germany, maintains a wide dialogue with neighboring representatives and the local government and operates its activity in accordance with the best social and environmental practices.

Lusosider unit in Portugal

GRI 3-3 | 413-1 | 413-2

Management of impacts on communities

As an essential part of its relationship management process and asserting the principle of Doing Good, Doing More, Doing Forever, CSN monitors the adverse social impacts resulting from its activities in communities neighboring its operations, as well as studies and implements the most appropriate mitigation measures for each of the cases.

The main impacts on local communities generated by the CSN Group's businesses are linked to the operation of industrial plants in the steel, mining and cement segments.

In each business, the socio-environmental impact studies carried out allow the identification of the intensity, duration and actions necessary to minimization or mitigation of impacts, considering the different territorial characteristics and production processes. Actions to mitigate the identified impacts are carried out directly by each business, according to local demands and adequate plans to meet the demands of communities.

In addition, the CSN Group also provides a communication channel with the community called **"Linha Verde" (Green Line)**, to receive complaints, reports, doubts and suggestions about the social and environmental impacts related to business activities. Access to Linha Verde is by telephone (0800 282 4440) or via email (**meio.ambiente@csn.com.br**).

Community visit to Casa de Pedra (MG)

The impacts can be actual or potential, among which:

Actual

- Compromise to the capacity and quality of the road network and traffic
- Change in air quality due to the emission of particulate matter
- Increased risk of accidents (people and animals)
- Pressure on public education, health and safety services

Potential

- Discomfort due to contamination of water bodies
- Accidents involving community members
- Pollution of natural resources due to accidental spills
- Change in water availability and quality
- Discomfort caused by sound pollution (noise)

GRI 2-25 | 3-3 | 413-2
SASB EM-MM-210b.1

Upon receipt, external communication is registered in the specific control system of each CSN unit, to be treated and discussed in meetings with leaders. The Green Line in 2022 received 148 manifestations, 100% of which were dealt with and resolved according to the applicable assessment. The main manifestations are related to dust, noise, requests for information and suggestions for improvement projects in the communities.

In the steel industry, the UPV monitors the Master Plan for Noise, covering all operating and support units, in addition to evaluating the unit's external generation, such as railroad, road traffic and other external contributions. With regard to the impacts caused by particulate emissions, the Company maintains three automatic and five semi-automatic air quality monitoring stations in Volta Redonda (RJ), in addition to monitoring chimneys from fixed sources. To manage impacts on water resources, there are automatic meters in 4 outfalls of the UPV, two pH neutralization stations and an automatic monitoring station on the Paraíba do Sul River. Also in order to mitigate the impacts on water availability in the region, the UPV voluntarily reduced its water abstraction permit by 30% over the last three years.

CSN Mineração has an Air Quality and Noise Monitoring and Control Program, made up of automatic and semi-automatic monitoring stations. The Company has monitoring systems and automatic equipment for cleaning heavy vehicles, which minimizes the transport of dirt to public roads in the cities surrounding the mines.

Treatment of communications received through the Green Line

- If the communication received is a **compliment**, it is forwarded to the person in charge of the corresponding unit for knowledge;
- If the incoming communication is a **request for information** that is not related to the environmental or social area, the Green Line indicates to the requester which recipient it corresponds to;
- If the incoming communication is a **complaint**:
  - The answer to the communicator is sent within 15 working days of receiving the communication, describing the treatment given to the topic.
  - All complaints from the community deemed valid must lead to the opening of Non-Conformity (NC), in accordance with the Company's Deviation Management procedure.

Access the Green Line 0800 282 4440 meio.ambiente@csn.com.br

GRI 2-25 | 3-3 | 413-2
SASB EM-MM-210b.1

Effluent disposal point at the Presidente Vargas Steelworks (RJ)

Through the **CSN Support House**, installed in a community on the outskirts of the Casa de Pedra Mine, the Company also established a direct communication channel with representatives of local communities, in which it is also possible to present the management actions and mitigation plans associated with the possible perceived socio-environmental impacts. In 2022, the Support House provided 2,235 services to the population.

In addition, created in August 2018, the **CSN Communities Committee** aims to build a permanent relationship channel between CSN Mineração and the local community. This forum is used to discuss and clarify matters of common interest and provide greater interaction and transparency between the company's processes and the daily life of the city of Congonhas (MG). The committee is made up of 23 members, including representatives of communities, NGOs, civil society, municipal government, among other highly representative members of the Municipality of Congonhas and nearby regions and CSN Mineração. The meetings are bimonthly.

CSN also has an **Environmental Education Program** (learn more on page 109), which engages both the internal public and external stakeholders located in the area of direct influence of the mining projects. The development of the PEA takes place, with actions based on a participatory socio-environmental diagnosis, engaging stakeholders in its area of influence (employees, contracted third parties and community actors). Its actions are continuous and have flexibility so that the reality and particularity of those involved are always taken into account with socio-environmental activities through lectures, events and workshops in public schools and for CSN employees, the program has been revised for total compliance with the International Finance Corporation (IFC) Sustainability Performance Standards.

At ERSA, a cassiterite mining unit located in the state of Rondônia, actions to mitigate real and potential risks include support for three community centers residing within the Floresta Nacional do Jamari conservation unit, contemplating the installation of plaques solar panels, road maintenance, monthly donation of food baskets, in addition to environmental education activities.

Children of the CSN Foundation in Volta Redonda (RJ)

The Environmental Education Program (PEA) engages both employees and external audiences

GRI 3-3 | 413-2
SASB EM-MM-210b.1

Dam management

Dam management is one of the priority topics on CSN's ESG agenda, which owns the first large mining company not to depend on the use of dams to dispose of mining tailings, even without having a history of accidents at its facilities. The process without the operation of dams translates into the use of iron ore magnetic concentration plants and filtering systems that remove most of the water contained in the tailings. The tailings are then piled dry, following the best national and international practices for safety and mitigation of geotechnical risks.

A detailed schedule is being followed by the Company for carrying out its program for de-characterization of existing dams. The work is monitored by the Dams Committee, which meets weekly and is made up of technicians and executives from the Company. The Company is also accountable to the National Mining Agency and other competent authorities.

At the end of 2022, all CSN Mineração dams – a company controlled by CSN – were at zero emergency level, that is, with guaranteed stability according to current national legislation. The B5 Dam had already been declassified in 2020. In 2022, the declassification of the Auxiliar do Vigia dam was completed, which was no longer part of the National System of Dam Management (SIGBM). And, the process of de-characterization of the Vigia Dams is ongoing, already in the final stage, with completion scheduled for the first half of 2023, and the B4 dam, with completion scheduled for 2028.

Work is also underway to stabilize the B2A Dam, belonging to Minérios Nacional – a company controlled by CSN – which in 2022 was classified as emergency level 2. As a result of the advances in the stabilization works and the constant evolution in safety factors, it is expected, in the first semester of 2023, the classification of the structure at level 1 and the continuity of the de-characterization process, expected to be completed in 2026. The B2 dam, also belonging to Minérios Nacional, has a declaration of stability and will be removed after the B2A works are completed.

CSN's dam decommissioning program exceeds the requirements established by government bodies, as it provides for the decomposition of all dams owned by the Company regardless of the construction method. The Casa de Pedra dam, built by the downstream method and which has no legal obligation to decommissioning, is also included in the Company's dam decommissioning schedule and will have the contracting of engineering projects for decommissioning started in 2023.

CSN Miningdam in Casa de Pedra, Congonhas (MG)

Visiting program

CSN Mineração runs the "Family in the Mine" Visitor Program at the Casa de Pedra mine. The initiative allows family members of employees and residents of communities neighboring CSN Mineração's operations to get to know the mine, the production process, the deactivated dams and the tailings stacking process, as well as monitoring the safety actions carried out on a daily basis.

GRI 3-3
SASB EM-MM-540a.2 | EM-MM-540a.3

Employee at CSN Mineração Casa de Pedra (MG)

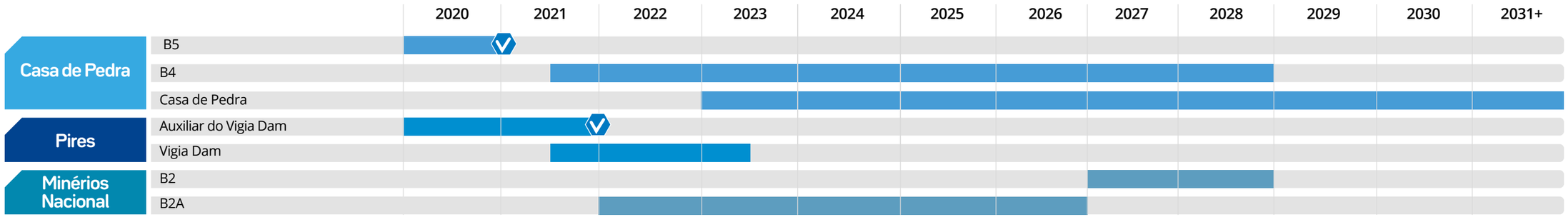
For each of the structures, Dam Safety Plans and Emergency Action Plans for Mining Dams (PAEBM) are established, executed in accordance with the regulations provided for by the National Mining Agency (ANM). In addition, the management of safety conditions at tailings dams by CSN meets all the requirements and determinations of the ordinances and laws applicable in Brazil and considers parameters established by international organizations, as the Global Industry Standard for Tailings Management (GISTM).

Safety routines include visual inspection of dams and dykes at most every 15 days, with drones georeferencing; external audits carried out twice a year; cross-checking (peer review) of audits and projects; online capture and real-time data, through automated instruments; data analysis and reading, with the support of software and data analytics for identifying changes; and endoscopic inspection to measure the pressure and water levels installed in the dams.

Additionally, CSN Mineração is part of the Mutual Help Group (GAM) together with other mining companies, which facilitates contact and coordinated decision-making in emergencies, and is part of the Municipal Safety Plan for Dams in Congonhas (MG). Minérios Nacional, in turn, supports simulations and educational actions by the Civil Defense of Rio Acima, such as the Civil Defense in Schools project.

All tailings are disposed of using the dry method and new projects are underway to reuse mining tailings

Schedule for de-characterization of dams



GRI 3-3
SASB EM-MM-540a.2 | EM-MM-540a.3

Natural capital conservation
Climate Change

Climate Change Strategy

The Company was the first Brazilian steelmaker to publicly present targets for reducing its GHG emissions. To take the journey towards its **ambition of providing society with essential materials with carbon neutral emissions by 2050** and to prepare itself for all the challenges that make up this agenda, CSN restructured its climate strategy into three pillars: the first aims to build relationships with new stakeholders, incorporating external aspects (market trends, players, public policies, and new technologies) with the dissemination of internal advances through reports (Integrated Report, CDP and others) to the interested public; the second, focused on mitigation, which concentrates part of the efforts to retain reliable data, which will guide action plans; and the last attentive to climate risks and opportunities for agile and correct adaptation.

The elements that make up CSN's climate strategy aim to ensure the consistency and quality of data information, present a vision of the future for the business with mitigation of potential risks and support the decision-making of top leadership.

Stakeholders
to identify trends and opportunities, build partnerships and report actions.

- Participation in climate discussion forums
- Engagement of customers and suppliers in issues related to Climate Change
- Integrated report and response to the CDP (Disclosure Insight Action) questionnaire, Climate Action Report
- Strategic partnerships
- Investments in startups through CSN Inova Ventures (see more on page 56)

Mitigation
to build the decarbonization journey

- Data reliability and quantity for consistent inventory and reporting
- Targets for reducing emissions
- Mapping of potential technologies and construction of the MAC curve by sector
- Development of decarbonization projects
- Investments in renewable energy for the CSN Group's integrated decarbonization strategy

Adaptation
to manage key climate risks

- Process for identifying climate risks and opportunities (see more on page 44)
- Study of climate scenarios
- Report in line with the Task Force on Climate-Related Financial Disclosures (TCFD)

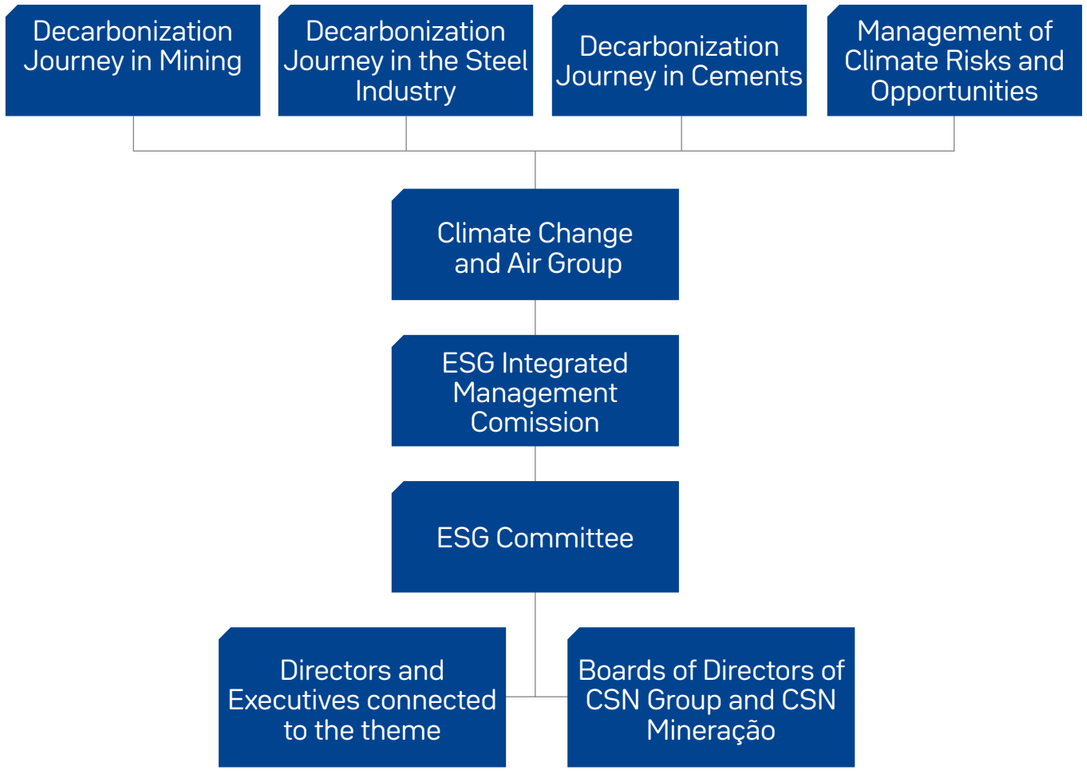
In 2022, CSN set the ambition to provide society with essential materials with carbon neutral emissions by 2050

GRI 3-3 | 201-2

Climate governance and strategy

Operational management

The subgroups of CSN's Climate Change Group meet monthly to report the main indicators (intensity of emissions, as well as performance status and specific projects) to business directors and managers. As a result of these meetings, an executive report is prepared. The objective is to promote alignment between Senior Management and operations to implement the Strategic Climate Action Plan (PAC) in operations.



Elements under the supervision of Senior Management

- Performance of operational indicators and GHG emissions.
- Climate risks and opportunities
- Follow-up on external climate-related discussions
- Investments in decarbonization projects

GRI 3-3 | 201-2

Aerial view of SWT in Germany

Construction of the Decarbonization Journey

The three sectors' decarbonization journey is made up of three fundamental elements: emission reduction targets, specific indicators and roadmaps specific decarbonization processes. Your roadmaps of decarbonization of each segment were established from the Curve of Marginal Cost of Abatement (MAC Curve), methodology that allows evaluating different low carbon scenarios through carbon pricing and abatement potential of different technological routes. More than 100 possible emission mitigation options were then raised, submitted to a technical and economic evaluation to be prioritized, which resulted in the roadmaps that will guide the decarbonization journey of CSN's productive businesses.

GRI 3-3 | 201-2

Decarbonization journey in the steel industry

In Steel, the goal is to reduce 20% of emissions by 2035 in three phases: Blue, Oliva and Green (see the graph). In the first, Azul, R$ 5 billion in investments are planned until 2030 – some of which have already been invested in 2022, mainly to improve the operational efficiency of the Presidente Vargas Steelworks (UPV), in Volta Redonda (RJ). During the year, for example, the Company invested in the recovery of the top turbine of Blast Furnace 3, to generate electricity; and reforms in the coke batteries, which will increase the internal coke production capacity, improving the quality of this input used in the manufacture of steel with the aim of increasing efficiency in the Blast Furnace. In addition, the advance in investment in innovation allowed the anticipation of projects foreseen in the Green phase, such as the injection of green hydrogen in the blast furnace of the UPV through the technology of the ICUs already tested in our cement operations.

The intensity of emissions from the Steel Industry is made up of the UPV and SWT units (Germany). In 2022, the intensity ended the year at 1.99 tCO_2e/t of steel, 5% reduction compared to the base year (2018). The Company began to monitor, through the Steel Decarbonization Journey subgroup, the CO indicators and operational – through which it was possible to understand in detail what are the main factors that influenced the performance of the units.

The first semester of operation of the UPV was marked by stoppages and a low performance in the coke plant that resulted in a higher intensity of emissions in this period. These factors contributed to an intensity of 2.34 tCO_2e/t of steel in 2022 compared to 2.30 tCO_2e/t of steel in 2021. However, in the second half, there was a recovery in battery efficiency, greater operational continuity at the UPV and an efficient operation in Germany. With the combination of these elements, it was possible to reach a level of 1.85 tCO_2e/t of steel in September, below the target for 2030 (1.89 tCO_2e/t of steel).

Production of long steel at the Presidente Vargas Steelworks (RJ)

In 2022, green steel represented **16.4%** of all steel produced by CSN

External initiatives

Aiming to contribute to the multilateral debate of the sectors in which it operates, since 2021 CSN has become a key member of the Net Zero Steel Initiative (NZSI), a zero GHG emission 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 aimed at decarbonizing heavy industries globally over the next 10 years, which also supports the Company's decision-making with a focus on the steel decarbonization journey.

GRI 3-3 | 201-2 | 302-4 | 305-4 | 305-5
SASB EM-IS-110a.2

During the year, the SWT team developed the strategy for the production of Green Steel CSN, focusing on customer demands. This strategy considers several elements such as:

100%
use of renewable energy proven by certificates

Replacement of natural gas with
H_2 green

Continuous improvement of
energy efficiency
in all processes – ISO 50.001

CO_2 neutral logistics

Life Cycle
Assessment Studies for all products

CO_2 balance
for each customer order based on an audited Environmental Product Declaration (EPD)

GRI 3-3 | 201-2 | 305-5
SASB EM-IS-110a.2

In 2022, SWT updated the EPD to obtain the Green Seal partnering with Klöckner, the company that developed the green steel rating scale in partnership with the Boston Consulting Club.

The following SWT measures lead to emission reduction of 385 kgCO_2 and for 327kgCO_2 and for 1 ton of steel:

Oxygen generation with
Green Energy

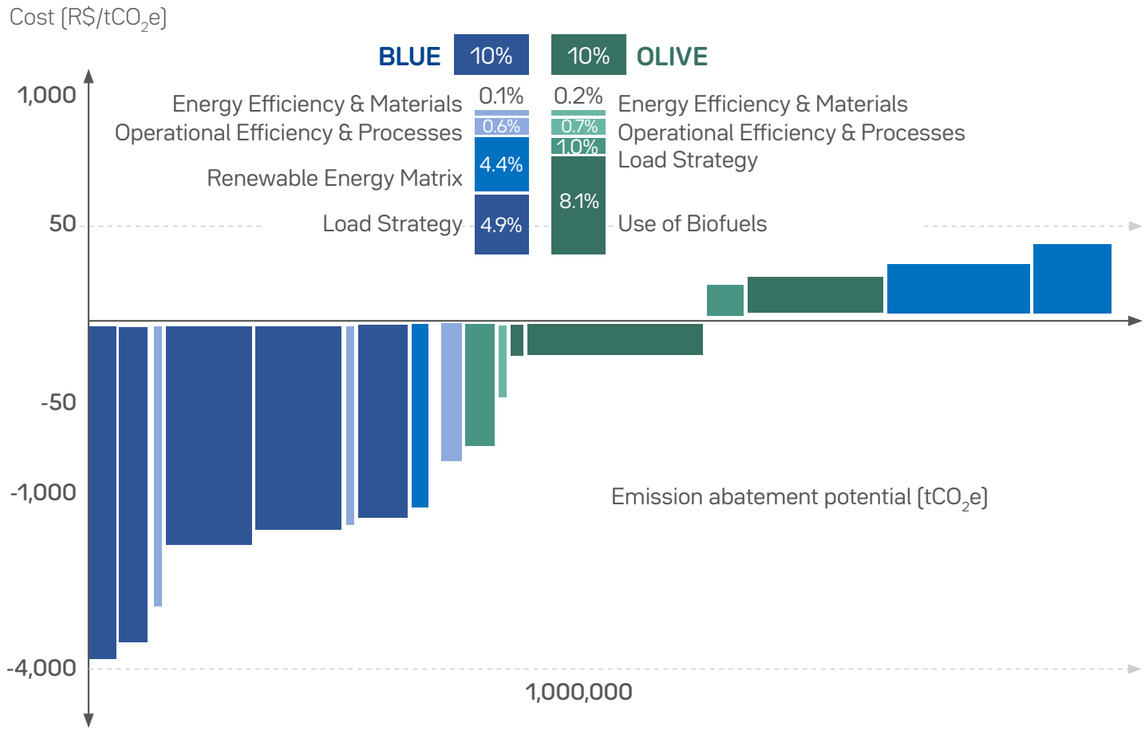
Compressed air generation with
Green Energy

Updating
the database on CO_2 footprints for ferroalloys and aggregates

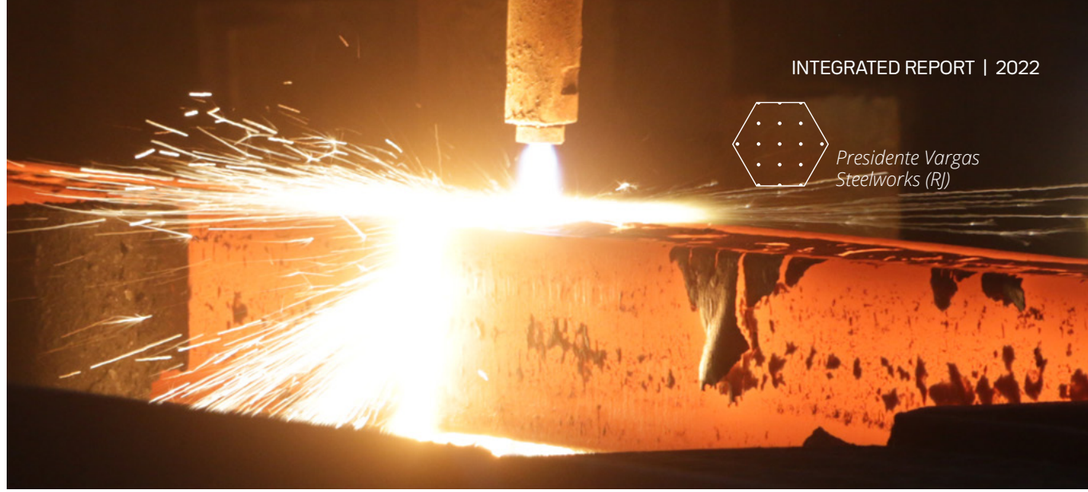
With the Green Steel certificates, SWT was able to sell more than 2,000 tons of steel at an additional price based on environmental criteria.

The year was also marked by the update of the MAC curve in which the emission reduction assumptions and project costs were refined. Within the scope of this work, the Blue Phase SWT emission reduction projects (until 2030) were also incorporated. This curve will be reviewed at least every two years to maintain the roadmap updated. CSN understands that this tool is a key pillar to achieve the decarbonization of its operations.

MAC curve of roadmap of decarbonization of the Blue and Olive phases



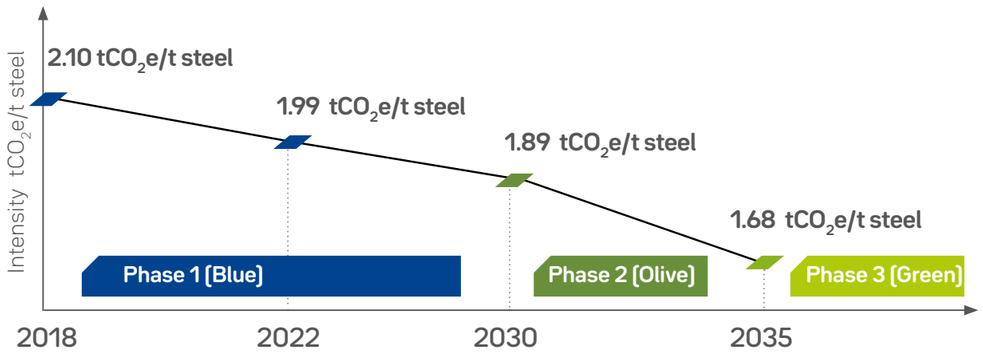
GRI 3-3 | 201-2 | 302-4 | 305-5
SASB EM-IS-110a.2

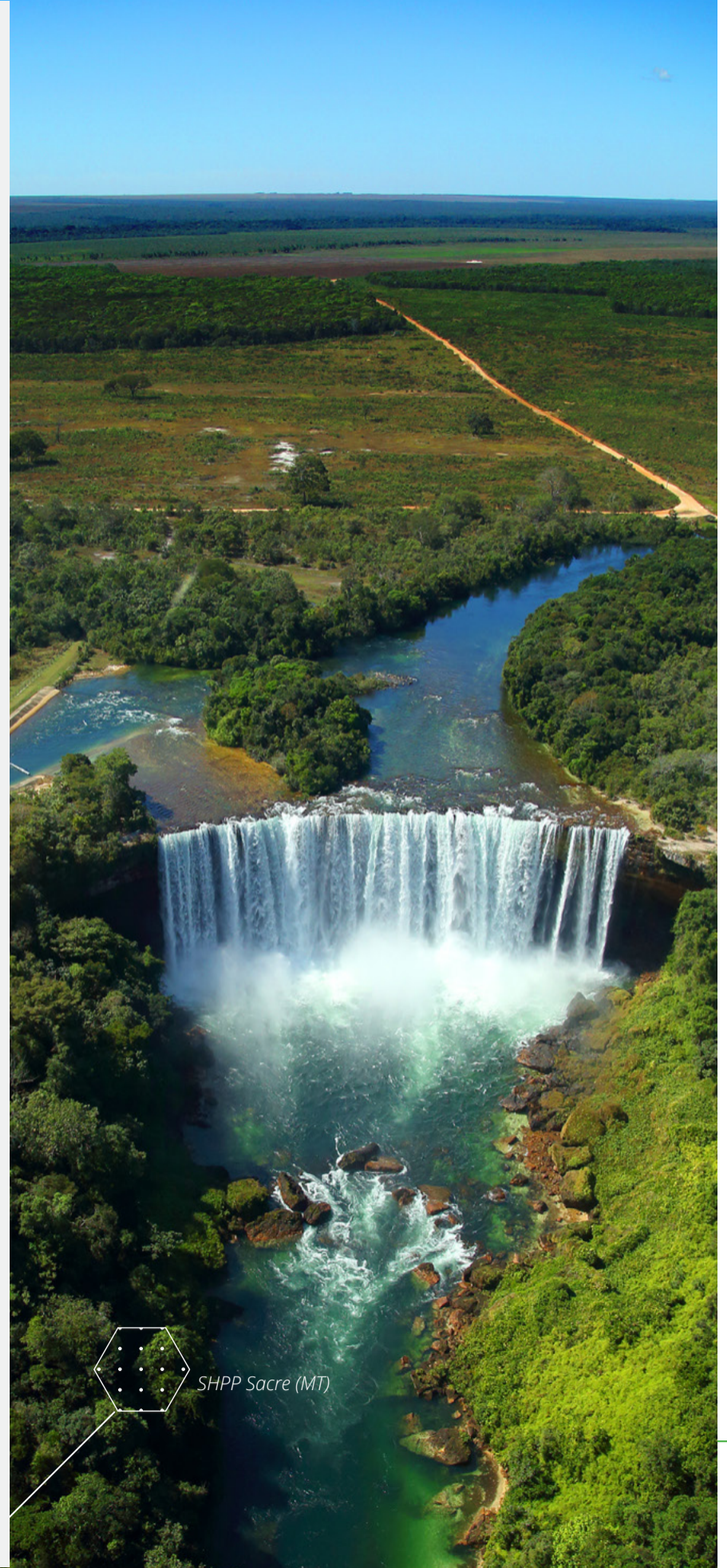


In 2023, the company will continue to explore new technologies and strategies for decarbonization in the Steel Industry. A group was created to discuss Carbon Capture Use and Storage (CCUS), whose main objectives are to create intellectual capital and envision market opportunities related to this technology.

Through CSN Inova, Artificial Intelligence projects will be carried out to optimize specific consumption in steel furnaces and the Selene Project (green H2) at CSN Paraná (learn more on page 55). CSN also intends to capture opportunities for the use of charcoal in its processes at the Presidente Vargas Steelworks.

Decarbonization roadmap in the steel industry





Decarbonization journey in mining

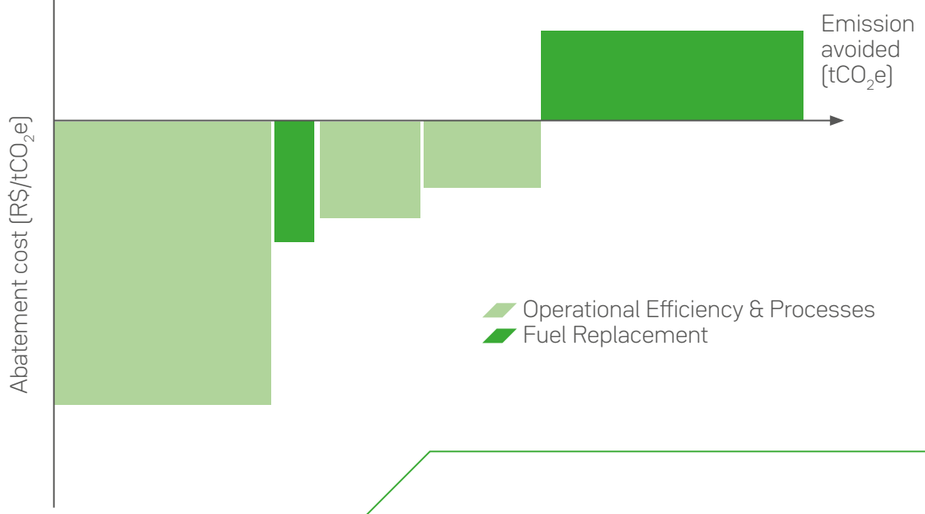
The Casa de Pedra Mine already has one of the lowest greenhouse gas emission intensities in the world (scopes 1 and 2 per ton of ore produced). This is due to the very structure of the mine, which, due to its geological formation, compactly distributed the occurrence of the ore. This contributes to greater operational efficiency by requiring an average distance to move the mine and transport products and overburden.

In Mining, the goal is to reduce 30% of emissions by 2035, and become carbon neutral by 2044. According to the decarbonization roadmap prepared for CSN Mineração, a transitory increase in the intensity of GHG emissions is foreseen, until structuring projects related to the operational efficiency of the mine and technological innovation projects have been timely implemented. In addition, unexpected weather events can affect the company's production capacity, leading to lower efficiency in terms of the production/ tons of CO_2 equation.

The year 2022 was marked by heavy rains in the first quarter, which substantially impaired operations and production at CSN Mineração in the state of Minas Gerais. In addition to climate factors, the ramp-up of projects connected to the Central Plant impacted its performance in the year. As a result of these factors, specific emissions from mobile combustion (>95% of CSN Mineração's Scope 1 emissions) of 7.54 $kgCO_2e$/ ton of ore were recorded, 18% higher than in 2021.

With the entry of P15, the mine should operate more efficiently, with less ROM and a significant increase in its production. There is also the expectation of the entry of new decarbonization projects, which should substantially influence emissions from 2024. Based on the projections of activities at the mine, the emissions profile was mapped until 2035. In 2022, the roadmap for decarbonization of CSN Mineração, in which potential emission reduction projects were identified, as well as the financial costs and related GHG emission reductions calculated. The result of this process was as follows:

Mining MAC Curve



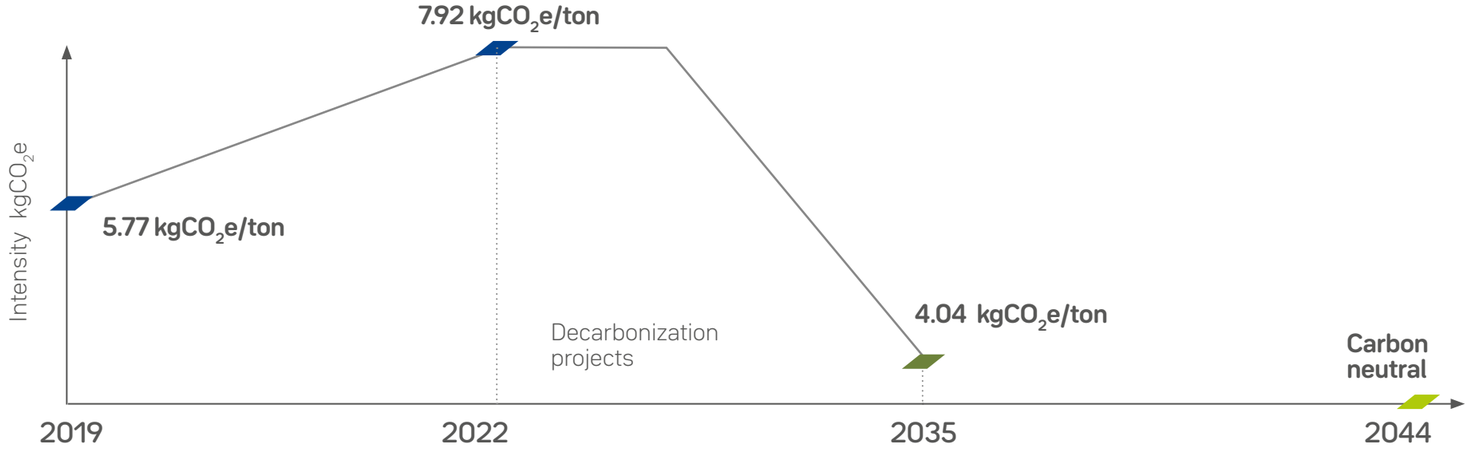
GRI 3-3 | 201-2 | 302-4 | 305-4 | 305-5
SASB EM-MM-110a.2

During the year, CSN Mineração started the electrification plan for its fleet of large vehicles, linked to ore and tailings transport operations at the Casa de Pedra mine, in Congonhas (MG), and two 100% electric trucks with capacity of 60 tons are already in operation (see more in the table). At the same time, a memorandum of understanding (MoU) was signed with Shell and Itochu Corporation for cooperation on the issue of decarbonization. Throughout 2022, the scope of work was developed to implement the best solutions and, in the first half of 2023, a synthetic fuel will be tested, called HVO, which does not emit fossil CO_2 when used. The signed MoU also aims to identify and evaluate opportunities in the different phases of the decarbonization journey, focusing on real chances of positive impact.

Thus, current efforts and MAC Curve projects will support the Decarbonization Journey by mitigating Scope 1 emissions, which are mostly from mobile combustion emissions from the off-road fleet.

Regarding scope 2, CSN Mineração has been, since 2020, powered 100% by renewable electricity. Also in 2022, the CSN Group acquired renewable electricity assets that consolidate this strategy, as they provide self-sufficiency in renewable energy generation for the entire Group, including CSN Mineração.

CSN mining decarbonization roadmap



Finally, a challenging point for the entire Mining sector is Scope 3 of its emissions. CSN Mineração has made efforts in its value chain to reduce emissions in category "10 - Processing of products sold". However, limitations of access to its customers, especially in the transparency of its GHG emission factors, has been affecting the Company's ability to establish feasible targets for reducing its emissions in Scope 3. Thus, based on its positioning in the market as a supplier of products premium with high iron content, which will happen from 2025 onwards, it will be possible to access customers interested in the production of green steel and allied to decarbonization commitments, as this product with better energy efficiency will be fundamental to direct reduction routes for the production of steel in the steel industry and also other decarbonization technologies. The new scenario will materially change CSN Mineração's Scope 3 emissions standard, allowing the development of clearer collaboration actions with these customers.

GRI 3-3 | 201-2 | 302-4 | 305-5
SASB EM-MM-110a.2

The first mining company to use electric trucks in the country

With the commitment to the Carbon Neutrality target established for 2044, CSN Mineração is already one of the mining companies with the lowest intensity of greenhouse gas emissions (per ton of ore produced) among its peers, with 100% of its electricity generated from renewable sources. Now, the company takes another step towards building a new chapter of innovation and sustainability in the history of mining by signing an agreement with the Chinese multinational Sany to test, at the Casa de Pedra Mine, one of the most important in the country, electric trucks in its operations, replacing diesel fuel with rechargeable batteries.

In the testing phase, conducted at Casa de Pedra in 2022, two units of the Sany SKT90E model were used, which stands out for its energy regenerating brake system and lower operating cost (OPEX), in addition to providing the interface for its autonomous driving. The trucks used to transport iron ore, with a capacity to transport 60 tons, are accompanied and monitored during the period of performance tests, in accordance with factory recommendations. Monitoring took into account several performance indicators, evaluating KPI's such as battery autonomy, reduction in pollutant emissions, reduction in the consumption of petroleum-derived fluids, greater physical availability of the equipment and lower operating and maintenance costs.

The testing phase, expected to last until the end of 2023, brings encouraging news, indicating higher productivity than traditional trucks.

Electric vehicles with higher productivity than traditional ones

GRI 3-3 | 201-2 | 302-4 | 305-5
SASB EM-MM-110a.2

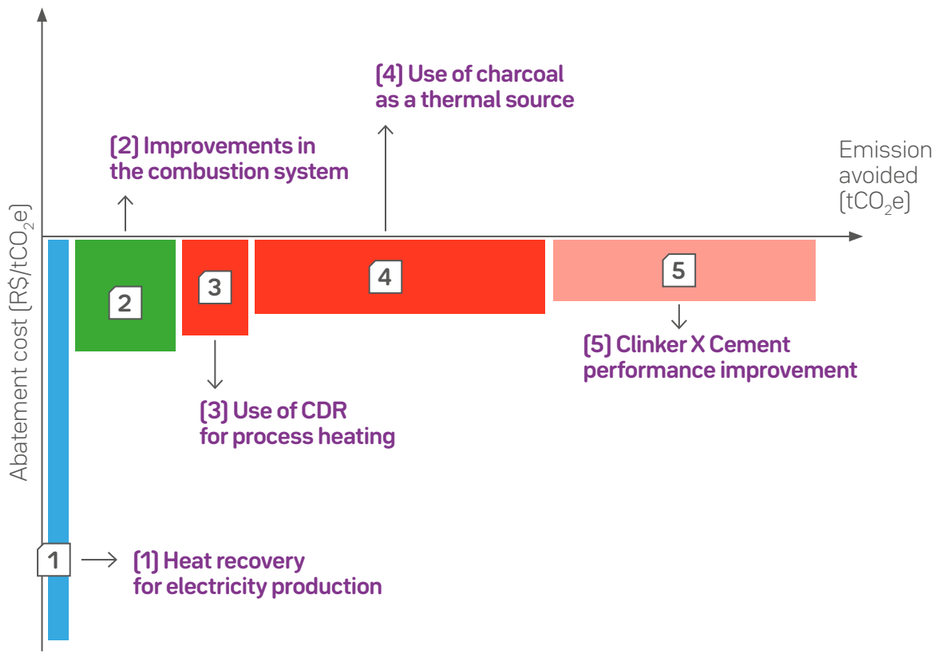
Electric truck at Casa de Pedra (MG)

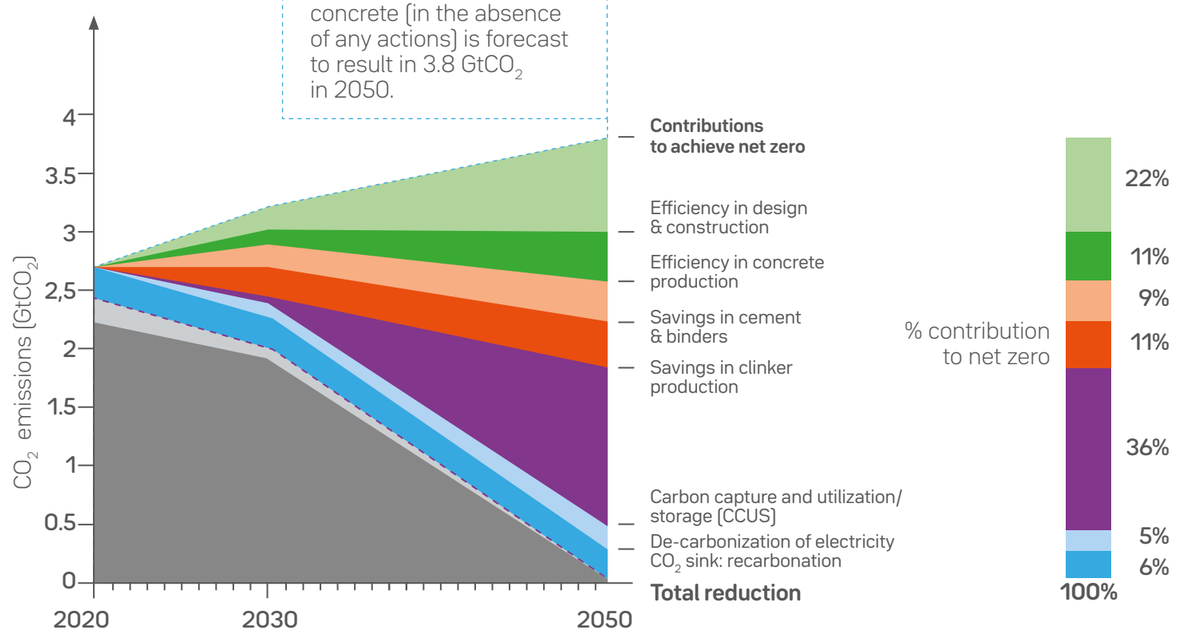
Decarbonization journey in Cements

The decarbonization journey in the Cement sector becomes even more relevant after the acquisition of the assets of LafargeHolcim Brasil, as the Cements segment now accounts for around 40% of the direct emissions of the entire CSN Group. However, it is worth noting that CSN owns, in the Cement sector, one of the most efficient industrial parks in the world in terms of CO_2 emissions per ton of cement. Among the initiatives undertaken during 2022, the injection of controlled amounts of green hydrogen to improve fuel burning in the clinker kiln at CSN Alhandra using UTIS technology stands out, replicating the process that had positive results observed in the year at the cement plant located in Arcos (MG), such as more stable burning, reduced thermal/electrical consumption, improved clinker quality and reduced CO_2 emissions.

In 2022, there was an 8% reduction in the intensity of emissions compared to the base year of 2020. The intensity of 2022 was 481 kgCO_2e/t cement, including the Alhandra unit. **One of the highlights of the year was the start of co-processing in Arcos, which enabled an average reduction of 50 kgCO2e/t of cement in the unit. There was also a greater use of biomass at the Arcos unit throughout the year, growing from 1% in January to 26% in September.** The Company kept the clinker factor practically constant in 2022 (55.9%) compared to 2021 (55.6%). The implementation of co-processing and the use of biomass are part of CSN Cimentos Brasil's strategy to reduce its emissions. It is possible to verify the importance of these two projects in the MAC Curve developed internally for this segment of activity in 2021 and updated in 2022. These technologies are in convergence with the strategy developed by the Global Cement and Concrete Association (GCCA) to achieve the neutrality of emissions from the segment by 2050.

Cements MAC Curve





Source: The GCCA 2050 Cement and Concrete Industry Roadmap for Net Zero Concrete.

GRI 3-3 | 201-2 | 302-4 | 305-4 | 305-5
SASB EM-CM-110a.2

CSN Cimentos Arcos (MG)

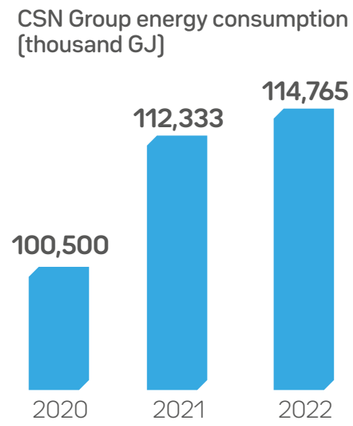
One of the main challenges for 2023 will be the integration of LafargeHolcim Brasil's assets in the definition of roadmap and MAC curve update from CSN Cimentos Brasil. With the recent acquisition of the plants, CSN Cimentos Brasil estimates a reduction of around 5% in the intensity of its GHG emissions. Given the magnitude of the impact of this integration on its emissions, CSN Cimentos will review its targets and recalculate the base year, taking this opportunity to verify the reduction paths proposed by the new Science Based Targets Initiative (SBTi) methodology for the sector. Next year, co-processing operations will also begin at the Alhandra unit and new opportunities for reducing emissions for the new units will be mapped.

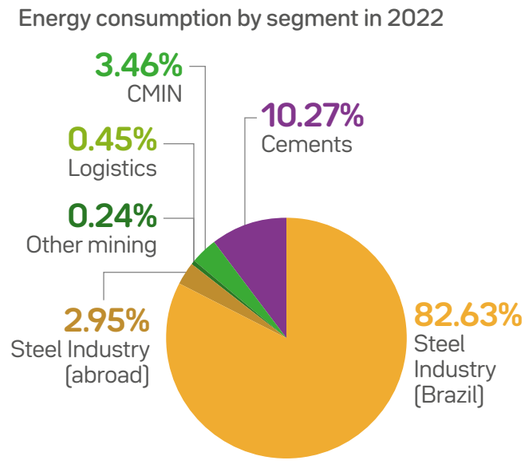
GRI 3-3 | 201-2 | 302-4 | 305-5
SASB EM-CM-110a.2

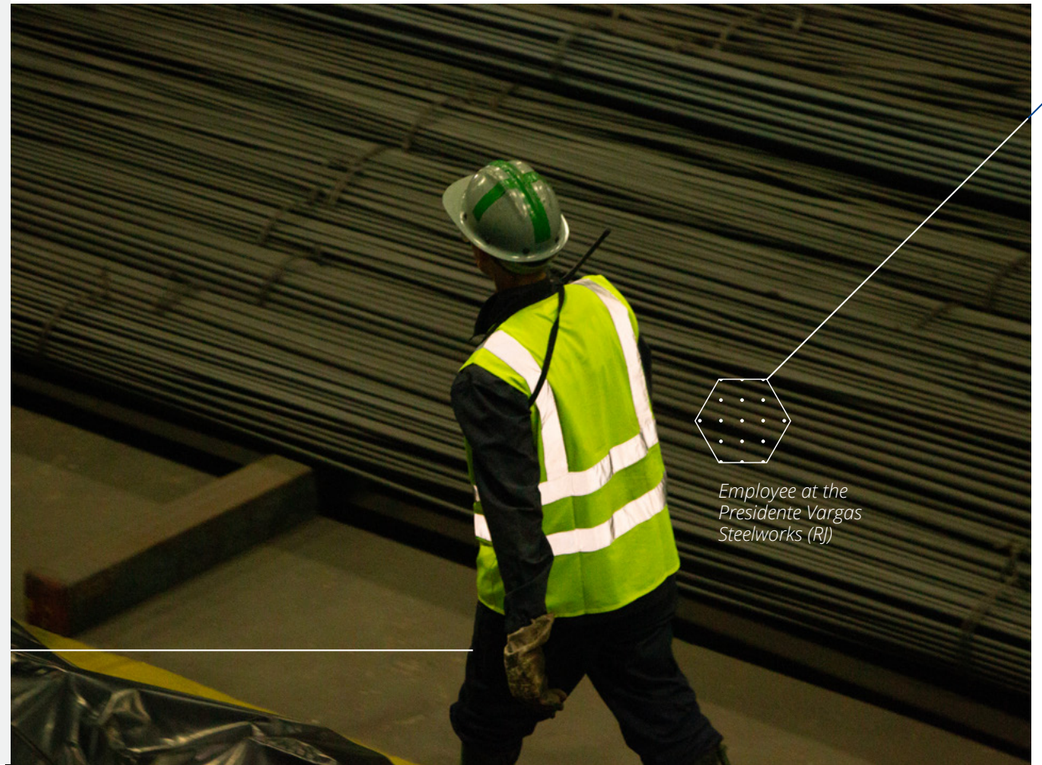
Indicators and energy performance

In 2022, total energy consumption within CSN Group companies was 114.8 million GJ, an increase of 2% compared to the previous year, as a result of the consolidation of the reporting of activities at the Alhandra unit (Cement). In line with its ESG strategy, the Company has been investing more and more in new energy sources for self-production and expansion 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 energy contracts (PPAs). In 2022, 98.3% of the electricity consumed came from renewable sources and self-generation, such as hydroelectricity. With the acquisition of consolidated assets in 2022, from 2023 the CSN Group will have 100% of the electricity consumed from renewable sources.







Employee at the Presidente Vargas Steelworks (RJ)

Energy intensity[1]

	2020	2021	2022
Energy consumption (GJ) divided by the added value distributed (R$ thousand)[2]	8.30	4.16	6.97
Energy consumption (GJ) divided by ton of crude steel[3]	20.88	20.70	21.94
Energy consumption (kWh) divided by cement[4]	85.96	81.12	70.38
Energy consumption (kWh) divided by ton of cimentitious[4]	85.4	80.5	74.4
Energy consumption (MJ) divided by ton of clinker[4]	3,269	3,287	3,315
Energy consumption (GJ) divided by ton of ore produced	0.166	0.142	0.164

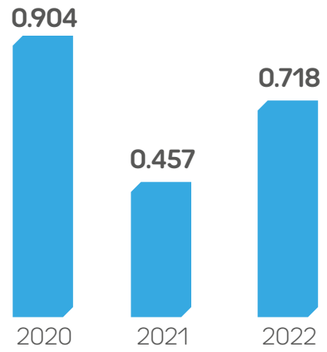
1. Considers all energy consumption within the organization (GRI 302-1, WSA Scope 1, GCCA Scope 1 and Scope 2).
2. Combustech tool and indicator B.5.2 of the Guidance on core indicators for entity reporting on contribution towards implementation of the Sustainable Development Goals of the UNCTAD United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

GRI 3-3 | 302-1 | 302-3

CSN has also disclosed, since 2013, its annual inventory of greenhouse gas emissions, prepared in accordance with the parameters of the Brazilian GHG Protocol Program on the Public Emissions Registry platform of the Getulio Vargas Foundation (FGV). 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. Additionally, since 2021, CSN Mineração has carried out its emissions inventory independently from the CSN Group.

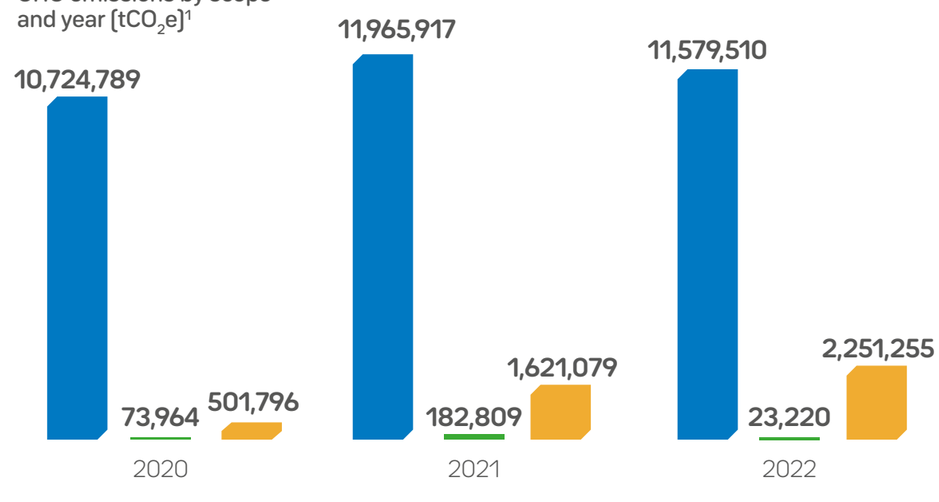
In 2022, CSN's total emissions (scope 1 and scope 2 market-based) amounted to 11.6 million tCO2e. Compared to the previous year, there was a 4% reduction, driven mainly by the reduction in steel production at the UPV and by the favorable energy scenario that supported a significant reduction in the Company's Scope 2.

CSN Group emissions intensity [tCO_2e/R$ thousand][2]



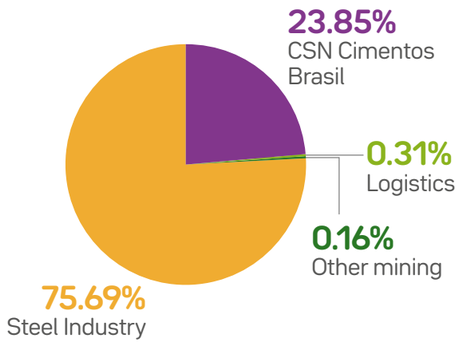
2. Considers Scope 1 and 2 emissions divided by distributed added value (DVA). Scope 2 was calculated using the market-based approach. Covers CSN and CSN Mineração.

GHG emissions by scope and year [tCO_2e][1]

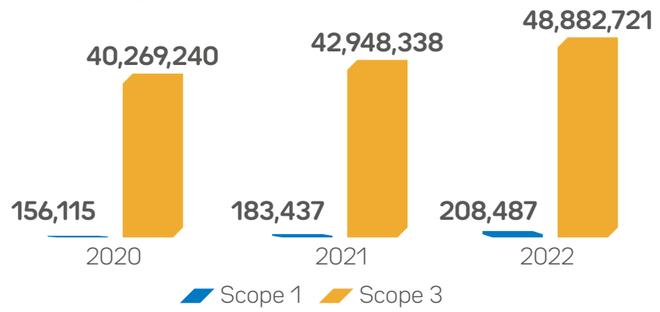


1. Considers all units, except CSN Mineração. Scope 2 was calculated using the market-based approach. As of 2021, the CSN Group will also consolidate emissions from the SWT and Lusosider units in its inventory.

Scope 1 and 2 emissions by segment in 2022[1]

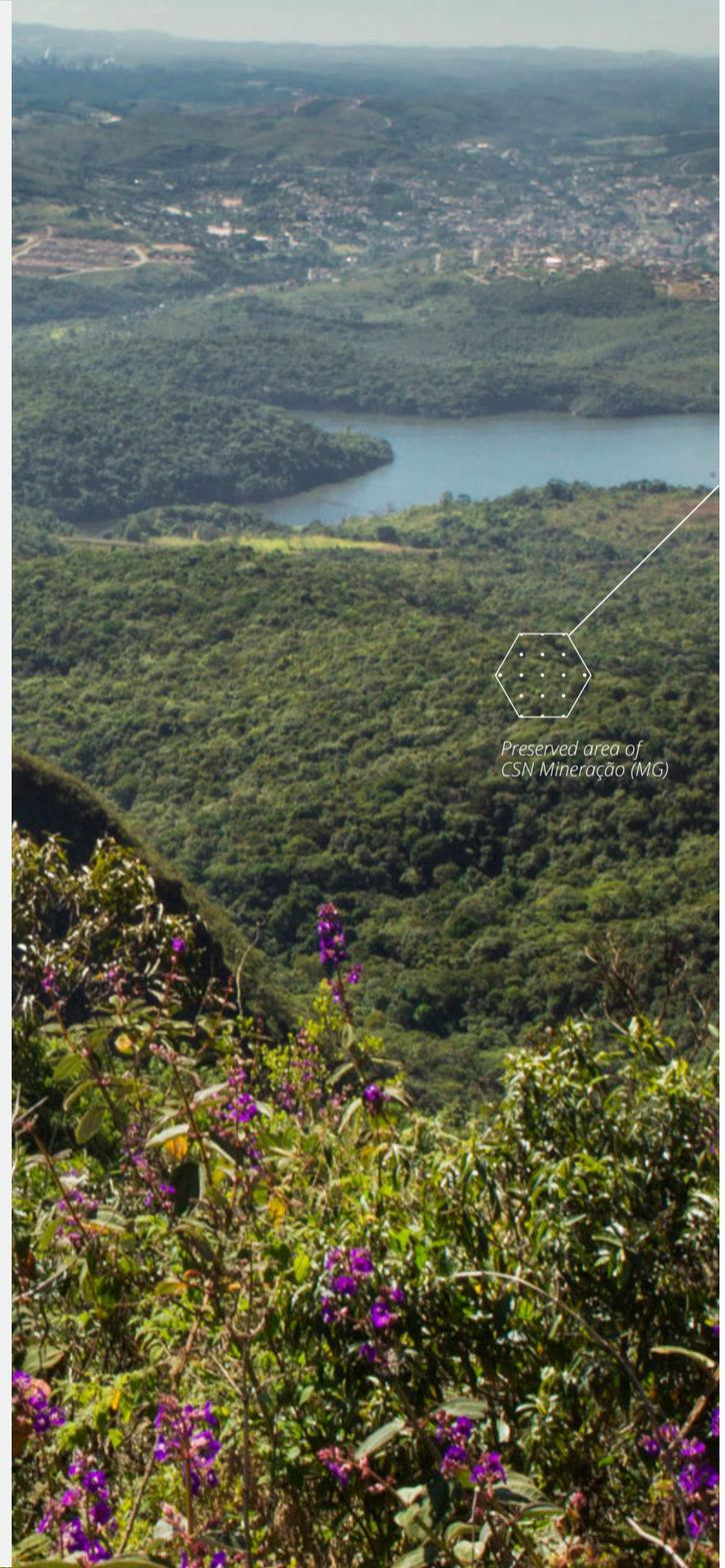


GHG emissions by scope and year [tCO_2e] CSN Mineração[1]



1. CMIN scope 2 emissions are zeroed by keeping your electricity consumption 100% renewable.

GRI 3-3 | 305-1 | 305-2 | 305-3 | 305-4



Preserved area of CSN Mineração (MG)

Study of Climate Scenarios

In 2022, CSN carried out the first study of climate scenarios with the aim of considering factors related to climate change when making strategic decisions for the Company. For this, three climate scenarios were developed based on the narratives of the Shared Socioeconomic Pathways (SSP) scenarios, used in the most recent report of the Intergovernmental Panel on Climate Change (IPCC):

	Net-Zero Emission World (NZE)	Stay on the fence (SOF)	Business as Usual (BAU)
Average warming up to 2100	1.5°C	2.5°C	4.0°C
The pace of society's change towards a low-carbon economy			
Exposure to changes in weather patterns			
Scenario narrative	The world is gradually but broadly shifting towards a more sustainable path, emphasizing more inclusive development that respects perceived environmental boundaries. Driven by a commitment to achieving development goals, inequality is reduced both between and within countries, and consumption is oriented towards low material growth and lower resource and energy intensity.	The world follows a path where social, economic and technological trends do not deviate sharply from historical patterns. Development and income growth proceed unevenly, with some countries making relatively good progress while others falling short of expectations. Global and national institutions work to achieve sustainable development goals, but make slow progress.	GHG emissions will be even higher compared to current levels. Consequently, society will be highly vulnerable to changes in climate patterns that will be enhanced by low social development.
Main Climate Scenarios used as Base	**IEA** Net Zero Emissions by 2050 Scenario (NZE) **IPCC** SSP 1- 1.9	**IEA** Announced Pledges Scenario (APS) **IPCC** SSP 2- 4.5	**IEA** Stated Policies Scenario (STEPS) **IPCC** SSP 5-8.5 e SSP3-7.0

GRI 3-3 | 201-2

After building the scenarios, qualitative analyzes were carried out for all risks and opportunities classified as critical for the three climate scenarios. In addition to the qualitative analysis, CSN carried out a quantitative analysis of climate risks for some identified risks in order to guarantee the robustness of the methodology. The value ranges presented correspond to the monetization of risks on an annualized basis.

Qualitative analysis of climate risks

Segment	Climate risk factor	Associated risks	BAU	SOF	NZE
Mining	Increased intensity and frequency of extreme weather events (Urban, River and Coastal Floods)	1. Increased operational stoppages and interruption of production; 2. Asset damage; 3. Increased maintenance cost;	↑↑	↑	↔
Energy	Water scarcity and droughts due to changes in precipitation patterns	1. Increased cost of electricity supply; 2. Compromise to decarbonization targets; 3. Loss of income from electricity generation; 4. Increased cost of water supply; 5. Water scarcity	↑↑	↑	↔
Cements	Creation of the market and/or implementation of carbon taxation in Brazil (New pricing)	1. Increased operating cost and reduced profit margin 2. Market-share loss	↓	↑	↑↑
Steel industry	Creation of the market and/or implementation of carbon taxation in Brazil (New pricing)	1. Increased operating cost and reduced profit margin 2. Market-share loss	↔	↑	↑↑
Mining	Market creation or implementation of carbon taxation in international markets (New pricing)	1. Increased operating cost and reduced profit margin 2. Market-share loss	↔	↑	↑↑
Steel Industry	Loss of competitiveness due to the delay in developing more sustainable production routes compared to the practices of national and international competitors	1. Increased operating cost and reduced profit margin 2. Market-share loss	↔	↑	↑↑
CSN Group	Absence of a product portfolio aligned with different climate scenarios and the future society's need for eco-friendly products (scenarios for the expansion of sustainable infrastructure that is resilient to climate extremes)	1. Market-share loss	↑↑	↑	↑↑

↑↑ Risk factor with the greatest impact on the scenario
↑ Risk factor with impact in this scenario
↔ Risk factor not impacted by the scenario

GRI 3-3 | 201-2

Qualitative analysis of climate opportunities

Segment	Climate Opportunity Factor	BAU	SOF	NZE
Steel Industry Brazil	Continuity and operational stability projects in the Steel Industry	↑↑	↔	↓
Steel Industry Brazil	Use of Hydrogen as an element of the decarbonization strategy and new production routes	↔	↑	↑↑
Steel Industry Brazil	Load plating strategy (ore quality, HBI etc.)	↑	↑	↑↑
Steel Industry Brazil	Product portfolio aligned with different climate scenarios and the needs of future society	↑↑	↑	↑↑
Cements	Reduction of the clinker factor through the use of slag or other cements in order to reduce CO_2 emissions and promote circularity	↑	↑	↑↑
Mining	Demand for higher quality ore by the market	↑	↑	↑
Energy	Investment in renewable energy and energy matrix diversification	↑↑	↑	↑
CSN Group	Circular economy and integration between sectors promoting efficiency and impact reduction	↑	↑	↑

Quantitative analysis of climate opportunities

Segment	Description	BAU (MMR$)	SOF (MMR$)	NZE (MMR$)
Mining	Increased intensity and frequency of external weather events (Urban, River and Coastal Floods)	<R$ 100MM	<R$ 100MM	<R$ 100MM
Energy	Water scarcity and droughts due to changes in precipitation patterns	<R$ 30 MM	-	-
Cements	Creation of the market and/or implementation of carbon taxation in Brazil (New Pricing)	Opportunity with potential advantage > R$100MM	<R$ 100MM	<R$ 500MM
Steel Industry Brazil	Creation of the market and/or implementation of carbon taxation in Brazil (New Pricing)	<R$ 100MM	<R$ 500MM	>R$ 500MM
CSN Group	Absence of a portfolio of products aligned with different climate scenarios and the future society's need for eco-friendly products (scenarios for expanding infrastructure that is sustainable and resilient to climate extremes)	0	< 100 MM	< 200 MM

↑↑ Risk factor with the greatest impact on the scenario
↑ Risk factor with impact in this scenario
↔ Risk factor not impacted by the scenario

In 2023, CSN will monetize the other risks and opportunities considered critical and will improve the studies already carried out. To improve this process, discussions on this topic will continue within the Climate Risks Climate Group. Additionally, a climate vulnerability study will be carried out in order to work with more models and make the process more robust to support future decision-making by Senior Leadership.

Climate Report (TCFD)

PILLAR: GOVERNANCE

Recommendation	Management of CSN	Learn more
a) Describe the board's oversight of risks and opportunities related to climate change	The Board of Directors, together with the ESG Committee and the Integrated Management Commission, is responsible for supervising the performance of operational indicators and GHG emissions, managing climate risks and opportunities, monitoring external discussions on the subject of changes in the climate and investments in decarbonization projects. At least once a year, the climate issue is taken to the ESG Committee in an exclusive forum for the topic. In 2022, the process of climate risks and opportunities was presented in detail to the Audit Committee, which is independent and advises the Board of Directors.	Page 122 of this report CDP Questionnaire (Governance)
b) Describe the management role in assessing and managing risks and opportunities to climate change	CSN has an ESG Committee, which supports the Board of Directors' decision on environmental, social and governance risks. The ESG Committee works together with the Sustainability, Environment and Occupational Health and Safety Board, which reports directly to the CEO of CSN, and has direct action in the management of indicators, assessment and identification of climate risks and development of projects to leverage the low carbon agenda. Under the scope of this board there is a Decarbonization Management to build strategies, control indicators and develop projects to reduce GHG emissions. CSN has the Strategic Climate Action Plan (PAC), which brings together the initiatives of the Company's decarbonization journey and the management of risks and opportunities in the context of climate change. The PAC was built under the leadership of the Sustainability, Environment and Occupational Health and Safety Board. To monitor progress on the subject, CSN has an executive report on the Decarbonization Journey, directed to senior leadership, created by the Decarbonization Management and supervised by the ESG Committee and the Sustainability Board.	Page 122 of this report CDP Questionnaire (Governance)

GRI 3-3 | 201-2

Area of Relevant Ecological Interest in the Cicuta Forest, in Volta Redonda (RJ)

Climate Report (TCFD)

PILLAR: STRATEGY

Recommendation	Management of CSN	Learn more
a) Describe the risks and opportunities related to climate change that the organization has identified in the short, medium and long term	Since 2021, CSN has carried out a broad mapping and assessment of the most relevant risks and opportunities related to climate change in the context of activities, sectors and regions in which its businesses operate. In 2022, this process was improved and, as a result, 39 climate risk factors and 33 climate opportunity factors were identified. The risks classified as highly relevant for the business were: • Market creation or implementation of carbon taxation in international markets (New pricing); **- Short term** • Increased intensity and frequency of extreme weather events (Urban, River and Coastal Floods); Creation of the market and/or implementation of carbon taxation in Brazil (New Pricing); Loss of competitiveness due to the delay in developing more sustainable production routes compared to the practices of national and international competitors **- Medium Term** • Water scarcity and droughts due to changes in precipitation patterns; Absence of a product portfolio aligned with different climate scenarios and future society's need for eco-friendly products **– Long Term** CSN considered three time horizons, characterized as short, medium or long term, respectively 1 to 3 years, 4 to 5 years, and 6 years or more.	Pages 44 and 132 of this report CDP Questionnaire (Risks and Opportunities)
b) Describe the impact of risks and opportunities related to climate change on the organization's business, strategy and financial planning	CSN quantified the potential impact of five risk factors, considering the three scenarios foreseen in its Study of Climate Scenarios.	Pages 122 and 132 of this report CDP Questionnaire (Risks and Opportunities)
c) Describe the resilience of the organization's strategy, taking into account different scenarios related to climate change, including a 2°C or lower scenario	CSN carried out its first Study of Climate Scenarios using the Shared Socioeconomic Pathways (SSP) scenarios of the IPCC 2021 and the international energy agency as a basis. Three scenarios were contemplated by the study: • Net-Zero Emission World (NZE) – 1.5°C • Stay on the fence (SOF) – 2.5° • Business as Usual (BAU) – 4.0°C	Page 132 of this report CDP Questionnaire (Business Strategy) Study of Climate Scenarios

Climate Report (TCFD)

PILLAR: RISK MANAGEMENT

Recommendation	Management of CSN	Learn more
a) Describe the organization's processes for identifying and assessing risks related to climate change	Since 2021, CSN has carried out a systemic assessment of climate risks and opportunities in a four-phase process: Methodology for the process of climate risks and opportunities; Mapping and prioritizing climate risks and opportunities; Assessment of climate scenarios; and Climate Adaptation.	Page 44 of this report CDP Questionnaire (Risks and Opportunities)
b) Describe the organization's processes for managing risks related to climate change	In 2022, CSN improved the climate risk management process by incorporating new risks and a methodology with a greater degree of granularity. This methodology considers the taxonomy provided by the TCFD. Based on a qualitative analysis in conjunction with the operation, risks and opportunities are assessed considering the magnitude of impact and probability of occurrence. Risks and opportunities are discussed and validated within the scope of the Climate Change Thematic Group. After this assessment, priority risks undergo a qualitative climate scenario assessment and, for some risks, a quantitative assessment. In 2023, CSN will carry out a vulnerability study to raise the company's maturity level in this phase of the process. After risk analysis and monetization, applicable adaptation measures are defined in accordance with their value.	Page 122 of this report CDP Questionnaire (Risks and Opportunities)
c) Describe how processes to identify, assess and manage risks related to climate change are integrated into the overall risk management of the organization	The assessment and management of climate risks are integrated into CSN's corporate risk management model. Based on the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), this model consists of three lines of defense and is monitored by the Audit Committee and the Board of Directors.	Page 42 of this report CDP Questionnaire (Risks and Opportunities)

GRI 3-3 | 201-2

Cargo ship in Port of TECAR

Climate Report (TCFD)

PILLAR: METRICS AND GOALS

Recommendation	Management of CSN	Learn more
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	The identification and assessment of climate risks is conducted in line with TCFD recommendations and based on strategic external reports (IPCC, IEA, etc.), benchmarking and internal analysis by the Company. The model includes, among other methodologies, the Marginal Cost of Abatement Curve and the Study of Climate Scenarios. The prioritization of risks and opportunities considers a matrix of probability of occurrence and magnitude of impacts in the short, medium and long term time horizons.	Page 44 of this report CDP Questionnaire (Goals and Performance)
b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and related risks	CSN annually calculates and discloses its inventory of greenhouse gases, according to market methodologies: Brazil GHG Protocol Program; IPCC Guidelines for National Greenhouse Gas Inventories, 2006; and ISO 14064-1. The inventory covers scopes 1, 2 and 3 and is verified by a third party. The disclosure of this information occurs in the Integrated Report, in the Public Registry of Emissions of the Brazilian GHG Protocol Program and in the CDP questionnaire.	Page 132 of this report CSN and CSN Mineração inventories CDP Questionnaire (Emissions Data)
c) Describe the targets used by the organization to manage risks and opportunities related to climate change and performance against targets	CSN has targets for the intensity of GHG emissions for the Steel, Mining and Cement businesses, in addition to having a Neutral Carbon target for Mining. **Steel industry:** 10% reduction in CO_2e emissions per ton of crude steel by 2030 and 20% by 2035, according to the methodology of the World Steel Association (WSA). **Mining:** 30% reduction in CO_2e emissions per ton of ore produced by 2035 (scopes 1 and 2); Net Zero in scope 1 and 2 emissions by 2044. **Cements:** 28% reduction in CO_2e emissions per ton of cement by 2030, reaching 375 $kgCO_2$ e/t of cement, according to the methodology of the Global Cement and Concrete Association (GCCA).	Page 61 of this report CDP Questionnaire (Goals and Performance)

GRI 3-3 | 201-2

CSN Araucária (PR)

Atmospheric emissions

CSN adopts technologies and procedures to constantly mitigate and monitor atmospheric emissions from its production processes, with a view to ensuring the compliance of its operations and the maintenance of air quality in accordance with the parameters established by regulatory standards in the regions where the group's units are installed.

6%
reduction in NOX emissions at the CSN Group in 2022

100%
of the average IQA monitored by the Company was considered Good during the year in Congonhas (MG), Itaguaí (RJ) and Itapuã do Oeste (RO)

Employee at the Air Quality Monitoring Station in Araucária (PR)

To control and mitigate emissions from fixed sources 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 monitoring based on continuous meters of particulate matter and gas analyzers in its chimneys, periodically checked, which guarantee the reliability of the results. The same concept of environmental control used in the steel industry is applied in the cement segment at CSN Cimentos Brasil units.

CSN has a robust air quality monitoring network in the city of Volta Redonda (RJ), 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 (IQAr) to the local community.

In the mining sector, the Company 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 online data and 24 hours a day for the State Secretariat of Minas Gerais.

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

GRI 305-7

Biodiversity

After the inclusion of the Biodiversity theme in the matrix of material themes in 2021, the following year, governance and management practices were instituted that resulted in important advances that, for now, represent just the beginning of a journey that aims to improve management and publicity on the topic.

Seeking to identify the main risks and opportunities related to the theme of Biodiversity, and reflecting the Company's Biodiversity Policy, a roadmap was established for the theme, oriented towards meeting the requirements and guidelines of the Task Force for Financial Disclosure related to Nature (TNFD[1]) and the Performance Standard 6 (PS6) of the International Financial Corporation (IFC)[2].

The roadmap foresees work fronts until 2025 that contemplate the refinement of the scope, ecosystem services and adherence to the TNFD and PD6 requirements and guidelines. The work fronts are primarily developed by the Thematic Group (TG) on Biodiversity and Ecosystem Services which, established in early 2022, subsidizes the ESG Integrated Management Commission and the ESG Committee in decisions related to risk and strategy on the topic.

Among the work carried out by the GT throughout 2022, the diagnosis and geoprocessing of preserved areas and the identification of the main impacts and dependencies of the CSN Group in relation to ecosystem services (ES) stand out.

The broad diagnosis of the areas protected by the Company, which add up to more than 82 thousand hectares, allowed a more precise look at the forested areas, enabling a more effective management of biodiversity. On the other hand, the first mapping of impacts and dependencies of ecosystem services carried out for each of the sectors (Logistics, Energy, Mining, Steel and Cement) allows capturing the specificities of each typology, aiming to subsidize the prioritization of actions to address the most business sensitive.

Also noteworthy is CSN's intention, as of 2023, to start contributing to the Task Force for Financial Disclosure related to Nature (TNFD), by means of reporting on the theme in the manner recommended by the task force.

1. TNFD is the Taskforce on Nature-related Final Disclosures and consists of an alliance of institutions and organizations (task force) with 40 members representing financial institutions, corporations and market service providers, with the mission of developing and providing a framework management and disclosure of risks and opportunities for organizations to report and act on risks related to nature.
2. The IFC is an institution linked to the World Bank which, through Performance Standard 6 (PD6) establishes requirements for Biodiversity Conservation and Sustainable Management of Living Natural Resources.

In 2022, CSN concluded the identification of the main impacts and dependencies in relation to ecosystem services

GRI 3-3 | 304-2
SASB EM-MM-160a.1 | EM-CM-160a.1

Ecosystem services

The initiative to identify the main ecosystem services (ES) on which the Company depends and impacts comes from the concern with ecosystems and their integrity. In this sense, in 2022 the first mapping of ES associated with operations began, contemplating the first phase of evaluation, with regard to the journey of identifying risks and opportunities related to Nature.

This process resulted in the mapping of ESs for CSN's five business sectors: Logistics, Energy, Mining, Steel and Cement, as the main operations that have an interface with relevant and priority biomes and ecosystems for biodiversity conservation were contemplated. Furthermore, lists of ES and natural resources relevant in relation to dependency and impacts, for each line of business, emerged.

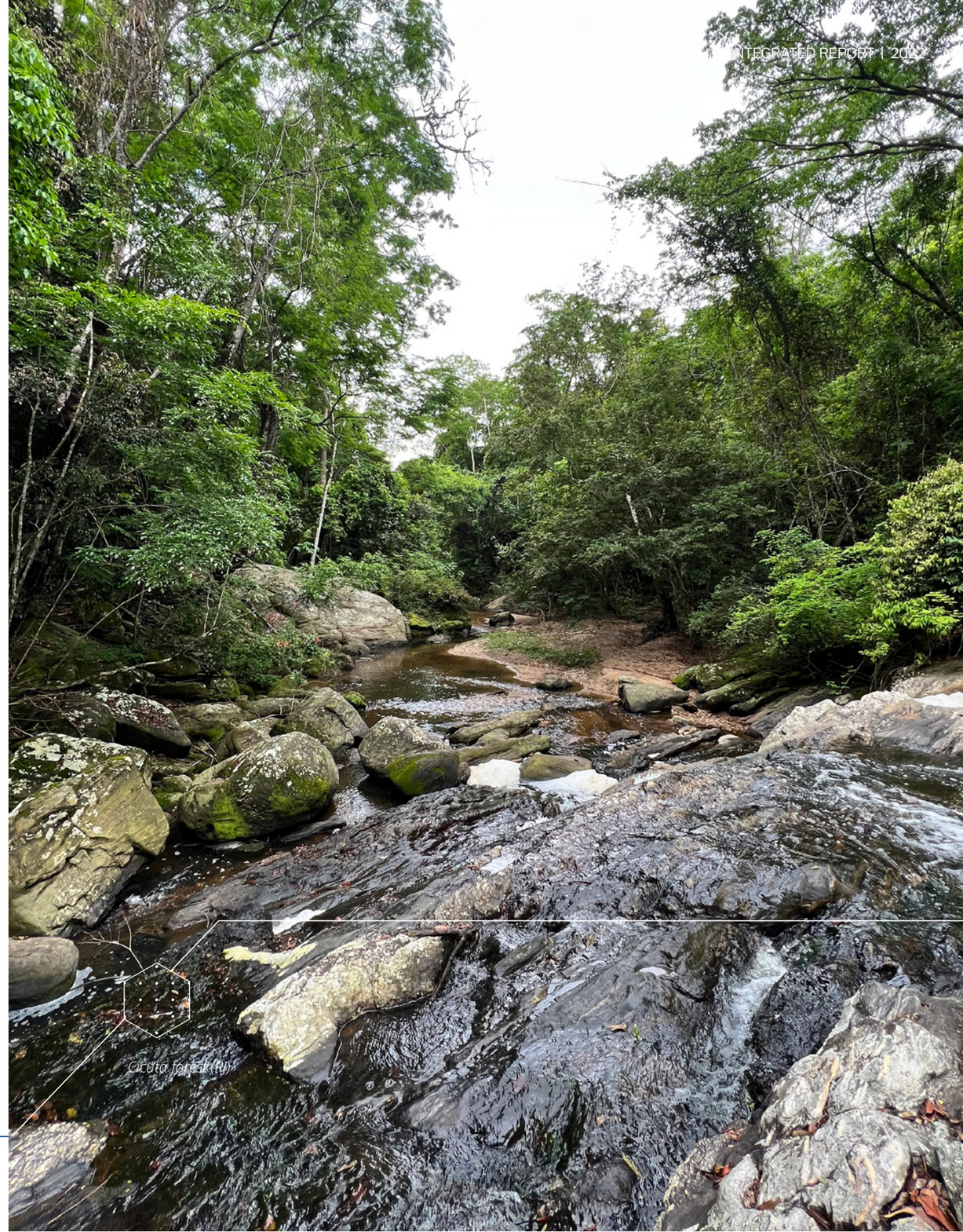
Such outputs are in line with the TNFD risk and opportunity assessment LEAP approach[1] which consists of four phases (L – Locate, E – Estimate, A – Assess and P – Prepare for reporting), including steps L and E.

Currently, CSN has identified the main SEs and respective impacts and dependencies. The subsequent stages of analysis and ranking and determination of risks and opportunities are planned for the next cycles of the roadmap of biodiversity. Below is a list of the main dependencies and impacts in relation to ecosystem services, according to each sector.

1. LEAP stands for Locate. Evaluate, Assess and Prepare (in Portuguese: Locate, Estimate, Assess and Prepare for reporting) and corresponds to the approach to assessing risks related to nature advocated by the TNFD. It should be noted that, although the TNFD framework is under development and under public consultation, with a launch forecast for September 2023, CSN is guided by the materials made available by the Task Force, due to its intention to contribute to Financial Disclosure related to Nature.

Beginning of the process of identifying and managing risks and opportunities associated with natural capital and biodiversity

GRI 3-3 | 304-2
SASB EM-MM-160a.1 | EM-CM-160a.1



Mapping of the main dependencies and impacts related to ecosystem services, according to each sector[1]

	Ecosystem service	Sector that has dependency	Sector that negatively impacts	Sector that positively impacts
Provision	Woods or wood fibers	Logistics	Logistics	
	Biomass	Cements		Cements
	Water availability	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, Mining, Cements, Logistics	Energy
	Air quality maintenance	Mining, Cements	Steel Industry, Mining, Cements, Logistics	Cements
Regulation	Global climate regulation	Steel Industry, Mining, Energy, Logistics	Steel Industry, Mining, Cements, Energy, Logistics	
	Regional/local climate regulation	Steel Industry, Mining, Energy, Logistics	Steel Industry, Mining, Cements, Energy, Logistics	
	Water flow regulation	Steel Industry, Mining, Cements, Energy	Steel Industry, Mining, Cements, Energy	Mining, Energy
	Water purification and waste treatment	Mining, Cements	Steel Industry, Mining, Cements	Steel Industry, Mining
	Erosion control	Mining, Energy, Logistics	Steel Industry, Cements, Logistics	Steel Industry, Energy
	Maintenance of soil quality	Logistics	Steel Industry, Mining, Cements, Logistics	

1. The list of Ecosystem Services (ES) is based on the Dependence and Impact Assessment Tool Version 2 of the Ecosystem Service Review, published by the World Resources Institute (WRI) in 2012, not being limited to it, also including resources (ore/ Availability of ore / Fossil fuels) and Biodiversity.

GRI 3-3 | 304-2
SASB EM-MM-160a.1 | EM-CM-160a.1

	Ecosystem service	Sector that has dependency	Sector that negatively impacts	Sector that positively impacts
Support	*Habitat*	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, Mining, **Cements**, Energy, Logistics	Steel Industry, **Mining**, Cements, **Energy**, Logistics
	Biodiversity[2]	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, Mining, **Cements**, Energy, **Logistics**	Steel Industry, **Mining**, Cements, **Energy**, Logistics
Cultural	Recreation and ecotourism	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, **Mining**, Cements, **Energy**, Logistics
	Ethical and spiritual values	Steel Industry, **Mining**, Cements, Energy, Logistics	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, **Mining**, Cements, Energy, Logistics
Resources	Fossil fuel[2]	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, Mining, **Cements**, **Energy**, **Logistics**	Steel Industry, Mining, Cements, Energy, Logistics
	Mining/ore availability[2]	Steel Industry, Mining, Cements, Energy, Logistics	Steel Industry, Mining, **Cements**, Energy, **Logistics**	Steel Industry, Mining, Cements, Energy, Logistics

2. Ore, Fossil Fuels and Biodiversity are not ES. Ore and fossil fuel are configured as a natural resource, and Biodiversity – the variability of living organisms among species, populations and ecosystems – is an element that provides the basis for ecosystem services. However, they are considered as relevant elements for the business and, for this reason, are included in the dependency and impact analysis.

GRI 3-3 | 304-2
SASB EM-MM-160a.1 | EM-CM-160a.1

Logistics

The main activities of CSN's logistics sector correspond to the railway operations of FTL, which is in operation, and of TLSA, under construction; and operations at Port of TECAR and Port of TECON. The facilities are due to the use of wood (ES Woods or wood fibers) as sleepers (in the case of FTL) and for piping cargo in ports, and the use of water (ES Water availability) for washing equipment, maintenance, construction and consumption, essential for operation and construction. In the case of ports, water is essential to mitigate the emission of particulate matter through wetting.

The occurrence of stoppages directly associated with extreme weather events such as storms and fires demonstrate the dependence of the ES on global and regional climate regulation both in rail operations and in port operations, and there are cases of stoppages in rail operations due to fires, for instance, and of port operations by storms and heavy rains.

The **ES of erosion control** directly influences the sediment carry-over, which hinders the railway operation, mainly and requires constant maintenance. The ES maintenance of soil quality is a dependency especially for TLSA, due to the need for recovery and compensation for vegetation suppression. In the Caatinga biome, recovery and compensation are a challenge, given the edaphic and climatic peculiarities. In this sense, the better the quality of the soil, the better the results, with good quality soil being essential for the continuity of operations. TLSA's construction activities also depend on the extraction and production of ore (gravel for the accommodation of sleepers and construction of the railroad).

The negative impacts on **ES Woods or wood fibers and the ES Water availability** are mainly due to the use and consequent decrease in the availability of these scarce resources from the SE, although in the ports the wood used (pallets and beams) come from reforestation and that the effluents are constantly treated, monitored and reported to the competent bodies.

Port of TECON (RJ)

GRI 3-3 | 304-2

Port of TECAR (RJ)

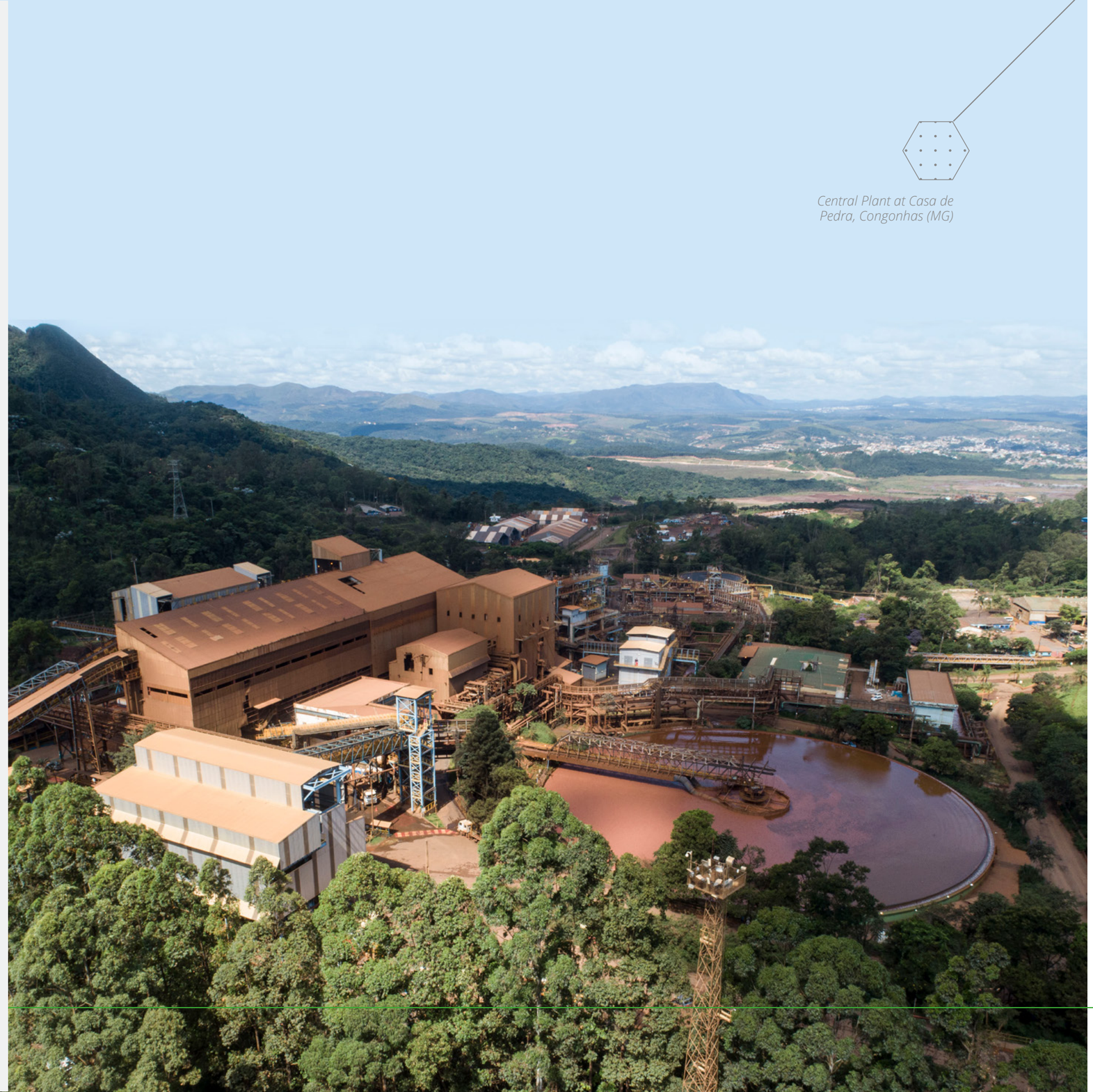
Impacts on the ES Air quality maintenance and Global and Regional/local climate regulation are mainly due to the emission of particulate matter and GHG emissions.

Impacts on ES Erosion control and Maintenance of soil quality are mainly due to the suppression of vegetation and construction of slopes (in the case of railway operations) and the drainage and eventual carry-over of stored materials (in the case of the Port of TECAR).

As for the impacts on **habitats and biodiversity**, in railway operations, occur as a result of vegetation suppression (especially during construction) and, for example, fauna being run over (in operation). In the case of port operations, Port of TECAR can potentially impact marine biodiversity, due to the eventual release of ore or other products transported to the sea. However, periodic monitoring of marine fauna is carried out and reports are made to the competent bodies.

With regard to **natural resources**, railways and ports use diesel to operate machinery, while railway operations use a significant amount of gravel, which results in a reduction in **ore availability**.

GRI 3-3 | 304-2



Central Plant at Casa de Pedra, Congonhas (MG)

Mining

Operations in the mining sector are dependent on **ES Water availability**, with groundwater (Casa de Pedra and ERSA) and surface water (in the case of the Pires operation) being collected. The negative impacts on SE water availability are related to the generation of effluents (outflows from dikes and dams), which in turn is duly controlled through mitigation actions and monitoring.

Another important aspect of mining is the emission of particulate matter (PM), which impacts on the **ES Air quality maintenance**. In addition to the negative impact, due to the release of PM into the atmosphere, the ES Air quality maintenance is also configured as a dependency, as it causes direct impacts on the mining activity when its quality is compromised.

The operation also has a dependency relationship with the **ES Global and Regional/local climate regulation**, as its activities are relatively vulnerable to climate variations and extreme weather events. As an example, there are stoppages or decreases in productivity due to heavy rains, as well as stoppages that can last for days in episodes of extreme rainfall, in the case of operations in Casa de Pedra (Congonhas/MG). On the other hand, the impacts on these ES occur through the emission of GHG during the operation – mostly caused by large vehicles that move the ore within the operation.

GRI 3-3 | 304-2
SASB EM-MM-160a.1

With regard to the **ES Water flow regulation and Water purification and waste treatment**, in addition to dependence, depending on the use in the operation, there are potential positive and negative impacts. Potential negative impacts are caused by the discharge of effluents and the eventual carriage of sediments into water bodies (both aspects mitigated, monitored and periodically reported to the competent bodies). On the other hand, the positive impacts on these ES result from the existence and preservation of CSN Mineração's legal reserve area (Congonhas/MG), which houses a fundamental water body for the city's water supply. The preservation of this area results in the integrity of ecosystem services, including flow regulation and water purification. Proof of this is the fact that the Sanitation Company of Minas Gerais (Copasa) collects high quality water from CSN's properties, for subsequent distribution to the population of the city of Congonhas (MG).

ES Erosion control is important for the operation, since its absence implies maintenance actions to remove sediments. Potential impacts, which in turn are negative, also affect the **quality of the soil**, since removals and movements on the ground intensify erosion processes and modify the soil structure (also being mitigated, monitored and periodically reported to the competent bodies).

CSN Mineração also interfaces with **cultural ESs such as recreation and ecotourism and ethical and spiritual values**. The Parque das Cachoeiras, in Congonhas (MG), is a place of entertainment for the local population, whose water from the waterfall passes through areas of direct influence of CSN Mineração. In this sense, the preservation of these areas results in the maintenance and availability of SE for recreation and ecotourism for the community.

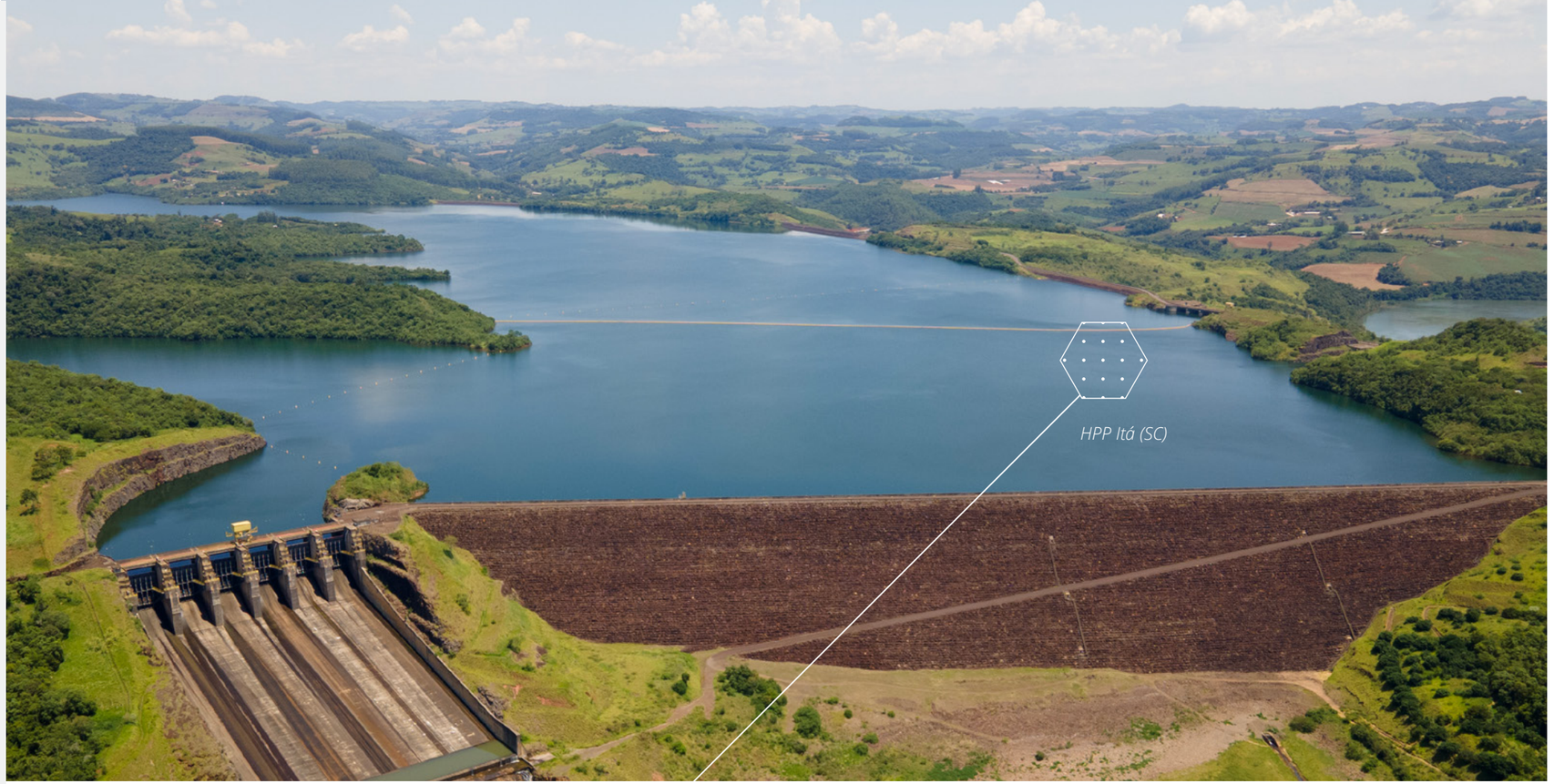
With regard to **ES ethical and spiritual values**, in the case of operations in Congonhas (MG), the preservation of listed natural heritage (Morro do Engenho), which has significant existence value for the stakeholders from the surroundings. In the case of ERSA's operations in the National Forest (FLONA) Jamari, in Rondônia, there is direct support for three family groups that reside within the FLONA, thus contributing to the preservation and maintenance of these families' way of life, which is intrinsically linked to the forest and its services.

The **habitat support ES**, as well as biodiversity, are negatively impacted by the suppression of vegetated areas and positively due to the compensations that, generally, are carried out in greater proportion in relation to the suppressed areas, accompanied by constant fauna and flora monitoring.

With regard to **iron ore and fossil fuel resources**, the operation is highly dependent, negatively impacting the availability of such resources.

GRI 3-3 | 304-2
SASB EM-MM-160a.1

Jamari National Forest (RO



Energy

Management and investment in power generation assets are part of CSN's growth and consolidation strategy. the energy sector owns interests in two hydroelectric power plants (HPP Itá, on the border of Santa Catarina and Rio Grande do Sul, and HPP Igarapava, in Minas Gerais), in addition to the Thermoelectric Central and Turbina de Topo, both located in the Presidente Vargas plant in Volta Redonda (RJ). Based on the assets of CEEE-G, recently acquired and headquartered in Rio Grande do Sul, the Company operates small hydroelectric power plants (SHPPs), hydroelectric generation plants (CGHs) and Hydroelectric Power Plants (HPPs).

The analysis of the relationship between this sector's operations and ecosystem services did not consider the operational units individually, but the aspects and impacts common to all, highlighting the main ones (positive and negative).

With regard to aspects and impacts arising from the formation of reservoirs, those relating to the construction phase are considered compensated, as they are more than 45 years old (the most recent reservoir was built in 1978), therefore considering all impacts of the construction phase already compensated during the respective licensing processes. Given the recent acquisition by CSN, the aspects and impacts considered in the analysis refer to the operation of the reservoirs for the energy generation process.

Regarding the **ES provision, the availability of water** is the main dependence, since it is hydroelectric generation. The impact on this SE is positive, as the operation does not entail aspects that could impact water quality, and the operation is responsible for maintaining, preserving, inspecting and monitoring water bodies and their margins that make up the reservoirs.

For regulation services, the dependence of **ES Global and Regional/local climate regulation** stands out, since climate variations, rainfall and periods of water scarcity can cause a reduction in river flow, a decrease in reservoir levels and restriction of water supply. production. On the other hand, dams play a fundamental role when there is excess rainfall, regulating the volume of water downstream and reducing the impact of floods on the populations that live along the watercourses. However, a volume of rainfall above the design of the dams can cause eventual destabilization, a situation for which there are a series of preventive and mitigation procedures already established. The **climate regulation ES** are impacted by GHG emissions resulting from the use of **fossil fuels** (diesel and gasoline) in the fleet and in emergency generators at the plants.

GRI 3-3 | 304-2

The **ES water flow regulation** is also a dependency, since the operation depends directly on the flow of the rivers, which influences the level of the reservoirs. In turn, dams control flow downstream, resulting in a potential impact on water availability for other users.

The **ES Erosion control** is important for the operation, as the carrying of sediments by erosive processes leads to the silting up of the reservoirs, which reduces their capacity and useful life. In this sense, erosive processes are monitored on the slopes of the reservoirs and monitoring of the silting process is carried out. On the other hand, the operation contributes to this ES insofar as it preserves the permanent protection areas (APPs) around the reservoirs, collaborating to provide the SE for erosion control on the part of the ecosystems.

The **cultural ES of recreation and tourism** is positively impacted, given that part of the reservoirs are used by the surrounding communities for leisure and recreation, with the preservation, maintenance and inspection of the areas of the reservoirs being essential for communities to enjoy this SE. In this sense, there are Plans for the Use of the Surroundings of the Reservoirs that foresee leisure and tourism as a way of using the reservoirs.

The conservation of the integrity and quality of APP areas and water bodies results in the maintenance of **biodiversity and habitats**, which are periodically monitored and reported to the competent bodies.

The conservation of the margins of the reservoirs, through the APP, makes possible the shelter and development of the fauna, the establishment of ecological corridors and of genetic flow, besides processes of natural regeneration of the flora and ecological functions of the riparian forest. In addition, operations are dependent on fossil fuels (diesel and gasoline) to operate their fleets and emergency generators at the plants, negatively impacting the availability of this scarce resource.

HPP Igarapava (MG)

GRI 3-3 | 304-2

Cements

Considering the interactions with the environment and the representativeness of production, the operational units: Arcos, in Minas Gerais, and Alhandra, in Paraíba, are the most representative in 2022, composing the scope of analysis of the cement sector regarding the relationship between operations and ecosystem services.

In this sector, there is dependence in relation to the **ES for water availability and water purification**, given that the water used requires little treatment for use in the various cement manufacturing processes. The main uses are for cooling and spraying, in the containment of particulate matter. The **ES related to water** are impacted by consumption during the process and in the sprinkler to contain particulate matter, as well as by the release of effluents (duly controlled, monitored and reported to the competent authorities).

In terms of resources, among the main dependencies are **fossil fuels** (mineral coal and coke) used to run the kilns and **ores** used to manufacture clinker and cement.

In the case of the Arcos (MG) unit, co-processing was started, in which materials such as charcoal from reforestation (**ES Biomass**), for example, and residues are used. In this case, the use of waste in co-processing implies a decrease in the demand for biomass (coal), which is configured as a positive impact on the **ES of biomass availability**.

GRI 3-3 | 304-2
SASB EM-CM-160a.1

Lapiás, preserved rock formation in Arcos (MG)

Preserved area at the Alhandra unit (PB)

The **ES for air quality maintenance** is configured as a dependency for the Arcos (MG) unit. In addition to the negative impact on this ES, due to the release of PM into the atmosphere, air quality is also configured as a dependency, as it causes direct impacts on the mining activity when its quality is compromised, culminating, in some cases, in a high risk of stoppage of activities by the supervisory bodies. Still on the **ES for maintaining air quality**, the Arcos (MG) operation has areas of legal reserve and Private Natural Heritage Reserve (RPPN) that serve as natural barriers to the dispersion of particulates and other pollutants, collaborating positively with this ES.

The emission of particulate matter, pollutants such as SOx e NOx and GHG are among the main aspects that have a negative impact on the **ES for maintaining air quality and global/regional/local climate regulation**, especially due to the functioning of the ovens, which use **fossil fuels**.

The operation does not depend on **ES Erosion control**, however, the drainage of rainwater has the potential to intensify erosion processes. As for the **ES maintenance of soil quality**, there is potential for a negative impact due to the storage of materials in direct contact with the soil, which may eventually cause changes in soil characteristics.

With regard to **ES habitat and to biodiversity**, there is no dependency, with compensation actions for suppression of vegetation carried out.

GRI 3-3 | 304-2
SASB EM-CM-160a.1

Fauna present in the Area of Relevant Ecological Interest (ARIE) Cicuta (RJ)

Steel industry

Considering the interactions with the environment and the representativeness of the production, the operational units of Volta Redonda (Presidente Vargas Steelworks - UPV) and Porto Real (CSN Porto Real), in Rio de Janeiro, and in Araucária (CSN Paraná), in Paraná, are the most representative in 2022, composing the scope of analysis of the steel sector.

The dependencies related to the **provision ES** are related to the use of wood for pallets and **availability of water** at various stages of the process, with the acquisition of pallets made with reforestation wood does not cause negative impacts on the **ES Woods and wood fibers**.

CSN Porto Real and UPV are dependent on the **ES for regulating water flow and water availability**, as they collect surface water (UPV) and underground water (Porto Real), while CSN Paraná's operation purchases water from the concessionaire, not having this direct dependency.

In this sense, CSN Porto Real and UPV have a negative impact on the **ES of water flow regulation** by returning an amount lower than that collected from the water body. However, the efficiency of the water reuse process at the UPV stands out, which is around 94%, significantly mitigating the impact on this ES.

The release of effluents (a potentially impactful aspect on the quality of water bodies) is duly controlled, monitored, maintained within established standards and reported to the competent bodies. However, CSN Paraná and UPV generally discharge effluent downstream with a higher quality than that collected, positively impacting **ES water purification**. In the case of the UPV, there are episodes in which the operating unit treats part of the sewage in the city of Volta Redonda (RJ).

The emission of air pollutants and particulate matter is one of the main aspects of the steel industry. The negative impacts on the **ES for maintaining air quality and global and regional/local climate regulation** are mainly due to the launch of Nox, SOx, Greenhouse gasses (GHG) and dust, throughout the different processes.

GRI 3-3 | 304-2

With regard to **dependence on these ESs, the dependence on global and regional/local climate regulation ESs** stands out, due to the influence of local climate conditions on specific processes in the steel industry. Excessive rainfall and consequent increase in relative humidity can impair the quality of manufactured products, requiring greater control. Thus, the **ES of climate regulation (global and regional)**, which influences the variation of local meteorological conditions, directly affects an important variable of the production process in the UPV.

CSN Paraná makes a positive contribution to **ES Erosion control** by preserving a permanent protection area (riparian forest) adjacent to the water body, on its property. Similarly, the UPV, by protecting its APP areas close to water bodies, also contributes positively to the **ES of erosion control**. Regarding the **ES soil quality**, there are potential negative impacts due to any temporary disposal of waste directly on the soil, which is already being addressed by the units.

With regard to the use of resources, CSN Paraná and CSN Porto Real depend on **natural gas**, negatively impacting the availability of this scarce resource. The UPV, on the other hand, depends directly on **mineral coal** (to produce coke), in addition to iron **ore**, limestone, dolomite, among others.

With regard to **biodiversity and the ES of habitats** all units maintain forested areas on their properties, positively impacting, since their typology does not imply significant vegetation suppression.

GRI 3-3 | 304-2

Employee at the Presidente Vargas Steelworks (RJ)

Conservation of areas

In the regions where CSN operates, there may be a reduction or loss of habitats to a greater or lesser extent, according to the type of activity carried out. Mining activities, for example, are those that have the potential to impact on biodiversity, mainly due to the locational rigidity of the ore, which, consequently, may be linked to the need for vegetation suppression. Other aspects that may cause potential negative environmental impacts are: emission of atmospheric pollutants, generation of noise and vibration and traffic intensification.

During the entire life cycle of assets, issues related to biodiversity are evaluated, starting with environmental studies, in which significant negative impacts are addressed according to the mitigation hierarchy, seeking to initially avoid, then minimize and, where necessary, compensate.

As a positive impact on biodiversity, investments aimed at preserving biodiversity, in all businesses, are carried out in accordance with the guidelines and parameters established in the best market practices and in environmental licenses. Partnerships with public authorities and some associations are established by the Company in order to strengthen biodiversity protection and recovery initiatives, such as improvements to nurseries used for the production of seedlings of native species.

Cicuta forest (RJ)

CSN Mineração has been developing, since 2021, a broad study on biodiversity at the Casa de Pedra Mine, aiming to meet the Performance Standards on Social and Environmental Sustainability, PS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources of the International Finance Corporation (IFC). The actions, already in progress, are expected to be completed in 2023:

- Elaboration of the Jurema RPPN Management Plan.
- Assessment of Critical Habitats in order to provide information for the environmental management of habitats found in the enterprise.
- Preparation of a Biodiversity Action Plan (BAP) and a Biodiversity Monitoring and Assessment Plan (BMEP)

GRI 3-3 | 304-3

Legal reserve area of CSN Mineração (MG)

Based on the results obtained, the expectation is that CSN Mineração will have an in-depth diagnosis of the potential impacts on biodiversity generated by its operation and, based on this, develop action strategies to manage risks, opportunities and socio-environmental impacts.

In addition, the unit develops academic work, the result of partnerships with universities that result in optimization of monitoring work and environmental studies and in the preparation and publication of scientific articles. More details can be found in CSN Mineração's integrated report.

Biodiversity impact management programs

- Flora rescue
- Phenological monitoring
- Seed collection
- Fauna chase and rescue
- Environmental compensation
- Revegetation of exposed soil
- Monitoring of fauna and flora
- Prevention of forest fires
- Execution of drainage projects
- Implementation of sediment containment devices
- Road signs, preventing fauna from being run over
- Environmental education programs [see more on page 109]

GRI 3-3 | 304-3

Protected areas

The Company has 3,731.6 hectares of Permanent Protection Areas (APP), 26,732.3 hectares of Legal Reserve, 50,347.7 hectares of areas with native vegetation and 1,228.1 hectares of recovery areas, totaling 82,070 hectares of protected areas . ERSA, CSN's tin producer, operates within the Jamari National Forest (Flona), in the municipality of Itapuã do Oeste (Rondônia). After closing the mining fronts, all areas are recovered.

CSN Mineração employs a series of differentiated measures related to biodiversity monitoring and has 9,465 hectares of protected areas, most of them with fragments of semi-deciduous seasonal forest with Atlantic Forest in a high degree of preservation.

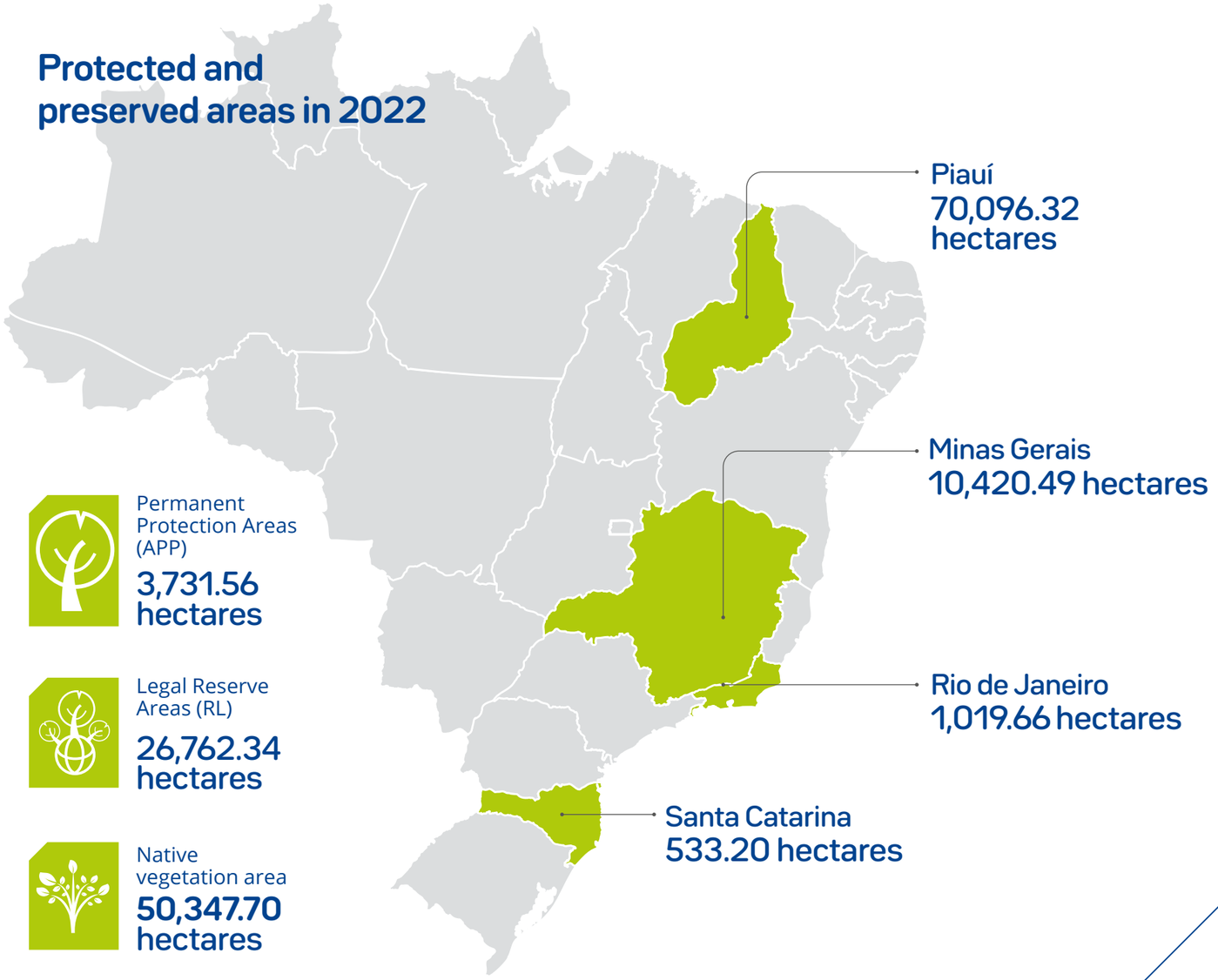
The other preservation areas, including the Legal Reserve (RL), Permanent Protection Area (APP), Areas with native vegetation and recovery areas, which make up a total of 82,070 ha, are distributed among the sectors as follows: CSN Cimentos, 812 ha; the logistics sector, 586 ha; the steel industry, 1019 ha; other mining operations (Minérios Nacional and ERSA), 218 ha and areas acquired by the CSN Group, 69,976 ha. More details are available in the annex (see disclosure 304-3).

In Volta Redonda (RJ), CSN preserves the Cicuta Forest, covering 131.00 hectares, recognized as an Area of Relevant Ecological Interest (ARIE) for harboring one of the last remaining fragments of Atlantic Forest of semideciduous seasonal forest in the state of Rio de Janeiro, in addition to animals and plants of great ecological value. It also signed, just over two years ago, a cooperation agreement with the Chico Mendes Institute for Biodiversity Conservation (ICMBio), an autarchy linked to the Ministry of the Environment (MMA), contemplating the planting of 41 hectares within the limits of the Cicuta Forest, in order to increase the size of the protected area, in addition to investments in five federal conservation units: 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.

Legal reserve area in Arcos (MG)

CSN Mineração has 9,465 hectares of protected areas, most of them with fragments of semi-deciduous seasonal forest with Atlantic Forest in a high degree of preservation

Protected and preserved areas in 2022



Permanent Protection Areas (APP)
3,731.56 hectares

Legal Reserve Areas (RL)
26,762.34 hectares

Native vegetation area
50,347.70 hectares

Recovery area
1,228.06 hectares

Next steps

CSN has established a roadmap of biodiversity, aiming to align its performance in this area with best practices and frameworks ESG. Based on the IFC's PD6 and the TNFD as main references, the set of activities carried out in 2022 (the inventory and analysis of preservation areas and the diagnosis of the most relevant ecosystem services for the sectors) is part of the company's strategy to manage biodiversity more accurately and effectively.

The actions developed so far give rise to the beginning of a journey that will culminate in the systematic survey of risks and opportunities related to Natural Capital. Until then, activities such as: identification, classification and georeferencing of preserved and recovery areas, prioritization and evaluation of identified ecosystem services and mapping of risks and opportunities related to Biodiversity will be developed through the work fronts and the WG, complementing thus the Company's risk management, which, at the present time, already includes a survey of climate risks and opportunities. Added to this is the intention to carry out annual reports related to Biodiversity management in accordance with the TNFD guidelines, reflecting the progress of the assessment (according to the LEAP approach) and its reporting structure.

82 thousand hectares of protected and preserved areas by the CSN Group in 2022

GRI 3-3 | 304-3

Water management

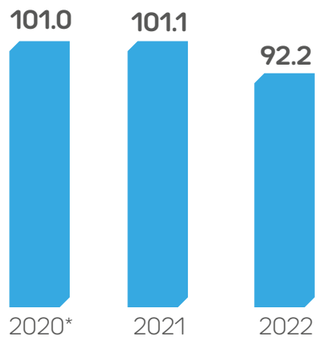
Water is another priority topic for CSN in view of the intensive consumption for its operations. However, the Company has been increasing the percentage of recirculation of its operations each year, as funding has been gradually decreasing. The variation between the water withdrawal by the Group in 2021 (101.1 thousand megaliters) and the amount registered in 2022 (92.2 thousand megaliters) would be enough to supply a city of more than 100 thousand inhabitants per year – the populations of Arcos (MG) and Congonhas (MG) added together.

This result reflects the Company's pioneering spirit in being the first steelmaker in the country to carry out its water footprint, a study that was also carried out by CSN Mineração, in 2021, and by the Arcos unit of CSN Cimentos Brasil, in 2022, and which will be extended in the coming years for the other operations of the CSN Group. It is a complex survey of all water losses, withdrawals and stages of use, always taking into account the basin in which the operations are located and whether there is a water risk in order to seek maximum efficiency from the resource.

At operational units, water is collected from surface or underground sources; and, mainly in the iron ore and limestone mining business, there is a need to lower the water table. After using the water resource, the effluents generated are primarily reused in industrial processes, or treated and returned to water bodies in an appropriate manner only when the first option is not possible. The entire process is carried out in accordance with the grants authorized by the environmental agencies.

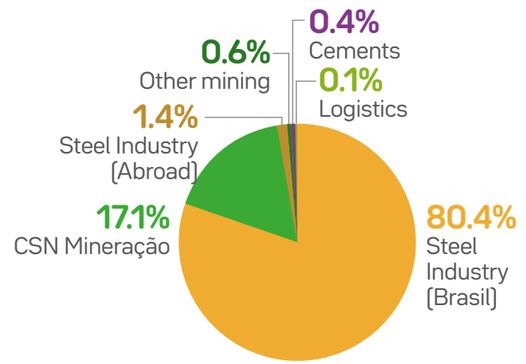
Cicuta forest in Volta Redonda (RJ)

Water withdrawal from CSN (megaliters)



**In 2020, volume withdrawn by units abroad is not included.*

Water withdrawal by segment in 2022



CSN's water intensity

	2020	2021	2022
VAS (Value Added Statement)	12,111,236	27,008,490	16,458,014
Water withdrawal (m^3)	100,980,760	101,111,790	92,212,247
Intensity (water withdrawn/VAS)	8.3	3.7	5.6

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

Hydrological monitoring system at the Presidente Vargas Steelworks (RJ)

CSN's Environmental Education Program in Volta Redonda (RJ)

In view of the commitments established in the CSN group's sustainability policy, CSN's Environmental Education Program in Volta Redonda (RJ) began in 2022, as a result of the Cooperation Agreement established with the municipality. The first educational actions, alluding to Water Day, celebrated worldwide on March 22, included:

- Lecture on Water Resources Management
- Model making workshop
- Bugio Stream cleaning
- Photographic Exhibition Capturing the Past: Water and CSN
- Water Forum
- Release of 10,000 native fingerlings in the Paraíba do Sul River

In the **Steel Industry** segment, the Presidente Vargas Steelworks (UPV) is responsible for more than 80% of the total water collected by the Group annually. The water resource is used mainly in the cooling processes of equipment for the production of steel and in the generation of energy in the Thermoelectric Power Plants. However, the UPV has been pursuing the objective of increasing the rates of recirculation and reuse of its effluents. The unit ended 2022 with an 8.7% reduction in the volume of water collected, when compared to 2021, from 81 thousand megaliters to 74 thousand megaliters in 2022. Compared to 2019, the reduction is even more significant, with 14% of reduction and 94.4% of recirculation of water in the productive process in the operations of the Presidente Vargas Steelworks. The intensity of abstraction ended the year at 18.5 m³ of water for each ton of steel produced, a figure below the world average (28.6 m³) according to the World Steel Association (WSA). This indicator considers all water collected, including currents for non-steel production purposes, such as generating electricity in thermoelectric plants.

The Company also participates in different forums that discuss the shared use of water and water management in the Volta Redonda region. Among these initiatives, the Sul Fluminense Sobre Águas Forum stands out, with the participation of various actors in society, such as the academic sector, management bodies, regional companies, specialists in water resources and representatives of civil society. The objective is to demonstrate, with transparency, the activities carried out by CSN, to disseminate actions, indicators, projects and other matters related to water management for the local community.

In 2020, CSN, spontaneously, reduced its authorization to capture water from the Paraíba do Sul River at the UPV by 38%, a volume equivalent to 76,631,000 m³/year, enough to supply 1 million people a year. This proactive reduction was possible due to the significant decrease in water collection over the last 20 years, a period in which the unit reduced the collection of new water from 8.8 m³/s to 2.6 m³/s, even with the implementation of other three manufacturing units inside the UPV plant: a new Thermoelectric Power Station, the Cement Factory and the Long Steel Factory.

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

In the **Mining segment**, water is used in the processing of iron ore and in the wetting of accesses and piles in order to mitigate the emission of particulate matter. CSN has the goal of reducing, by 2030, the consumption of new water for iron ore production by at least 10% per ton of ore compared to 2018, by 2021, an 11% reduction had already been achieved. However, 2022 was marked by heavy rains in the first quarter, which substantially impaired ore production at the Casa de Pedra Mine, located in Congonhas/MG. The decrease in production impacted the indicator, culminating in an 8% increase in this volume compared to the base year (2018). The expectation for 2023 is that the indicator will return to the levels of 2021.

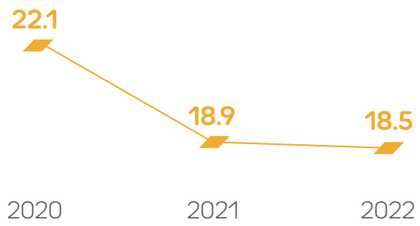
Investments in the Central Ore Processing Plant aim to reduce, by 2024, the plant's specific consumption of fresh water by 45% – from 0.22m³/t to 0.12m³/t – using 2018 as a reference. , advances in the plan for de-characterizing dams and filtering existing tailings in dams for dry stacking (see more on page 109) also contributes to reducing the water footprint in operations, as it generates the recovery of water existing in the removed material, allocating its use to the ore beneficiation process.

With regard to recirculation in the production process for processing ore at Casa de Pedra, due to investments in operational improvements, the index increased from 79% in 2018 to 88% in 2022. De-characterization of the dams, the expectation is that the complete one will operate more efficiently and reach levels of up to 94% of recirculation in 2030.

The uptake of new water in the **cement** production process is lower compared to the Steel and Mining businesses. A water footprint study was carried out in 2022 at the Cimentos unit in Arcos (MG), which showed an increase in the recirculation rate from 80% to 93%. In addition, with the entry of the Alhandra (PB) plant into the segment's annual results, the specific water intake per ton of cement produced achieved a 25% reduction compared to 2021, falling from 98.8 liters/ ton cement to 74.4 liters/ton cement in 2022.

Tailing Filtering Plant at Casa de Pedra (MG)

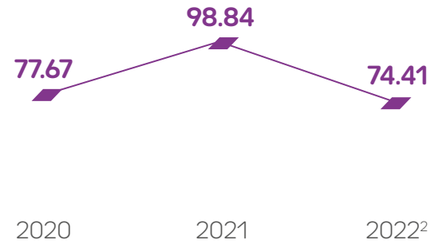
Water intensity in the Steel Industry segment (m³ withdrawn per ton produced)



Water intensity in the Mining segment (m³ withdrawn per ton produced)[1]

1. Water intensity is calculated based on the production of iron ore (wet + dry) and the withdrawal of water intended only for the production process of the ore, considering the water used in the Central Plant, in the Pires Complex and drinking water. The entire volume is withdrawn in areas with water stress.

Water intensity in the Cements segment (liter withdrawn per ton produced)[1]



1. Considers the methodology of the Global Cement and Concrete Association (GCCA) for cement production.
2. For the year 2022 Alhandra is now considered in the management of CSN Cimentos' data.

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

Based on a study carried out in 2021, in line with the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD) and considering all businesses, CSN found that only Logistics units (FTL and TLSA) and Steelmaking (Prada Santo Amaro, Prada Mogi das Cruzes and Lusosider) are located in areas with significant water stress. The data were obtained through the Aqueduct Water Risk Atlas platform, from the World Resources Institute (WRI) and the Water Risk Filter, from the World Wildlife Fund (WWF).

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

The Company acts in partnership with society in assessing the impacts and opportunities for the management and shared use of water. For this reason, it actively participates in river basin committees in the regions where it operates. Through these bodies, it collaborates with the participatory management of the waters of the Paraíba do Sul River, the Paraopeba River and its tributaries and contributes with continuous improvement practices in favor of biodiversity in the surroundings and water quality. In this regard, the following stand out:

In Volta Redonda (RJ)

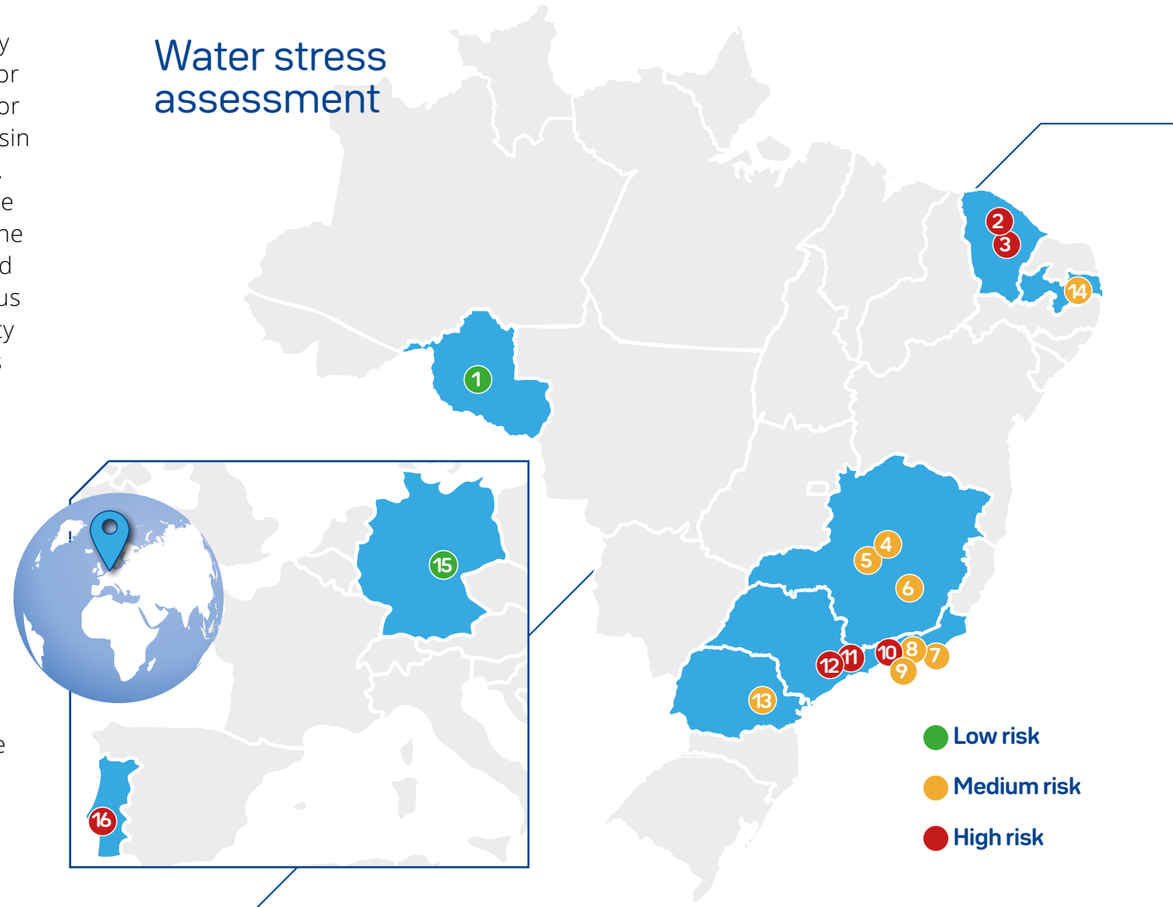
- Middle Paraíba do Sul River Basin Committee (CBH/MPS)
- Paraíba do Sul River Basin Integration Committee

In Minas Gerais

- Paraopeba River Hydrographic Basin Committee
- Alto São Francisco River Basin Committee

Employee at the Presidente Vargas Steelworks (RJ)

Water stress assessment



1. ERSA (RO)
2. FTL (CE)
3. TLSA (CE)
4. CSN Mineração(MG)
5. CSN Cimentos – Arcos (MG)
6. Minérios Nacional (MG)
7. Prada Embalagens Resende (RJ)
8. Usina Presidente Vargas (RJ)
9. CSN Porto Real (RJ)
10. Ports of TECON and TECAR (RJ)
11. Prada Embalagens Santo Amaro (SP)
12. Prada Distribuição (SP)
13. CSN Paraná (PR)
14. Alhandra (PB)
15. SWT (Germany)
16. Lusosider (Portugal)

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

Waste management and circular economy

CSN seeks to generate value from the maximum use of natural resources. For this reason, it implements solutions and technologies aimed at reusing materials in its own processes or in other production chains, in line with the circular economy concept.

Each ton of steel produced generates between 500 and 600 kilograms of waste and co-products that, instead of being sent to landfills, are sold and reinserted into different industries, such as fine chemicals, pharmaceuticals, agribusiness, among others. This potential stimulated the creation of the Special Sales area, dedicated to the marketing and proper destination of each co-product to markets in Brazil and abroad.

The Special Sales area has been seeking more and more opportunities to sell waste and unused materials, aiming not only at zero landfill, but also at internal use. In 2022, the area reached a turnover of R$ 337 million, with a 15% growth compared to 2021.

All CSN Group units have a warehouse that receives and properly segregates materials for sale. In 2022, the group's warehouses received more than 53,000 tons, including scrap and other recyclables. With a focus on the continuous improvement of working conditions and storage of scrap, an inventory of scrap lots at the UPV was carried out using a drone and topographic survey, reaffirming our commitment to the assertiveness of controls and gains in operational efficiency.

Warehouse at the Presidente Vargas Steelworks (RJ)

Segments of the Special Sales area

1 Carbo Chemicals
Chemicals like ammonia, tar, BTX and sulfur.

2 Co-products and waste
Mill scale, zinc and galvalume sludge, oxides and other co-products.

3 Alienated and useless
Unused materials, scrap paper, engines, pumps, other scraps without internal application and obsolete warehouse materials.

4 Decommissioned assets
Trucks, cars and equipment.

5 Opportunity steel
Auction sales of opportunity items such as coils, rolls, sheets and tubes.

6 Business Development
It encourages new value opportunities for co-products for the entire Group and partnerships with universities and companies.

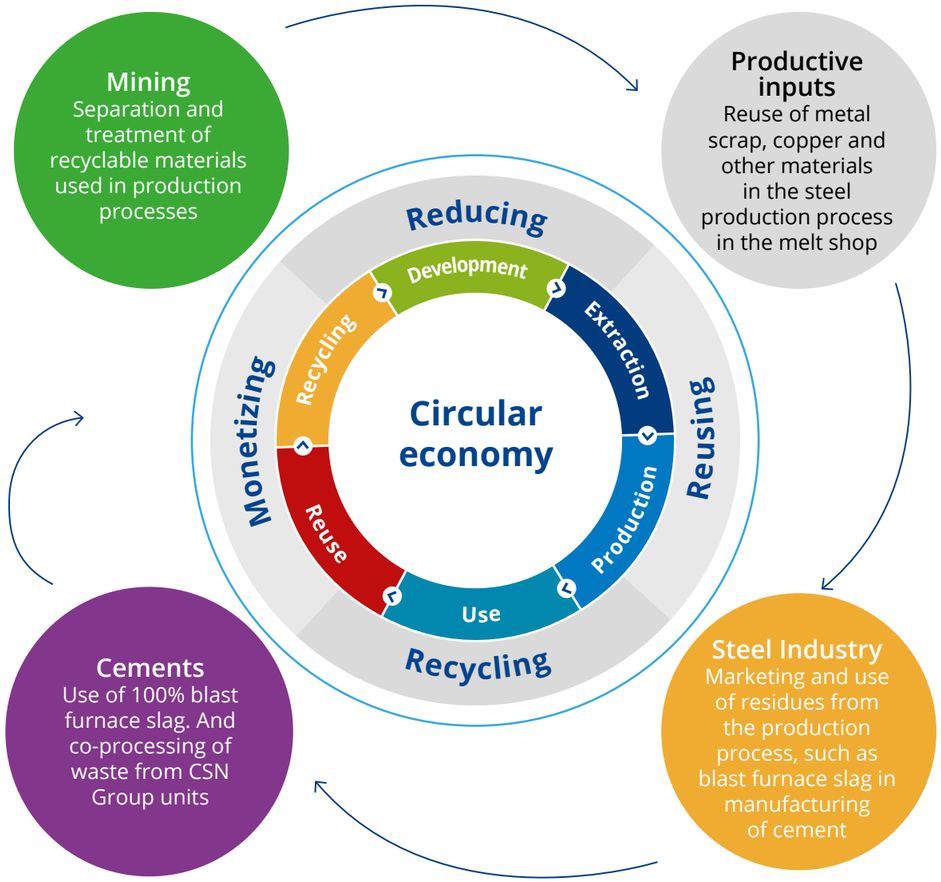
GRI 3-3 | 306-1 | 306-2
SASB EM-MM-150a.10

The growing results of the Special Sales area are a reflection of good practices in waste management and the constant search for favorable sales opportunities. Among the precautions, the following stand out:

- Segregation of materials received (all the Group's production units have a warehouse for receiving and adequate segregation of materials for sale).
- Press for recyclable materials.
- Hygienization of personal protective equipment (PPE), allowing reuse.
- Processing of lamps in the lampshade, transforming hazardous waste into non-hazardous waste.
- Capture of oils through the Oil Capture Station (ECO).
- Depressurization of cans spray for internal use of aluminum wire in the melt shop process
- Stripping of electrical cables to use copper – becoming self-sufficient in this input.

Hazardous waste from all businesses is preferably co-processed or reused. When these alternatives are not possible, they are disposed of in industrial landfills licensed by companies duly approved for this type of service.

In the operations of the entire CSN Group, waste management follows the guidelines established by the Solid Waste Management Plan, considering techniques recommended by norms, standards and guidelines established by licensing environmental agencies, international agreements and internal procedures. Employees in the operational areas are trained and instructed to segregate materials according to their classification and type.



Circula+

In the search for the sustainable destination of its waste, CSN has promoted the circular economy in Brazilian industry through the first spin-off of CSN Inova, Circula+.

The startup emerged from the result of a successful project between the Special Sales area and CSN Inova. A complete solution that aims to transform the management of waste and waste in Brazilian industries. Circula+ is a digital hub that connects large companies that sell and buy materials that were previously destined for landfills or considered unusable, optimizing the destination of these materials, bringing more revenue, transparency and responsibility in the sales process. In 2022, Circula+ became the first spin-off of CSN Inova and ended the year with seven active customers and more than 400 buyers registered on the platform, in addition to CSN itself.

Circula+

The ability to integrate the CSN Group's businesses for the reuse of waste and by-products is one of the Company's main competitive advantages, especially in the steel, mining and cements sectors

GRI 3-3 | 306-1 | 306-2
SASB EM-MM-150a.10

Steel Industry

The main activities that generate waste in the steel industry are the melt shop and the production of the blast furnace, which generates slag that is destined and fully used in the production of cement by CSN Cimentos.

Another type of by-product generated in the steelmaking process, resulting from the processing of slag from the Melt Shop production, is Neobrita, an aggregate that can be used for covering and paving side roads, applications for correctives and fertilizers in agricultural production, railway ballast, among other uses. In 2022, approximately 854 thousand tons of Neobrita were disposed of for appropriate uses.

In Mining, maintenance activities for ore processing structures generate a high volume of ferrous scrap. All of these wastes are sent for reuse in the Steelmaking production process.

At the UPV, sending sludge to landfills decreased by 15% in 2022, compared to the previous year – surpassing the 10% reduction target established for the period.

Mining

The main residues generated by mining activities are overburden, any material removed from mines that has no economic use, and tailings, discarded after the ore beneficiation process. Both overburden and tailings are disposed and stacked in licensed areas that are regularly managed to ensure the safety and stability of stacking.

Based on investments in Research & Development, CSN Mineração seeks to advance in the use of mining waste to produce new materials and co-products, promoting the circular economy. There are two technologies in the testing phase. The first, carried out by CSN Inova, aims to remove even more iron from the waste from the Central Plant, so that this product can be used in the steelmaking process. The second route, conducted jointly by the CSN Mineração and CSN Cimentos teams, aims at producing materials that can be used in the cement industry, such as pozzolana. Both initiatives were successful in pilot projects and are being analyzed for applicability on an industrial scale.

CSN Mineração – mining waste (tons)

	2020	2021	2022
Waste rock	22,532,916	26,095,919	32,503,000
Tailings	5,870,789	4,486,492	4,416,484
Total	**28,403,705**	**30,582,411**	**36,919,215**

Employee at the warehouse in Porto Real (RJ)

Waste management at all Group companies follows the guidelines of the Solid Waste Management Plan

GRI 3-3 | 306-1 | 306-2
SASB EM-MM-150a.5 | EM-MM-150a.6 | EM-MM-150a.10

Cements

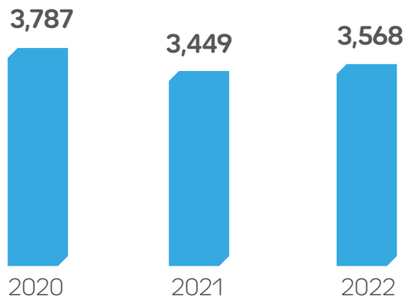
The year was also marked by the start of waste co-processing operations at CSN Cimentos at the Arcos unit (MG). With the recent acquisition of the Brazilian operations of the LafargeHolcim group, CSN now also has the services of the waste management platform, the company responsible for managing industrial and urban waste that is used as an alternative fuel in cement kilns. In this way, the co-processing initiatives already underway at CSN are leveraged and its operations in line with the precepts of the circular economy are strengthened.

CSN Group

The total volume of waste generated by CSN's businesses was 3% higher than in 2021 – excluding mining waste, this result is due to the start of the demolition and renovation of Battery 3 of the coke oven at the UPV. Most of the waste generated (98.4%) is classified as non-hazardous. Of these, 93% were destined for reuse, reprocessing or sold as an input for other production chains and only 7% are destined for duly licensed industrial landfills, incineration and effluent treatment.

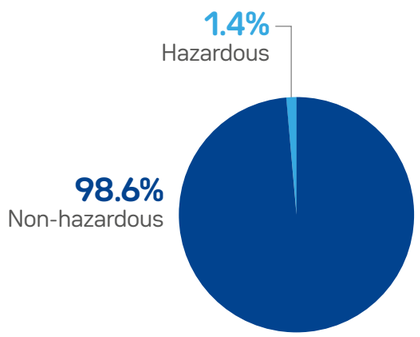
Warehouse Prada Santo Amaro

Waste generated by CSN Group (thousand tons)[1]

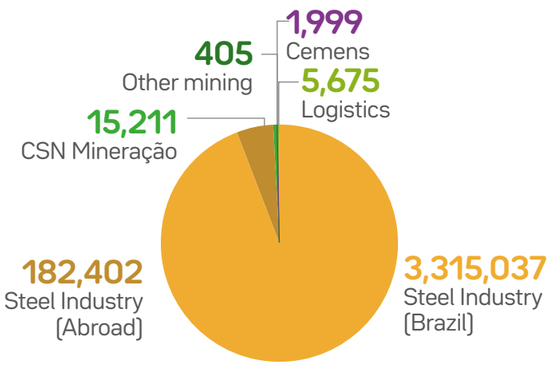


1. In 2022, 99.3% of waste was generated by the Steel Segment (Brazil + Abroad).

Waste generated by type



Waste generated in 2022 by segment (tons)



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

Employee at Casa de Pedra, in Congonhas (MG)

Annexes

Complement to the GRI disclosures and SASB indicators

GRI 2-4 | Restatements of information

Historical data of GRI contents 2-7, 303-3, 303-4, 303-5, 306-3, 306-4 and 306-5 were restated after identifying the need for adjustments in the consolidation of the previous report.

GRI 2-6 | Activities, value chain and other business relationships

Supplier indicators by Segment

	2020		2021		2022	
	Number of suppliers	Expenditures (R$ million)	Number of suppliers	Expenditures (R$ million)	Number of suppliers	Expenditures (R$ million)
Steel Industry	2,369	9,380.7	2,292	17,001.2	2,316	19,540.2
CSN Mineração	1,378	6,361.40	1,298	9,727.00	1,353	8,243.68
Other mining	na	na	335	101	325	213.9
CSN Cimentos	849	573.6	870	910.2	1,230	1,270.50
Logistics	788	448.1	1,027	1,107.20	1,267	1,305.20
Corporate	403	447.2	411	344.4	401	531.4
CSN Group	**4,139**	**17,211.00**	**4,170**	**29,191.10**	**4,443**	**31,104.85**

Supplier indicators by Steel Industry (Abroad)

	2021	2022
Number of suppliers	3,886	4,038
Expenditures (€ million)	540.07	855.50

GRI 2-7 | Employees

Employees by gender and region of the CSN Group[1]

	2020			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Indefinite period									
North	237	23	**260**	241	37	**278**	291	70	**361**
Northeast	1,434	202	**1,636**	1,010	116	**1,126**	1,522	189	**1,711**
Southeast	17,488	2,579	**20,067**	18,507	3,227	**21,734**	17,603	3,351	**20,954**
South	20	5	**25**	542	125	**667**	516	145	**661**
Abroad	na	na	**na**	629	82	**711**	888	110	**998**
Total	19,179	2,809	**21,988**	20,929	3,587	**24,516**	20,820	3,865	**24,685**
Fixed period									
North	14	5	**19**	1	0	**1**	0	0	**0**
Northeast	24	8	**32**	0	2	**2**	3	5	**8**
Southeast	386	202	**588**	12	12	**24**	48	52	**100**
South	4	0	**4**	0	0	**0**	0	0	**0**
Abroad	na	na	**na**	232	29	**261**	45	3	**48**
Total	428	215	**643**	245	43	**288**	96	60	**156**
Fixed period (Apprentice and Capacitar Programs)									
North	1	8	**9**	0	0	**0**	0	2	**2**
Northeast	31	25	**56**	3	20	**23**	6	50	**56**
Southeast	558	322	**880**	508	763	**1,271**	635	1,222	**1,857**
South	0	1	**1**	9	12	**21**	4	6	**10**
Abroad	na	na	**na**	na	na	**42**	0	0	**0**
Total	590	356	**946**	520	795	**1,357**	645	1,280	**1,925**
Total CSN Group	**20,197**	**3,380**	**23,577**	**21,694**	**4,425**	**26,161**	**21,561**	**5,205**	**26,766**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year. All work full-time. CSN has a working hours policy for operations in Brazil, which establishes respect for the 8-hour day, as established in the CLT. Employees cannot work more than 2 hours of overtime per day in order to ensure compliance with labor legislation.

GRI 2-7 | Employees

Employees by gender and region of the Steel Industry (Brazil) Segment[1]

	2020			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Indefinite period									
Northeast	561	106	**667**	56	6	**62**	51	7	**58**
Southeast	11,624	1,748	**13,372**	11,071	1,894	**12,965**	10,436	1,961	**12,397**
South	20	5	**25**	542	125	**667**	516	145	**661**
Total	**12,205**	**1,859**	**14,064**	**11,669**	**2,025**	**13,694**	**11,003**	**2,113**	**13,116**
Fixed period									
Northeast	21	6	**27**	0	1	**1**	0	0	**0**
Southeast	119	71	**190**	3	5	**8**	35	43	**78**
South	4	0	**4**	0	0	**0**	0	0	**0**
Total	**144**	**77**	**221**	**3**	**6**	**9**	**35**	**43**	**78**
Fixed period (Apprentice and Capacitar Programs)									
Northeast	12	11	**23**	1	3	**4**	2	1	**3**
Southeast	445	254	**699**	415	472	**887**	452	678	**1,130**
South	0	1	**1**	9	12	**21**	4	6	**10**
Total	**457**	**266**	**723**	**425**	**487**	**912**	**458**	**685**	**1,143**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year at the UPV, Porto Real, Paraná and Prada (Distribution and Packaging) units. All work full-time. CSN has a working hours policy for operations in Brazil, which establishes respect for the 8-hour day, as established in the CLT. Employees cannot work more than 2 hours of overtime per day in order to ensure compliance with labor legislation.

Employees by gender and region of the Steel Industry (Abroad) Segment[1]

	2021			2022		
	Men	Women	Total	Men	Women	Total
Indefinite period	629	82	**711**	888	110	**998**
Fixed period	232	29	**261**	45	3	**48**
Fixed period (Apprentice Program)	nd	nd	**42**	0	0	**0**

1. Considers effective employees on December 31 of each year. All work abroad and full time.
2. Since 2021, the CSN Group started to report data referring to operations abroad (Lusosider and SWT), therefore data for 2020 is not available. In 2021, there are 42 apprentices at SWT for whom it was not possible to identify gender, so they are accounted for only in the "Total" column.

GRI 2-7 | Employees

Employees by gender and region of the Mining Segment (CSN Mineração)[1]

	2021			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Indefinite period	5,231	740	**5,971**	6,064	1,063	**7,127**	5,814	1,090	**6,904**
Fixed period	250	130	**380**	1	3	**4**	4	7	**11**
Fixed period (Apprentice and Capacitar Programs)	107	61	**168**	78	268	**346**	156	501	**657**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. They all work in the Southeast Region and work full-time. CSN has a working hours policy for operations in Brazil, which establishes respect for the 8-hour day, as established in the CLT. Employees cannot work more than 2 hours of overtime per day in order to ensure compliance with labor legislation.

Employees by gender and region of the Mining Segment (Other mining)[1 and 2]

	2020			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Indefinite period									
North	237	23	**260**	241	37	**278**	291	70	**361**
Southeast	168	20	**188**	162	22	**184**	171	29	**200**
Total	**405**	**43**	**448**	**403**	**59**	**462**	**462**	**99**	**561**
Fixed period									
North	14	5	**19**	1	0	**1**	0	0	**0**
Southeast	1	0	**1**	1	0	**1**	0	0	**0**
Total	**15**	**5**	**20**	**2**	**0**	**2**	**0**	**0**	**0**
Fixed period (Apprentice and Capacitar Programs)									
North	1	8	**9**	0	0	**0**	0	2	**2**
Southeast	0	0	**0**	0	0	**0**	4	4	**8**
Total	**1**	**8**	**9**	**0**	**0**	**0**	**4**	**6**	**10**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. All work full-time. CSN has a working hours policy for operations in Brazil, which establishes respect for the 8-hour day, as established in the CLT. Employees cannot work more than 2 hours of overtime per day in order to ensure compliance with labor legislation.
2. Other mining activities include: ERSA Mineração (RO) and Minérios Nacional (MG).

GRI 2-7 | Employees

Employees by gender and region of the Cements Segment[1]

	2021			2022		
	Men	Women	Total	Men	Women	Total
Indefinite period						
Northeast	NA	NA	**NA**	267	45	**312**
Southeast	719	173	**892**	723	201	**924**
Total	**719**	**173**	**892**	**990**	**246**	**1,236**
Fixed period						
Northeast	NA	NA	**NA**	2	2	**4**
Southeast	7	4	**11**	9	0	**9**
Total	**7**	**4**	**11**	**11**	**2**	**13**
Fixed period (Apprentice and Capacitar Programs)						
Northeast	NA	NA	**NA**	3	8	**11**
Southeast	0	6	**6**	13	18	**31**
Total	**0**	**6**	**6**	**16**	**26**	**42**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. All work full-time. CSN has a working hours policy for operations in Brazil, which establishes respect for the 8-hour day, as established in the CLT. Employees cannot work more than 2 hours of overtime per day in order to ensure compliance with labor legislation. The company CSN Cimentos was separated from the CSN Group with an independent CNPJ in March 2021, thus the 2020 history is consolidated in the number of employees of the CSN Company.

Employees by gender and region of the Logistics Segment[1]

	2020			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Indefinite period									
Northeast	873	96	**969**	954	110	**1,064**	1,204	137	**1,341**
Southeast	465	71	**536**	491	75	**566**	459	70	**529**
Total	**1,338**	**167**	**1,505**	**1,445**	**185**	**1,630**	**1,663**	**207**	**1,870**
Fixed period									
Northeast	3	2	**5**	0	1	**1**	1	3	**4**
Southeast	16	1	**17**	0	0	**0**	0	2	**2**
Total	**19**	**3**	**22**	**0**	**1**	**1**	**1**	**5**	**6**
Fixed period (Apprentice and Capacitar Programs)									
Northeast	19	14	**33**	2	17	**19**	1	41	**42**
Southeast	6	7	**13**	15	17	**32**	10	21	**31**
Total	**25**	**21**	**46**	**17**	**34**	**51**	**11**	**62**	**73**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year. All work full-time. CSN has a working hours policy for operations in Brazil, which establishes respect for the 8-hour day, as established in the CLT. Employees cannot work more than 2 hours of overtime per day in order to ensure compliance with labor legislation.

GRI 2-8 | Workers who are not employees

The third parties that work at CSN's units are related to outsourcing contracts for activities and processes, such as surveillance, cleaning, maintenance, transport, civil works, IT and equipment assembly services. The inspection of the labor regularity of the contracted companies responsible for these services is carried out through the Third Party Management Center (learn more on page 103).

Total number of third parties

	2020	2021	2022
Steel Industry (Brazil)	5,603	5,785	4,233
Steel Industry (Foreign)	NA	42	42
CSN Mineração S.A.	3,462	3,828	2,266
Other mining	271	169	67
Cements Segment	821	892	650
Logistics	1,841	892	2,468
CSN Group	**11,998**	**11,608**	**9,726**

GRI 2-21 | Annual total compensation ratio

Ratio of annual compensation and its increase (times)

	2020	2021	2022
Proportion of compensation of the highest paid individual X average of other employees	30	32.4	31.7
Proportion of the annual increase in compensation of the highest paid individual X average of other employees	NA	NA	95.6

GRI 2-27 | Compliance with laws and regulations
GRI 206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices
SASB EM-MM-140a.2 | Number of incidents of non-compliance associated with water quality permits, standards, and regulations
SASB EM-CM-520a.1 | Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities

Neither CSN nor the companies that are part of the CSN Group received non-monetary sanctions, fines or responded to legal proceedings for non-compliance with laws and regulations related to socioeconomic aspects and free competition practices during the year 2022. Likewise, none of the companies were sanctioned for non-compliance or non-compliance associated with water quality licenses, standards and regulations.
In 2022, CSN Group companies received eight notices of infraction related to alleged non-compliance with environmental regulations.
CSN Cimentos received four notices of infraction, but only one was fined, in the amount of R$ 1,384,579.58, due to alleged pollution caused by a road accident with a vehicle transporting cement produced at the Montes Claros plant. In all cases, the Company presented administrative defenses that are awaiting judgment.
CSN Mineração received three infraction notices for alleged visible emission of particulate matter (dust) from the activities carried out by the Company. All of them were fined in the amount of R$ 15,270,000.00. The Company presented a defense that awaits judgment at the Municipal Secretariat for the Environment (SEMMA) of the municipality of Congonhas.
In the energy segment, CEEE-G received a notice of infraction with a fine in the amount of R$ 1,073,963.34 for alleged non-compliance with legal, regulatory, contractual provisions or contained in the act of concession, permission or authorization related to the safety of dams at the Jacuí Hydroelectric Plant (HPP). The administrative defense is on trial.

Cases of non-compliance by Business Segment

	Company	Period	Total number of significant fines	Total monetary value of significant fines (R$ thousand)[1]	Number of non-monetary sanctions
Cements	CSN Cimentos	2020	0	0.0	0
		2021	0	0.0	0
		2022	1	1,384.6	3
Mining	CSN Mineração	2020	1	2,190.0	0
		2021	2	6,343.0	4
		2022	3	15,270.0	0
Logistics	Sepetiba TECON	2020	0	0.0	0
		2021	1	1,400.0	1
		2022	0	0.0	0
Energy	CEEE-G	2020	0	0.0	0
		2021	0	0.0	0
		2022	1	1,074.0	0

1. Significant monetary fines: over R$ 1 million. The values presented and considered as significant for the company are still in the process of defense analysis or in judicial discussion.

GRI 2-28 | Membership associations

Participation in associations and class entities by Segment in 2022

CSN Siderurgia	National Institute of Steel Distributors (INDA); Rio Grande do Sul Steel Association (AARS); National Confederation of Industry (CNI); Industrial Center of Rio de Janeiro (FIRJAN - CIRJ); Brazilian Association of Technical Standards (ABNT); Prolata Brazilian Association of Steel Packaging (ABEAÇO); RemTech Europe – International event on Remediation, Coasts, Floods, Climate, Seismic, Regeneration, Industry; EKOS Brazil.
CSN Mineração	Federation of Industries of the State of MG (FIEMG); Brazilian Association of Port Terminals (ABTP); SINDIEXTRA - Union of Extractive Industries of Minas Gerais.
Logistics	Brazilian Association of Container Terminals (ABRATEC); National Association of Railway Carriers (ANTF); Association of Companies of the Industrial and Port Complex of Pecém (AECIPP).
Energy	Brazilian Association of Large Electric Energy Consumers (ABRACE); Brazilian Association of Investors in Energy Self-Production (ABIAPE).

GRI 2 2-29 | Approach to stakeholder engagement

Investors: results conference call (quarterly) and CSN/CMIN Day (annual), when the Company's Board of Executive Officers presents and discusses with investors and capital market analysts the performance of the business, in ESG, and the main investments and challenges strategic.

Local communities: Conducting structured public consultation processes within the scope of environmental licensing for communities, participation in local councils/groups, environmental education programs and dealing with manifestations received by the Green Line channel.

GRI 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage

Ratio between the lowest wage paid and the minimum wage[1]

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
CSN Siderurgia	42.6%	44.9%	44.6%	47.0%	47.0%	47.0%
Cia Metalurgia Prada	47.0%	47.0%	47.0%	47.0%	42.6%	47.0%
CSN Mineração	44.6%	47.0%	47.0%	47.0%	47.0%	47.0%
Other mining[2]	89.2%	93.9%	103.7%	105.0%	47.0%	47.0%
CSN Cimentos	na	na	107.5%	47.0%	47.0%	42.6%
Logistics	100.0%	100%	100%	100%	47.0%	47.0%
Lusosider	na	na	101.0%	101.0%	101.4%	101.4%
SWT	na	na	162.4%	162.4%	129.9%	129.9%
Grupo CSN	**44.9%**	**44.9%**	**44.6%**	**47.0%**	**42.6%**	**42.6%**

1. 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, in 2021 R$ 1,100 and in 2022 R$ 1,212.
2. Other mining includes: ERSA (RO) and Minérios Nacional (MG).

GRI 204-1 | Proportion of spending on local[1] suppliers

Percentage of expenses with local suppliers by Segment

	2020			2021			2022		
	Materials	Services	Consolidated	Materials	Services	Consolidated	Materials	Services	Consolidated
Steel Industry (Brazil)	29.0%	70.1%	**36.6%**	24.0%	57.2%	**28.2%**	18.5%	55.5%	**23.2%**
CSN Mineração	39.6%	37.2%	**38.7%**	38.3%	40.9%	**39.1%**	41.0%	29.7%	**37.2%**
Other mining[2]				82.1%	91.5%	**88.7%**	82.6%	86.6%	**85.5%**
CSN Cimentos	20.7%	58.4%	**31.7%**	23.7%	28.5%	**25.5%**	20.7%	27.7%	**23.5%**
Logistics	46.6%	45.2%	**45.4%**	9.7%	31.1%	**19.1%**	17.5%	35.3%	**27.8%**
Corporate	3.2%	38.6%	**27.1%**	5.5%	50.4%	**30.4%**	4.6%	60.7%	**39.5%**
CSN Group[1]	**31.9%**	**49.7%**	**37.2%**	**27.8%**	**46.1%**	**31.6%**	**23.7%**	**42.1%**	**27.8%**

1. Local suppliers are those located within the Brazilian states where CSN operates.
2. Other mining include: ERSA Mineração (RO) and Minérios Nacional (MG).

Percentage of expenses with local suppliers (Steel Industry Abroad)

	2021	2022
Lusosider		
% local spend Materials	19.7	11.4
% local spend Services	35.4	28.3
% local spend Consolidated	55.0	39.7
SWT		
% local spend Materials	93.9	82.3
% local spend Services	6.1	11.5
% local spend Consolidated	48.0	82.3

GRI 205-2 | Communication and training about anti-corruption policies and procedures

Employees trained in ethics and compliance[1]

	2021		2022	
	Number of people trained	Percentage over headcount on 12/31	Number of people trained	Percentage over headcount on 12/31
By region				
North	85	30.5%	296	81.3%
Northeast	298	25.9%	1,108	60.2%
Southeast	17,480	75.9%	19,707	84.3%
South	183	26.6%	640	93.0%
By functional level				
Executive	20	105.3%	23	67.6%
Leadership	1,147	101.0%	1,165	94.8%
Specialist	1,101	101.7%	236	93.7%
Engineer			891	97.8%
Higher level	1,226	106.7%	1,228	95.3%
Technician	3,083	89.9%	2,719	88.4%
Administrative	988	160.1%	640	92.1%
Operational	9,311	55.1%	13,458	79.5%
Capacitar Program	1,170	141.6%	238	50.0%
Apprentice Program			618	77.6%
Trainee Program	na	na	49	100%
Interns	na	na	486	95.5
Total	**18,046**	**71.8%**	**21,751**	**83%**

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories. Percentage calculated as the total number of employees trained throughout the year divided by the headcount on 12/31, therefore, in some cases, the percentage of trained employees exceeds 100% of the staff at the end of the period.

207-4 | Country-by-country reporting

Nature of the tax 2022 (R$)

	Germany	Austria	Brazil	Spain	United States	Poland	Portugal	Grand total
Other taxes	na	na	228,323,929.96	na	na	na	na	**228,323,929.96**
Mining royalties	na	na	314,656,739.92	na	na	na	na	**314,656,739.92**
Income taxes	284,265,096.11	88,638.72	1,692,541,887.98	427,597.52	82,025,529.77	8,400.79	15,133,338.20	**2,074,490,489.09**
Payroll taxes	na	na	728,789,830.38	na	na	na	na	**728,789,830.38**
Taxes on products and services	63,114,571.53	na	3,021,617,382.35	7,908,966.35	na	na	249,993,315.35	**3,342,634,235.58**
Grand total	**347,379,667.63**	**88,638.72**	**5,985,929,770.59**	**8,336,563.88**	**82,025,529.77**	**8,400.79**	**265,126,653.55**	**6,688,895,224.93**

GRI 301-1 | Materials used by weight or volume
GRI 301-2 | Recycled input materials used

Materials consumption of CSN Group (tons)[1]

	2020	2021	2022
Non-renewable virgin materials	13,013,942	15,621,448	15,010,236
Renewable virgin materials	1	1	1
Subtotal virgin materials	**13,013,943**	**15,621,449**	**15,010,237**
Recycled materials	**913,054**	**699,933**	**686,943**
Total consumed materials	**13,926,997**	**16,321,382**	**15,697,180**

1. As of 2021, considers operations abroad.

Materials consumption of Other mining (tons)

	2020	2021	2022
Non-renewable virgin materials	363	297	526
Renewable virgin materials	0	0	0
Subtotal virgin materials	**363**	**297**	**526**
Recycled materials	**0**	**0**	**0**
Total consumed materials	**363**	**297**	**526**

Materials consumption of Steel Industry Segment (tons)[1]

	2020	2021	2022
Non-renewable virgin materials	9,908,031	12,051,791	10,070,238
Renewable virgin materials	0	0	0
Subtotal virgin materials	**9,908,031**	**12,051,791**	**10,070,238**
Recycled materials	**913,054**	**699,933**	**686,943**
Total consumed materials	**10,821,085**	**12,751,724**	**10,757,181**

1. As of 2021, considers operations abroad.

Materials consumption of Cements Segment (tons)

	2020	2021	2022
Non-renewable virgin materials	3,098,925	3,558,583	4,927,864
Renewable virgin materials	0	0	0
Subtotal virgin materials	**3,098,925**	**3,558,583**	**4,927,864**
Recycled materials	**0**	**0**	**0**
Total consumed materials	**3,098,925**	**3,558,583**	**4,927,864**

Materials consumption of CSN Mineração (tons)

	2020	2021	2022
Non-renewable virgin materials	6,427	10,562	11,519
Renewable virgin materials	0	0	0
Subtotal virgin materials	**6,427**	**10,562**	**11,519**
Recycled materials	**0**	**0**	**0**
Total consumed materials	**6,427**	**10,562**	**11,519**

Materials consumption of Logistics Segment (tons)

	2020	2021	2022
Non-renewable virgin materials	196	215	28
Renewable virgin materials	1	1	1
Subtotal virgin materials	**197**	**216**	**29**
Recycled materials	**0**	**0**	**0**
Total consumed materials	**197**	**216**	**29**

GRI 302-1 | Energy consumption within the organization

Energy generated by fuel consumption of CSN Group (GJ)[1]

	2020	2021	2022
Metallurgical coal/CSN	26,374,162	24,155,855	24,133,415
PCI metallurgical coal/CSN	12,483,002	13,901,578	16,028,485
Sub-bituminous coal	78,303	425,231	1,566,716
Coal coke/CSN purchased	19,561,559	25,701,254	19,601,162
Coal coke/Mill/CSN	300,549	1,066,834	7,316,763
Coal coke/Small Coke/CSN	5,180,385	6,638,058	5,244,411
Petroleum coke	7,226,798	6,445,613	8,446,801
Diesel/Brazil	2,946,358	3,410,386	3,665,335
Liquefied petroleum gas (LPG)	21,923	26,361	23,999
Natural gas	14,973,617	15,585,082	15,605,867
Gasoline/Brazil	16,912	16,388	19,302
Fuel oil	118,557	160,732	179,624
Subtotal non-renewable fuels	**89,282,306**	**97,533,372**	**101,831,882**
Hydrous ethanol (renewable fuel)	**19**	**27**	**21**
Total energy generated by fuel consumption	**89,282,325**	**97,533,399**	**101,831,903**
Electricity (GJ)			
Electricity/Brazil	4,004,505	4,642,004	1,323,062
Electricity/International	0	1,752,033	135,220
Electricity/Renewable	7,213,387	8,405,915	11,475,206
Subtotal electricity consumed	**11,217,892**	**14,799,951**	**12,933,487**
TOTAL energy consumed (fuels + electricity)	**100,500,217**	**112,333,350**	**114,765,390**

1. 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. Considers operations abroad (Lusosider and SWT) as of 2021.

Energy generated by fuel consumption of Steel Industry Segment (GJ)[1]

	2020	2021	2022
Metallurgical coal/CSN	26,369,556	24,152,383	24,126,509
PCI metallurgical coal/CSN	12,483,002	13,901,578	16,028,485
Coal coke/CSN purchased	19,561,559	25,701,254	19,601,162
Coal coke/Mill/CSN	300,549	1,066,834	7,316,763
Coal coke/Small Coke/CSN	5,180,385	6,638,058	5,244,411
Diesel/Brazil	137,604	141,575	136,940
Liquefied petroleum gas (LPG)	11,312	13,826	9,541
Natural gas	14,780,302	15,308,310	15,431,462
Gasoline/Brazil	101	88	93
Fuel oil	485	0	0
Subtotal non-renewable fuels	**78,824,855**	**86,923,907**	**87,895,368**
Hydrous ethanol (renewable fuel)	**0**	**0**	**0**
Total energy generated by fuel consumption	**78,824,855**	**86,923,907**	**87,895,368**
Electricity (GJ)			
Electricity/Brazil	3,597,210	4,183,523	815,059
Electricity/International	0	1,752,033	135,220
Electricity/Renewable	5,395,107	6,635,022	9,367,924
Subtotal electricity consumed	**8,992,318**	**12,570,578**	**10,318,203**
TOTAL energy consumed (fuels + electricity)	**87,817,173**	**99,494,485**	**98,213,571**

1. 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. Considers operations abroad (Lusosider and SWT) as of 2021.

GRI 302-1 | Energy consumption within the organization

Energy generated by fuel consumption of Mining Segment (GJ)

	CSN Mineração			Other mining		
	2020	2021	2022	2020	2021	2022
Metallurgical coal/CSN	0	0	0	4,605	3,471	6,906
Diesel/Brazil	2,162,203	2,604,852	2,675,282	152,046	127,979	211,919
Liquefied petroleum gas (LPG)	2,563	2,660	3,010	1,686	1,795	2,695
Gasoline/Brazil	7,699	6,466	6,424	744	833	1,157
Subtotal non-renewable fuels	**2,172,466**	**2,613,978**	**2,684,715**	**159,082**	**134,080**	**222,678**
Hydrous ethanol (renewable fuel)	**0**	**0**	**0**	**0**	**0**	**0**
Total energy generated by fuel consumption	**2,172,466**	**2,613,978**	**2,684,715**	**159,082**	**134,080**	**222,678**
Electricity (GJ)						
Electricity/Brazil	0	0	0	60,323	27,982	33,533
Electricity/Renewable Brazil	1,211,857	1,242,045	1,286,952	0	510	18,688
Subtotal electricity consumed	**1,211,857**	**1,242,045**	**1,286,952**	**60,323**	**28,492**	**52,222**
TOTAL energy consumed (fuels + electricity)	**3,384,323**	**3,856,024**	**3,971,667**	**219,404**	**162,571**	**274,900**

Energy generated by fuel consumption of Cements Segment (GJ)

	2020	2021	2022
Sub-bituminous coal	78,303	425,231	1,566,716
Petroleum coke	7,226,798	6,445,613	8,446,801
Diesel/Brazil	111,370	128,254	166,523
Liquefied petroleum gas (LPG)	6,216	7,785	7,676
Natural gas	193,315	276,772	174,405
Gasoline/Brazil	949	953	980
Fuel oil	118,072	160,732	179,624
Subtotal non-renewable fuels	**7,735,023**	**7,445,340**	**10,542,724**
Hydrous ethanol (renewable fuel)	**0**	**0**	**0**
Total energy generated by fuel consumption	**7,735,023**	**7,445,340**	**10,542,724**
Electricity (GJ)			
Electricity/Brazil	337,904	418,940	441,875
Electricity/Renewable Brazil	606,423	522,099	801,641
Subtotal electricity consumed	**944,327**	**941,039**	**1,243,517**
TOTAL energy consumed (fuels + electricity)	**8,679,350**	**8,368,378**	**11,786,241**

Energy generated by fuel consumption of Logistics Segment (GJ)

	2020	2021	2022
Diesel/Brazil	383,314	407,725	474,671
Liquefied petroleum gas (LPG)	146	293	1,077
Gasoline/Brazil	7,420	8,048	10,648
Subtotal non-renewable fuels	**390,880**	**416,067**	**486,396**
Hydrous ethanol (renewable fuel)	**19**	**27**	**21**
Total energy generated by fuel consumption	**390,899**	**416,094**	**486,417**
Electricity (GJ)			
Electricity/Brazil	6,268	11,559	32,595
Electricity/Renewable Brazil	0	6,238	0
Subtotal electricity consumed	**6,268**	**17,798**	**32,595**
TOTAL energy consumed (fuels + electricity)	**397,167**	**433,891**	**519,012**

GRI 302-2 | Energy consumption outside of the organization

Energy consumption outside the company (GJ)

	2020	2021	2022
Steel Industry Brazil	na	18,770,191	7,556,986
Steel Industry Abroad	na	na	372,770
CSN Mineração	na	4,670,945	26,954,248
Other mining	na	1,167	49,538
Cements	na	1,753,193	6,430,463
Logistics	na	31,070	2,650
CSN Group	**na**	**25,226,565**	**41,372,664**

GRI 302-3 | Energy intensity

Indicators of energy intensity

	Premise	2020	2021	2022
Energy consumption (GJ) divided by the added value distributed (R$ thousand)	Combustech tool and indicator B.5.2 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	8.30	4.16	6.97
Energy consumption (GJ) divided by ton of crude steel	According to the methodology of the World Steel Association (WSA) with consolidation of the UPV and SWT units	20.88	20.70	21.94
Energy consumption (kWh) divided by ton of cement	According to the methodology of the Global Cement and Concrete Association (GCCA)	85.96	81.12	70.38
Energy consumption (kWh) divided by ton of cementitious	According to the methodology of the Global Cement and Concrete Association (GCCA)	85.4	80.5	74.4
Energy consumption (MJ) divided by ton of clinker	According to the methodology of the Global Cement and Concrete Association (GCCA)	3,269	3,287	3,315
Energy consumption (GJ) divided by ton of ore produced	Considers all energy consumed within the organization (Scope 1 +2) and the total production of the Casa de Pedra unit	0.660	0.142	0.164

GRI 305-1 | Direct (Scope 1) GHG emissions
GRI 305-2 | Energy indirect (Scope 2) GHG emissions
GRI 305-3 | Other indirect (Scope 3) GHG emissions

GHG emissions of CSN Group [tCO_2e]

	2020			2021			2022		
	Scope 1	Scope 2	Scope 3	Scope 1	Scope 2	Scope 3	Scope 1	Scope 2	Scope 3
Steel Industry Brazil	8,611,081	66,965	381,875	9,814,487	146,888	1,421,872	8,650,460	9,644	1,613,985
Steel Industry Abroad	na	na	na	118,531	19,824	71,403	114,367	7,570	172,504
Other mining	11,267	1,024	457	9,348	982	256	17,905	393	3,946
Cements	2,075,111	5,867	115,383	1,995,227	14,709	121,863	2,761,528	5,228	442,336
Logistics	27,309	107	4,053	28,324	406	5,684	35,250	385	18,050
CSN Group	**10,724,768**	**73,964**	**501,768**	**11,965,917**	**182,810**	**1,621,079**	**11,579,510**	**23,220**	**2,250,821**
CSN Mineração	**156,115**	**0**	**40,269,240**	**183,437**	**0**	**42,948,338**	**208,488**	**0**	**48,882,721**

Biogenic GHG emissions [tCO_2e]

	2020		2021		2022	
	Scope 1	Scope 3	Scope 1	Scope 3	Scope 1	Scope 3
Steel Industry Brazil and Abroad	1,140.76	15,833.68	1,108.66	155,151.82	902.60	51,373.18
Other mining	1,269.89	10.06	1,012.51	6.68	1,451.34	333.83
Cements	923.23	13,726.66	1,005.45	14,526.68	29,046.25	43,491.12
Logistics	3,262.94	158.70	3,145.03	233.66	3,368.65	3.10
Offices	0.33	2.14	0.00	0.00	0.00	0.00
CSN Group	**6,597.15**	**29,731.24**	**6,271.65**	**169,918.84**	**34,768.84**	**95,201.23**
CSN Mineração	**18,024.37**	**37,129.17**	**20,470.87**	**38,639.45**	**14,959.10**	**35,271.95**

GRI 305-4 | GHG emissions intensity

GHG emissions intensity indicators related to the World Steel Association (WSA)

	2018 (target base year)	2020	2021	2022
Emission intensity in tCO_2e/ton of steel (WSA methodology) - UPV	**2.41**	**2.29**	**2.30**	**2.34**
Emission intensity in tCO_2e/ton of steel (WSA methodology) - SWT	**0.63**	**0.51**	**0.21**	**0.21**
Emission intensity in tCO_2e/ton of steel (WSA methodology) - CSN Steel	**2.10**	**1.97**	**1.98**	**1.99**
UPV steel production (ton)	4,152,184	3,816,090	4,388,668	3,906,104
SWT steel production (ton)	871,394	812,282	811,277	765,032
Total steel production (UPV + SWT)	5,023,578	4,628,372	5,199,945	4,671,136
Absolute emissions (scopes 1, 2 and 3) - UPV (tCO_2e)	10,024,216	8,721,503	10,109,528	9,142,867
Absolute emissions (scopes 1, 2 and 3) - SWT (tCO_2e)	547,147	414,697	172,248	161,213
Absolute emissions (scopes 1, 2 and 3) - Steel Production Process (tCO_2e)	10,571,363	9,136,200	10,281,776	9,304,080

GHG emissions intensity indicators related to the Mining Segment

	2019 (target base year)	2020	2021	2022
Iron ore production (ton)	32,089,836	21,891,493	27,239,253	24,279,000
Emission scopes 1 and 2 ($kgCO_2e$)	185,272,386	155,499,452	179,245,076	192,437
Intensity of GHG emissions ($kgCO_2e$/ton of ore produced)	**5.77**	**7.10**	**6.58**	**7.92**

GHG emissions intensity indicators related to the Global Cement and Concrete Association (GCCA)

	2020 (target base year)	2021	2022
CSI Indicator 71 - Absolute Direct Emissions (tCO_2e) - CSN (total)	2,038,329	2,056,817	2,613,346
CSI Indicator 74 – Specific emission per cementitious (kg CO_2/t ton of cementitious) - CSN	**518**	**480**	**497**
CSI Indicator 75 – Specific emission per cement (kg CO_2/t ton of cement) - CSN	**519**	**483**	**481**
CSI Indicator 92 - Clinker Factor (%) - CSN (total)	**58.2%**	**55.6%**	**55.9%**
CSI Indicator 93 - Specific energy consumption per clinker produced (MJ/ton of clinker) - CSN (total)	3,269	3,287	3,315
CSI Indicator 21a - Total cementitious products (ton) - CSN (total)	3,938,657	4,283,640	5,254,602
CSI Indicator 21b - Total cement products (tons) - CSN (total)	3,924,179	4,261,905	5,432,151

SASB EM-IS-110a.1 | Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations

Gross scope 1 emissions by type of gas in the Steel Industry Segment (tCO_2e)

	2020	2021		2022	
	Steel Industry Brazil	Steel Industry Brazil	Steel Industry Abroad	Steel Industry Brazil	Steel Industry Abroad
CO_2	8,590,848.7	9,783,710.5	118,530.6	8,641,870.8	114,279.0
CH_4	8,588.6	27,146.6	0.0	6,105.2	43.5
N_2O	150.4	542.0	0.0	498.2	44.4
HFCs	1,682.0	2,21.2	0.0	1,727.7	0.0
PFCs	0.0	0.0	0.0	0.0	0.0
SF_6	0.0	1,066.9	0.0	258.5	0.0
NF_3	0.0	0.0	0.0	0.0	0.0
Total	**8,601,269.7**	**9,814,487.0**	**118,530.6**	**8,650,460.4**	**114,366.9**
% of emissions subject to some type of regulation	100%	100%	100%	100%	100%

SASB EM-IS-130a.1 | (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

Energy indicators in the Steel Industry Segment

	2020	2021	2022	
	Steel Industry Brazil	Steel Industry Brazil and Abroad	Steel Industry Brazil	Steel Industry Abroad
Total energy consumption (GJ)	87,817,173	99,494,485	94,827,415	3,386,156
Consumption of renewable energy (GJ)	5,395,107	6,635,022	7,849,844	1,518,080
% of renewable energy	6.1%	6.7%	8.3%	44.8%
Consumption of electricity supplied by the grid (GJ)	3,597,210	5,935,556	815,059	135,220
% of electricity from the grid	4.1%	6.0%	0.9%	4.0%

SASB EM-IS-130a.2 | (1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable

Fuels indicators in the Steel Industry Segment

	2020	2021	2022	
	Steel Industry Brazil	Steel Industry Brazil and Abroad	Steel Industry Brazil	Steel Industry Abroad
Total energy consumption from fuels (GJ)	78,824,855	86,923,907	86,162,512	1,732,856
Energy generated by coal consumption (GJ)	63,895,051	71,460,107	72,105,170	212,161
% energy consumption from coal	81.1%	82.2%	83.7%	12.2%
Energy generated by the consumption of natural gas (GJ)	14,780,302	15,308,310	13,914,886	1,516,577
% energy consumption from natural gas	18.8%	17.6%	16.1%	87.5%
Energy generated by the consumption of renewable fuels (GJ)	0	0	0	0
% energy consumption from renewable fuels	0.0%	0.0%	0.0%	0.0%

SASB EM-MM-110a.1 | Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations

Gross scope 1 emissions by type of gas in the Mining Segment [tCO_2e]

	2020		2021		2022	
	CSN Mineração	Other mining	CSN Mineração	Other mining	CSN Mineração	Other mining
CO_2	146,500.4	10,907.5	173,327.0	8,985.5	198,658.7	17,516.2
CH_4	2,393.4	108.1	3,003.5	112.0	2,588.2	130.3
N_2O	2,374.3	163.9	2,512.9	121.8	2,610.6	203.7
HFCs	4,807.8	87.1	4,593.7	128.5	4,630.1	54.2
PFCs	0.0	0.0	0.0	0.0	0.0	0.0
SF_6	0.0	0.0	0.0	0.0	0.0	0.0
NF_3	0.0	0.0	0.0	0.0	0.0	0.0
Total	**156,114.8**	**11,266.5**	**183,437.1**	**9,347.8**	**208,487.6**	**17,904.4**
% of emissions subject to some type of regulation	100%	100%	100%	100%	100%	100%

SASB EM-MM-130a.1 | (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

Energy indicators in the Mining Segment

	2020		2021		2022	
	CSN Mineração	Other mining	CSN Mineração	Other mining	CSN Mineração	Other mining
Total energy consumption (GJ)	3,384,323	219,404	3,856,023	28,492	3,971,667	274,900
Consumption of renewable energy (GJ)	1,211,857	0	1,242,045	510	1,286,952	18,688
% of renewable energy	35.8%	0.0%	32.2%	1.8%	32.4%	6.8%
Consumption of electricity supplied by the grid (GJ)	0	60,323	0	27,982	0	33,533
% of electricity from the grid	0.0%	27.5%	0.0%	98.2%	0.0%	12.2%

SASB EM-CM-110a.1 | Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations

Gross scope 1 emissions by type of gas in the Cements Segment (tCO_2e)

	2020	2021	2022
CO_2	2,008,158.5	1,993,402.2	2,756,496.7
CH_4	638.5	719.2	2,131.8
N_2O	1,403.5	1,309.6	2,899.8
HFCs	0.0	0.0	0.0
PFCs	0.0	0.0	0.0
SF_6	0.0	0.0	0.0
NF_3	0.0	0.0	0.0
Total	**2,010,200.5**	**1,935,431.0**	**2,761,528.3**
% of emissions subject to some type of regulation	100%	100%	100%

SASB EM-MM-130a.1 | (1) Total energy consumed, (2) percentage grid electricity, (3) percentage alternative, (4) percentage renewable

Energy indicators in the Cements Segment

	2020	2021	2022
Total energy consumption (GJ)	8,679,350	8,368,378	11,786,241
Consumption of renewable energy (GJ)	606,423	522,099	801,641
% of renewable energy	7.0%	6.2%	6.8%
Consumption of energy from alternative sources (GJ)	0	0	0
% of energy from alternative sources	0.0%	0.0%	0.0%
Consumption of electricity supplied by the grid (GJ)	337,904	418,940	441,875
% of electricity from the grid	3.9%	5.0%	3.7%

GRI 303-2 | Management of water discharge-related impacts

Minimum standards established for the quality of effluent disposal

	Standards and norms
Steel Industry	NT-202 R.10 - criteria and standards for releasing liquid effluents
	DZ-205.R6 - organic load control guideline in liquid effluents of industrial origin
	DZ-215.R4 - guideline for control of biodegradable organic load in liquid effluents of sanitary origin
	CONAMA Resolution 430/11 - effluent release standards, complements and amends Resolution No. 357, of 17/2005
Mining	COPAM/CERH-MG Normative Deliberation No. 01 of May 5, 2008: classification of water bodies and environmental guidelines for their framework and conditions and standards for effluent discharge in the State of Minas Gerais
Cements	COPAM/CERH-MG Normative Deliberation No. 01 of May 5, 2008: classification of water bodies and environmental guidelines for their framework and conditions and standards for effluent discharge in the State of Minas Gerais

GRI 303-3 | Water withdrawal

Water withdrawal of CSN Group by source (megaliters)[1]

	2020	2021	2022
Total withdrawal			
Surface water	85,102.0	83,895.1	76,375.0
Underground water	8,740.8	11,739.0	9,836.9
Produced water	0.3	0.0	0.0
Rainwater	6,662.3	4,981.4	5,425.7
Third-party water	475.4	496.2	574.7
Total water withdrawn	**100,980.8**	**101,111.8**	**92,212.2**
Withdrawal in areas under water stress			
Surface water	0.0	0.0	0.0
Underground water	325.0	698.2	753.1
Rainwater	0.0	0.0	0.0
Third-party water	175.1	187.9	225.8
Total water withdrawn in areas under water stress	**500.1**	**886.1**	**978.9**

1. All volume withdrawn (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l. As of 2021, it considers operations abroad. Data for 2020 and 2021 were updated based on the value measured in 2022, in order to ensure the veracity and accuracy of historical data.

Water withdrawal of Steel Industry Brazil Segment by source (megaliters)[1]

	2020	2021	2022
Total withdrawal			
Surface water	83,405.0	81,214.0	73,704.9
Underground water	72.7	56.6	55.8
Produced water	0.3	0.0	0.0
Third-party water	316.8	324.5	366.4
Total water withdrawn	**83,794.8**	**81,595.1**	**74,127.1**
Withdrawal in areas under water stress			
Third-party water	16.5	16.2	18.8
Total water withdrawn in areas under water stress	**16.5**	**16.2**	**18.8**

1. All volume withdrawn (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

Water withdrawal of Steel Industry Abroad Segment by source (megaliters)[1]

	2021	2022
Total withdrawal		
Surface water	984.1	973.2
Underground water	322.7	291.7
Total water withdrawn	**1,306.8**	**1,264.9**
Withdrawal in areas under water stress		
Underground water	200.5	180.8
Total water withdrawn in areas under water stress	**200.5**	**180.8**

1. All volume withdrawn (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

GRI 303-3 | Water withdrawal

Water withdrawal of Mining Segment by source (megaliters)[1]

	CSN Mineração			Other mining[2]		
	2020	2021	2022	2020	2021	2022
Total withdrawal						
Surface water	1697.0	1697.0	1,697.0	0.0	0.0	0.0
Underground water	7,988.4	10,505.6	8,490.0	433.7	496.3	570.9
Rainwater	6,662.3	4,981.4	5,425.7	0.0	0.0	0.0
Third-party water	123.5	107.4	124.2	0.0	0.0	1.3
Total water withdrawn	**16,471.2**	**17,291.4**	**15,736.8**	**433.7**	**496.4**	**572.1**
Withdrawal in areas under water stress						
Third-party water	123.5	107.4	124.2	0.0	0.0	0.0
Total water withdrawn in areas under water stress	**123.5**	**107.4**	**124.2**	**0.0**	**0.0**	**0.0**

1. All volume withdrawn (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l. Data for 2020 and 2021 were updated based on the value measured in 2022, in order to ensure the veracity and accuracy of historical data.
2. Other mining includes Ersa Mineração (RO) and Minérios Nacional (MG).

Water withdrawal of Cements Segment by source (megaliters)[1]

	2020	2021	2022
Total withdrawal[2]			
Underground water	246.0	330.1	404.2

1. All volume withdrawn (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.
2. All withdrawal takes place in areas under water stress.

Water withdrawal of Logistics Segment by source (megaliters)[1]

	2020	2021	2022
Withdrawal in areas under water stress[2]			
Underground water	0.0	27.7	24.3
Third-party water	35.1	64.3	82.8
Total water withdraw	**35.1**	**92.0**	**107.1**

1. All volume withdrawn (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.
2. All withdrawal takes place in areas under water stress.

GRI 303-4 | Water discharge

Water discharge of CSN Group by source (megaliters)[1]

	2020	2021	2022
Total discharge			
Surface water	84,204.9	75,299.6	70,033.3
Underground water	0.0	145.9	147.3
Sea water	0.0	0.3	30.9
Third-party water	234.6	243.2	246.1
Total water discharged	**84,439.5**	**75,689.0**	**70,457.7**
Discharge in areas under water stress			
Surface water	27.9	28.3	126.1
Underground water	0.0	66.0	58.5
Sea water	0.0	0.3	30.9
Third-party water	17.5	38.4	33.9
Total water discharged in areas under water stress	**45.4**	**133.0**	**249.4**

1. All volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l. As of 2021, it considers operations abroad.

Water discharge of Steel Industry Brazil Segment by source (megaliters)[1]

	2020	2021	2022
Total discharge			
Surface water	75,683.8	67,904.1	62,968.6
Third-party water	216.0	204.8	212.2
Total water discharged	**75,899.8**	**68,108.9**	**63,180.8**
Discharge in areas under water stress			
Surface water	16.2	14.5	15.0

1, All volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l,

Water discharge of Steel Industry Abroad by source (megaliters)[1]

	2021	2022
Total discharge		
Surface water	368.2	377.3
Underground water	145.9	131.3
Total water discharged	**514.1**	**508.6**
Discharge in areas under water stress		
Underground water	66.0	58.5

1. All volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.

Water discharge of Mining Segment by source (megaliters)[1]

	CSN Mineração			Other mining[2]		
	2020	2021	2022	2020	2021	2022
Total discharge						
Surface water	8,496.0	7,008.0	6,503.9	11.7	11.7	11.7
Underground water	0.0	0.0	0.0	13.7	5.9	19.3
Total water discharged	**8,496.0**	**7,008.0**	**6,503.9**	**25.4**	**17.5**	**31.0**
Discharge in areas under water stress						
Surface water	na	2.1	99.4	0.0	0.0	0.0

1. All volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.
2. Other mining includes Ersa Mineração (RO) and Minérios Nacional (MG).

Water discharge of Cements Segment by source (megaliters)[1]

	2020	2021	2022[3]
Total discharge[2]			
Surface water	0.8	1.8	168.5

1. All volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.
2. No discharges occurs in areas under water stress.
3. In 2022, the increase was due to the entry of CSN Alhandra, as well as the increase in rainfall at the Arcos unit.

Water discharge of Logistics Segment by source (megaliters)[1]

	2020	2021	2022
Discharge in areas under water stress[2]			
Sea water[3]	0.0	0.3	30.9
Third-party water	17.5	38.4	33.9
Total water discharged in areas under water stress	**17.5**	**38.7**	**64.9**

1. All volume discharged (100%) has a concentration of total dissolved solids equal to or less than 1,000 mg/l.
2. All discharges takes place in areas with water stress.
3. In 2022, flow meters were implemented and the measurement became more accurate.

GRI 303-5 | Water consumption

Water consumption (megaliters)[1]

	2020		2021		2022	
	Total	In areas under water stress	Total	In areas under water stress	Total	In areas under water stress
Steel Industry (Brazil)	**7,895.0**	0.3	**13,486.2**	1.7	**10,946.2**	3.8
Steel Industry (Abroad)	**NA**	NA	**792.7**	134.5	**756.3**	122.3
CSN Mineração	**7,975.2**	123.5	**10,283.4**	105.3	**9,232.9**	24.8
Other mining[2]	**408.3**	313.3	**478.8**	458.4	**541.2**	536.3
Cements	**245.2**	0.0	**328.3**	0.0	**235.7**	0.0
Logistics	**17.6**	17.6	**53.3**	53.3	**42.2**	42.2
CSN Group	**16,541.3**	**454.7**	**25,422.7**	**753.1**	**21,754.6**	**729.4**

1. Data for 2020 and 2021 were updated based on the value measured in 2022, in order to ensure the veracity and accuracy of historical data.
2. Other mining includes: ERSA Mineração (RO) and Minérios Nacional (MG).

GRI 304-1 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

This indicator includes units in the segments: Steel, Cement, Mining and Logistics due to their greater potential impact on Biodiversity. Units that do not generate a significant environmental impact, such as distribution centers and mills, were not considered. Among the assessed units, 82% are close to or overlapping conservation units.
The reporting of this indicator uses the National System of Conservation Units – SNUC as the main source of information, in addition to state and municipal databases, when available.

Segment	Operation[1]	Conservation unit or area ofhigh value for biodiversity (5 km radius)
CSN Siderurgia	Presidente Vargas Steelworks	Yes
CSN Cimentos	Alhandra	No
	Arcos	Yes
CSN Mineração	Port operation - TECAR	Yes
	Casa de Pedra	Yes
	Engenho Mine	Yes
Other mining	Ersa Fundição	Yes
	Minérios Nacional	No
Logistics	Operation Ferrovia Transnordestina Logística (FTL)	Yes
	Transnordestina Logística S.A. (TLSA)	Yes
	Port operation – TECON	Yes

1. The sizes of the main operating units of the CSN Group are: 405.7 hectares of the UPV; and 4,703 hectares of Casa de Pedra and Pires Complex.

GRI 304-3 | Habitats protected or restored[1]

Segment	Type of preserved area	Area (ha)	Total area (ha)	State
CSN Siderurgia	Permanent Preservation Area (APP)	668.86	1,019.66	Rio de Janeiro
	Legal Reserve (LR)	296.95		
	Other areas with native vegetation	12.75		
	Recovery areas	41.1		
CSN Cimentos	Permanent Preservation Area (APP)	32.72	812.34	Minas Gerais and Piauí
	Legal Reserve (LR)	144.73		
	Other areas with native vegetation	590.88		
	Recovery areas	44.01		
CSN Mineração	Permanent Preservation Area (APP)	1061.7	9,465.43	Minas Gerais
	Legal Reserve (LR)	2610.16		
	Other areas with native vegetation	5237.3		
	Recovery areas	556.27		
Other mining[2]	Permanent Preservation Area (APP)	21.91	218.42	Minas Gerais and Rondônia
	Legal Reserve (LR)	48.43		
	Other areas with native vegetation	148.08		
Logistics	Recovery areas	586.68	586.68	Piauí. Pernambuco and Ceará
CSN Group	Permanent Preservation Area (APP)	1,946.37	69,967.14	Santa Catarina and Piauí
	Legal Reserve (LR)	23,662.07		
	Other areas with native vegetation	44,358.70		
Total area of habitats protected or restored		**82,070.00**		

1. The reported recovery areas are still in a state of development or are awaiting formal acceptance by the environmental agency.
2. It involves the operations of Minérios Nacional and ERSA.

GRI 304-4 | IUCN Red List species and national conservation list species with habitats in areas affected by operations

Number of species identified in flora and fauna monitoring by level of extinction risk

Segment	CNCFlora	IUCN
Critically endangered	5	5
Endangered	17	4
Vulnerable	36	22
Near threatened	13	33
Safe or of little concern	711	793

GRI 305-6 | Emissions of ozone-depleting substances (ODS)

In 2022, the total emission of substances that deplete the ozone layer was 0.37 tCFC-11eq.

GRI 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions
SASB EM-IS-120a.1 | Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
SASB EM-MM-120a.1 | Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)

Non-GHG atmospheric emissions of CSN Group (tons)[1]

	2020	2021	2022
NOx	5,797.1	5,924.1	5,570.4
SOx	5,394.3	2,805.9	3,094.6
Volatile Organic Compounds (VOCs)	40.4	76.8	155.5
Hazardous Air Pollutants (HAP)	14.4	1.4	10.1
Particulate Matter (PM)	3,496.9	3,404.5	4,079.6

1. In 2020, data refer to UPV, Volta Redonda and Arcos. As of 2021, all units were considered, including steel plants abroad.

Non-GHG atmospheric emissions of Steel Industry (Brazil) Segment (tons)

	2020	2021	2022
NOx	3,599.9	2,397.4	1,602.0
SOx	5,358.1	2,508.5	2,348.2
Volatile Organic Compounds (VOCs)	22.0	67.7	135.0
Particulate Matter (PM)	2,341.3	3,252.2	3,866.9

Non-GHG atmospheric emissions of Steel Industry (Abroad) Segment (tons)

	2021	2022
NOx	212.8	206.4
SOx	60.9	37.5
Volatile Organic Compounds (VOCs)	7.6	6.4
Particulate Matter (PM)	7.4	8.4

SASB EM-CM-120a.1 | Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) dioxins/furans, (5) volatile organic compounds (VOCs), (6) polycyclic aromatic hydrocarbons (PAHs), and (7) heavy metals

Non-GHG atmospheric emissions of Cements Segment (tons)

	2020	2021	2022
NOx	2,197.2	3,314.0	3762.0
SOx	36.2	236.5	708.96
Volatile Organic Compounds (VOCs)	18.5	1.6	14.0
Hazardous Air Pollutants (HAP)	14.4	1.4	10.1
Particulate Matter (PM)	1,155.6	144.9	204.3

Air Quality Monitoring (Inhalable Particles PM<10) of the Mining Segment (µg/m³)

	2020	2021	2022	Air Quality Index
CSN Mineração- Novo Plataforma	26.3	29.0	32.6	Good
CSN Mineração- Basílica	26.3	29.9	26.7	Good
CSN Mineração- Bairro Casa de Pedra	25.0	27.0	28.0	Good
CSN Mineração- Bairro Cristo Rei	27.0	29.0	28.0	Good
CSN Mineração- Bairro Esmeril	24.0	24.0	25.0	Good
TECAR - Vila Califórnia	28.1	23.7	25.5	Good
TECAR - Vila Aparecida	30.0	24.6	25.3	Good
TECAR - Brisamar	31.1	24.9	25.0	Good
TECAR - Sítio Terezinha	29.9	24.8	27.2	Good
Ersa Mineração	na	40.2	19.7	Good

1. Monitoring carried out by CSN Mineração in compliance with Conama Resolution No. 491/2018 demonstrates the air quality in the community surrounding the developments. The impact on the territory is also influenced by the dispersion of particulates from other projects and the municipality itself. Monitoring is carried out using Hi-vol devices, and the report is based on the annual averages of the PM10 parameter (particulate matter).

GRI 306-3 | Waste generated
GRI 306-4 | Waste diverted from disposal
GRI 306-5 | Waste directed to disposal

Waste generated by CSN Group per type (tons)[1]

	2020	2021	2022
Hazardous			
Sludge	3,808.6	15,631.2	6,377.2
Other	4,579.5	3,970.8	13,519.8
Powders and fines	3,013.0	17,049.9	15,282.5
Contaminated waste	3,498.3	2,375.8	4,432.6
Oily waste	5,006.8	6,114.1	7,950.4
Total CSN Group	**19,906.1**	**45,141.8**	**47,562.3**
Non-hazardous			
Slag	2,081,130.9	2,259,686.9	2,119,956.1
Sludge	145,986.7	132,122.2	175,818.1
Other	229,549.6	278,791.5	508,918.2
Iron oxide	4,844.0	7,960.3	7,269.5
Powders and fines	843,480.7	220,988.3	156,651.2
Recyclable	1,194.5	1,544.0	1,987.0
Oily waste	136.1	184.4	0.0
Equipment scrap	621.6	655.7	971.3
Metal scrap	460,269.5	501,795.3	549,156.8
Total CSN Group	**3,767,213.6**	**3,403,728.6**	**3,520,728.3**

1. As of 2021, considers operations in Brazil and abroad. All waste generated is stored until it reaches an ideal volume for disposal or treatment. As a result, the volumes of generation and disposal differ.

Waste diverted from final disposal by CSN Group per disposal method (tons)[1]

	2020	2021	2022
Hazardous			
Co-processing	2,502.6	3,947.0	3,580.9
External recycling	7,918.9	19,292.0	26,956.0
Internal recycling	5,332.9	18,739.3	20,557.8
Re-refine	939.1	1,094.7	1,369.5
Total CSN Group	**16,693.5**	**43,073.0**	**52,464.2**
Non-hazardous			
Co-processing	298.2	1,389.7	838.3
External recycling	975,435.4	1,583,934.5	1,212,985.8
Internal recycling	2,811,749.1	2,305,941.2	2,142,249.7
Recovery of degraded areas	0.0	29,685.7	24,191.5
Re-refine	0.0	0.1	0.0
Total CSN Group	**3,787,482.7**	**3,920,951.2**	**3,380,265.4**

1. As of 2021, considers operations in Brazil and abroad. All waste generated is destined for treatment and external disposal, with the exception of Internal Recycling. There is no recovery of internal energy in the waste treatment and final disposal processes.

Waste directed to final disposal by CSN Group per disposal method (tons)[1]

	2020	2021	2022
Hazardous			
Landfill Class I	2,936.3	1,861.4	3,273.7
Incineration	20.7	55.3	64.4
Wastewater treatment	228.4	349.4	1,419.2
Other	1.3	88.7	129.6
Total CSN Group	**3,186.70**	**2,354.8**	**4,887**
Non-hazardous			
Landfill Classes IIA and IIB	191,770.2	179,744.8	261,281.3
Incineration	469.1	568.1	554.6
Wastewater treatment	2,338.3	2,160.3	2,018.8
Other	524.6	6,618.5	3,719.0
Total CSN Group	**195,102.4**	**189,091.8**	**267,573.8**

1. As of 2021, considers operations in Brazil and abroad. All waste generated is destined for treatment and external disposal, with the exception of Internal Recycling. There is no recovery of internal energy in the waste treatment and final disposal processes.

GRI 306-3 | Waste generated
GRI 306-4 | Waste diverted from disposal
GRI 306-5 | Waste directed to disposal

Waste generated by Steel Industry (Brazil) Segment per type (tons)[1]

	2020	2021	2022
Hazardous			
Sludge	3,808.6	15,324.5	6,179.8
Other	4,349.4	1,944.1	10,091.9
Powders and fines	3,013.0	3,310.9	2,702.7
Contaminated waste	3,443.0	3,019.8	3,292.35
Oily waste	2,626.0	4,249.8	5,888.0
Equipment scrap	0.0	0.1	0.0
Total Steel Industry Brazil	**17,240.1**	**27,849.1**	**28,154.7**
Non-hazardous			
Blast furnace slag[1]	1,304,786.5	1,274,697.3	1,189,855.1
Steel slag	775,694.4	821,273.6	792,785.3
Sludge	145,986.7	126,862.8	172,422.4
Other	52,800.3	263,477.1	495,079.9
Iron oxide	4,844.0	7,960.3	7,269.5
Powders and fines	1,002,370.7	196,607.4	134,895.6
Recyclable	846.6	1,224.4	977.5
Oily waste	34.6	17.10.1	0.0
Equipment scrap	423.9	319.9	692.3
Metal scrap	453,908.0	479,795.3	521,059.1
Total Steel Industry Brazil	**3,741,695.9**	**3,172,235.1**	**3,315,036.7**

1. 100% of the blast furnace slag generated at the UPV is used as raw material at CSN Cimentos.

Waste diverted from final disposal by Steel Industry (Brazil) Segment per disposal method (tons)

	2020	2021	2022
Hazardous			
Co-processing	1,433.6	2,611.0	1,921.5
External recycling	7,833.2	5,552.9	11,145.5
Internal recycling	5,332.9	18,739.3	20,557.7
Re-refine	3.1	24.4	123.4
Total Steel Industry Brazil	**14,602.8**	**26,927.6**	**33,748.1**
Non-hazardous			
Co-processing	268.4	698.4	753.8
External recycling	967,912.0	1,395,304.8	1,063,617.0
Internal recycling	2,811,001.4	2,238,611.9	2,085,761.4
Recovery of degraded areas	0.0	29685.7	24,191.5
Re-refine	0.0	0.1	0.0
Total Steel Industry Brazil	**3,779,181.8**	**3,664,300.9**	**3,174,323.6**

Waste directed to final disposal by Steel Industry (Brazil) Segment per disposal method (tons)[1]

	2020	2021	2022
Hazardous			
Landfill Class I	2,587.70	1,462.4	2,844.7
Incineration	0.2	1.2	0.0
Wastewater treatment	0.0	7.0	1,274.4
Other	0.0	0.0	3.0
Total Steel Industry Brazil	**2,587.9**	**1,470.6**	**4,122.1**
Non-hazardous			
Landfill Classes IIA and IIB	178,663.0	151,521.3	226,735.4
Incineration	27.1	23.0	0.0
Wastewater treatment	48.0	97.8	182.3
Other	87.8	48.1	45.5
Total Steel Industry Brazil	**178,825.9**	**151,690.2**	**226,963.2**

1. As of 2021, considers operations in Brazil and abroad.

GRI 306-3 | Waste generated
GRI 306-4 | Waste diverted from disposal
GRI 306-5 | Waste directed to disposal

Waste generated by Steel Industry (Abroad) Segment per type (tons)

	2021	2022
Hazardous		
Sludge	306.7	197.4
Other	306.2	3.330.2
Powders and fines	13,739.0	12,579.7
Total Steel Industry Abroad	**14,351.9**	**16,107.3**
Non-hazardous		
Steel slag	163,016.1	137,315.70
Sludge	5,259.4	3,363.7
Other	160.6	213.5
Powders and fines	24,380.9	21,755.6
Metal scrap	18,950.6	19,753.1
Total Steel Industry Abroad	**211,767.5**	**182,401.6**

Waste directed to final disposal by Steel Industry (Abroad) Segment per disposal method (tons)

	2021	2022
Hazardous		
Landfill Class I	292.8	270.2
Other	88.0	126.6
Total Steel Industry Abroad	**380.8**	**396.8**
Non-hazardous		
Landfill Classes IIA and IIB	21,434.0	29,234.0
Incineration	434.8	434.8
Other	5,280.3	3,422.7
Total Steel Industry Abroad	**27,149.1**	**32,656.7**

Waste diverted from final disposal by Steel Industry (Abroad) Segment per disposal method (tons)

	2021	2022
Hazardous		
External recycling	13,688.2	15,786.3
Total Steel Industry Abroad	**13,688.2**	**15,786.3**
Non-hazardous		
External recycling	180,354.3	20,417.2
Internal recycling	60,375.5	60,375.5
Total Steel Industry Abroad	**240,729.8**	**95,579.0**

GRI 306-3 | Waste generated
GRI 306-4 | Waste diverted from disposal
GRI 306-5 | Waste directed to disposal

Waste generated by Mining Segment per type (tons)

	CSN Mineração			Other mining[1]		
	2020	2021	2022	2020	2021	2022
Hazardous						
Other	62.6	438.8	66.4	0.0	0.0	1.6
Contaminated waste	270.3	293.3	840.2	47.0	35.1	8.4
Oily waste	1,599.5	1,486.3	1,796.3	53.7	35.2	48.1
Total Mining Segment	**1,932.5**	**2,218.4**	**2,702.9**	**100.7**	**70.3**	**58.1**
Non-hazardous						
Slag	0.0	0.0	0.0	650.0	700.0	0.0
Other	13,825.8	9,396.5	7,939.9	233.1	143.1	196.4
Recyclable	113.2	93.6	575.5	0.0	0.0	208.5
Oily waste	50.3	0.0	0.0	0.0	0.0	0.0
Equipment scrap	194.3	332.0	265.7	0.0	0.0	0.0
Metal scrap	5,127.0	2,240.0	6,429.4	464.7	0.0	0.0
Total Mining Segment	**19,310.6**	**12,062.1**	**15,211.0**	**1,347.7**	**843.1**	**404.9**

1. Other mining include: ERSA Mineração (RO) and Minérios Nacional (MG).

Waste diverted from final disposal by Mining Segment per disposal method (tons)

	CSN Mineração			Other mining[1]		
	2020	2021	2022	2020	2021	2022
Hazardous						
Co-processing	952.9	1,099.6	1,495.5	100.7	70.3	52.7
E.ternal recycling	48.7	40.5	20.2	0.0	0.0	0.0
Re-refine	893.3	894	1,091.2	0.0	0.0	0.0
Total Mining Segment	**1,894.9**	**2.034.1**	**2,607.0**	**100.7**	**70.3**	**52.7**
Non-hazardous						
Co-processing	2.2	469.4	84.5	0.0	0.0	0.0
E.ternal recycling	5,950.1	6283.1	11,227.8	683.9	702.9	0.0
Total Mining Segment	**5,952.3**	**6,752.5**	**11,312.3**	**1,148.6**	**702.9**	**0.0**

1. Other mining include: ERSA Mineração (RO) and Minérios Nacional (MG).

GRI 306-3 | Waste generated
GRI 306-4 | Waste diversed from disposal
GRI 306-5 | Waste directed to disposal

Waste directed to final disposal by Mining Segment per disposal method (tons)

	CSN Mineração			Other mining[1]		
	2020	2021	2022	2020	2021	2022
Hazardous						
Incineration	0.2	0.1	0.0	0.0	0.0	0.0
Wastewater treatment	60.6	184	87.7	0.0	0.0	0.0
Other	0.1	0.2	0.0	0.0	0.0	0.0
Total Mining Segment	**60.9**	**184.8**	**87.7**	**0.0**	**0.0**	**0.0**
Non-hazardous						
Landfill Classes IIA and IIB	10,494.9	3,990.50	2,332.8	128.2	81.2	396
Incineration	16.6	0.0	0.0	0.0	0.0	0.0
Wastewater treatment	1,933.8	1,678.80	1,573.3	43.6	37.8	27.3
Other	0.0	24.3	44.9	0.0	0.0	0.0
Total Mining Segment	**12,445.3**	**5,693.6**	**3,951.0**	**171.8**	**119.0**	**423.3**

1. Other mining include: ERSA Mineração (RO) and Minérios Nacional (MG).

GRI 306-3 | Waste generated
GRI 306-4 | Waste diverted from disposal
GRI 306-5 | Waste directed to disposal

Waste generated by Cements Segment per type (tons)

	2020	2021	2022
Hazardous			
Other	42.8	3.8	0.1
Contaminated waste	156.0	94.4	176.5
Oily waste	56.2	40.5	23.9
Total Cements Segment	**255.1**	**138.7**	**200.5**
Non-hazardous			
Sludge	0.0	0.0	32.0
Other	1,182.2	2,156.5	1,224.2
Recyclable	171.8	157.8	147.1
Oily waste	0.0	40.4	0.0
Equipment scrap	0.3	3.8	10.7
Metal scrap	486.8	695.7	585.2
Total Cements Segment	**1,841.1**	**3,054.2**	**1,999.2**

Waste diverted from final disposal by Cements Segment per disposal method (tons)

	2020	2021	2022
Hazardous			
Co-processing	1.4	1.2	5.0
E.ternal recycling	23.5	4.3	0.0
Internal recycling	0.0	0.0	0.1
Re-refine	0.0	36.8	19.9
Total Cements Segment	**24.9**	**42.3**	**25.0**
Non-hazardous			
Co-processing	0.0	221.9	0.0
E.ternal recycling	403.6	680.1	848.2
Internal recycling	0.0	6,841.0	492.3
Total Cements Segment	**403.6**	**7,743.0**	**1,340.5**

Waste directed to final disposal by Cements Segment per disposal method (tons)

	2020	2021	2022
Hazardous			
Landfill Class I	229	90.0	158.4
Incineration	0.0	0.0	17.2
Other	1.2	0.0	0.0
Total Cements Segment	**230.2**	**90.0**	**175.6**
Non-hazardous			
Landfill Classes IIA and IIB	961.5	151.7	418.7
Wastewater treatment	39.1	4.7	126.3
Other	436.8	1,265.4	206.0
Total Cements Segment	**1,437.4**	**1,421.8**	**751.0**

GRI 306-3 | Waste generated
GRI 306-4 | Waste diverted from disposal
GRI 306-5 | Waste directed to disposal

Waste generated by Logistics Segment per type (tons)

	2020	2021	2022
Hazardous			
Other	13.5	0.4	29.5
Contaminated waste	188.7	210.8	115.1
Oily waste	175.6	302.2	194.1
Total Logistics Segment	**377.8**	**513.5**	**338.8**
Non-hazardous			
Other	2,618.2	3,457.7	4,264.3
Recyclable	62.8	68.3	78.5
Oily waste	51.2	126.9	0.0
Equipment scrap	3.1	0.0	2.6
Metal scrap	282.9	113.6	1,330.1
Total Logistics Segment	**3,018.2**	**3,766.4**	**5,675.4**

Waste directed to final disposal by Logistics Segment per disposal method (tons)

	2020	2021	2022
Hazardous			
Landfill Class I	119.6	16.2	0.5
Incineration	20.3	54.0	47.2
Wastewater treatment	167.8	158.4	57.2
Total Logistics Segment	**307.7**	**228.6**	**104.8**
Non-hazardous			
Landfill Classes IIA and IIB	1,522.6	2,566.1	2,164.5
Incineration	425.4	110.3	1.6
Wastewater treatment	273.8	341.1	109.7
Other	0.0	0.4	0.0
Total Logistics Segment	**2,221.8**	**3,018.0**	**2,275.8**

Waste diverted from final disposal by Logistics Segment per disposal method (tons)

	2020	2021	2022
Hazardous			
Co-processing	14.1	164.9	106.1
External recycling	13.5	6.1	4.0
Re-refine	42.6	139.4	134.9
Total Logistics Segment	**70.2**	**310.5**	**245.0**
Non-hazardous			
Co-processing	27.6	0.0	0.0
External recycling	485.8	609.3	2,762.6
Internal recycling	283.0	112.8	349.1
Total Logistics Segment	**769.4**	**722.1**	**3,111.7**

GRI 308-1 | New suppliers that were screened using environmental criteria

Assessment of environmental aspects when contracting suppliers

	2021			2022		
	Total new contracted suppliers	Number of suppliers assessed with environmental criteria	Percentage of suppliers assessed with environmental criteria	Total new contracted suppliers	Number of suppliers assessed with environmental criteria	Percentage of suppliers assessed with environmental criteria
Steel Industry[1]	2,168	304	14%	2,038	303	14.9%
Steel Industry [Abroad]	564	564	100%	643	643	100.0%
CSN Mineração	1,057	145	14%	1,171	161	13.7%
Other mining	1,228	158	13%	365	53	14.5%
CSN Cimentos	389	64	16%	923	120	13.0%
Logistics	1,228	90	7%	695	44	6.3%
Corporate	256	11	4%	209	8	3.8%
CSN Group[1]	4,465	1,053	24%	3,228	451	14.0%

1. Considers only suppliers from Brazil. For information on the Steel Industry (Abroad) segment, see page 103. The registration of new suppliers considers their scope of action to define the criteria by which they will be analyzed. Suppliers selected based on environmental criteria are those that work in activities that are directly related to issues of this nature and have gone through the CSN Group registration process.
In 2022, 100% of the new registered suppliers whose scope of action involves environmental aspects – that is, 1,181 suppliers – were selected based on these criteria. This represents approximately 30.5% of the total number of new suppliers registered at the Company in the reference period.

GRI 414-1 | New suppliers that were screened using social criteria

Assessment of social aspects when contracting suppliers

	2021			2022		
	Total new contracted suppliers	Number of suppliers assessed with social criteria	Percentage of suppliers assessed with social criteria	Total new contracted suppliers	Number of suppliers assessed with social criteria	Percentage of suppliers assessed with social criteria
Steel Industry[1]	2,168	2,168	100%	2,038	2,038	100%
Steel Industry [Abroad]	564	564	100%	643	643	100%
CSN Mineração	1,057	1,057	100%	1,171	1,171	100%
Other mining	1,228	1,228	100%	365	365	100%
CSN Cimentos	389	389	100%	923	923	100%
Logistics	1,228	1,228	100%	695	695	100%
Corporate	256	256	100%	209	209	100%
CSN Group[1]	4,465	4,465	100%	3,228	3,228	100%

1. Considers only suppliers from Brazil.

GRI 401-1 | New employee hires and employee turnover

Hirings and dismissals of CSN Group[1]

	2020		2021		2022	
	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals
By gender						
Men	1,516	3,043	4,131	3,487	3,293	3,787
Women	452	758	1,919	987	1,841	1,059
By age group						
Less than 30 years	1,285	1,715	3,674	2,018	568	165
Between 30 and 50 years	641	1,657	2,191	2,102	4,554	4,654
Over 50 years	42	429	185	355	12	27
By region						
North	71	33	76	81	196	110
Northeast	75	301	269	195	580	280
Midwest	0	43	na	na	na	na
Southeast	1,722	3,364	5,552	4,064	4,354	4,450
South	50	60	153	134	4	6
Total	**1,968**	**3,801**	**6,050**	**4,474**	**5,134**	**4,846**

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.

Hirings and turnover rates of CSN Group[1]

	2020		2021		2022	
	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]
By gender						
Men	7.4%	14.7%	19.8%	16.7%	16.0%	18.5%
Women	12.8%	21.6%	47.7%	23.8%	39.2%	22.9%
By age group						
Less than 30 years	18.4%	24.4%	50.5%	27.5%	42.7%	27.9%
Between 30 and 50 years	4.4%	11.3%	14.7%	14.1%	11.9%	16.6%
Over 50 years	1.7%	17.1%	6.9%	13.2%	5.7%	10.7%
Por região						
North	26.5%	12.7%	26.6%	28.5%	58.9%	32.6%
Northeast	6.2%	25.7%	24.0%	17.5%	27.5%	13.1%
Midwest	0.0%	102.8%	na	na	na	na
Southeast	8.1%	15.2%	24.4%	17.7%	19.2%	19.7%
South	7.4%	8.9%	22.6%	19.9%	11.6%	18.3%
Total	**8.2%**	**15.7%**	**24.3%**	**17.9%**	**20.4%**	**19.3%**

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.
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 summed.
3. The turnover rate is calculated as the number of terminated in the month over the effective headcount for the month. For annual data, monthly rates were summed.

GRI 401-1 | New employee hires and employee turnover

Hirings and dismissals of Steel Industry (Brazil) Segment[1]

	2020		2021		2022	
	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals
By gender						
Men	893	1,842	2,262	2,211	1,584	2,142
Women	226	501	1,035	539	990	638
By age group						
Less than 30 years	725	1,121	2,112	1,236	407	96
Between 30 and 50 years	370	941	1,091	1,272	2,160	2,667
Over 50 years	24	281	94	242	7	17
By region						
Northeast	11	46	11	13	85	100
Midwest	0	43	na	na	na	na
Southeast	1,058	2,194	3,133	2,603	2,485	2,674
South	50	60	153	134	4	6
Total	**1,119**	**2,343**	**3,297**	**2,750**	**2,574**	**2,780**

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

Hirings and turnover rates of Steel Industry (Brazil) Segment[1]

	2020		2021		2022	
	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]
By gender						
Men	7.0%	14.4%	18.7%	18.3%	13.6%	18.4%
Women	10.3%	22.8%	41.1%	21.4%	37.4%	24.7%
By age group						
Less than 30 years	na	na	na	na	41.5%	29.1%
Between 30 and 50 years	na	na	na	na	9.0%	16.4%
Over 50 years	na	na	na	na	4.1%	11.4%
By region						
Northeast	16.2%	67.6%	16.4%	19.4%	12.1%	14.2%
Midwest	0.0%	102.8%	na	na	na	na
Southeast	7.4%	15.4%	22.6%	18.8%	18.4%	19.8%
South	7.4%	8.8%	22.2%	19.5%	11.6%	18.3%
Total	**7.5%**	**15.6%**	**22.6%**	**18.8%**	**18.1%**	**19.6%**

1. 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 summed.
3. The turnover rate is calculated as the number of terminated in the month over the effective headcount for the month. For annual data, monthly rates were summed.

GRI 401-1 | New employee hires and employee turnover

Hirings and dismissals of Steel Industry (Abroad) Segment[1]

	Lusosider				SWT			
	2021		2022		2021		2022	
	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals
By gender								
Men	26	18	23	21	33	11	54	13
Women	2	4	4	2	1	1	5	3
By age group								
Less than 30 years	7	3	7	6	18	2	37	2
Between 30 and 50 years	21	19	18	14	15	8	20	14
Over 50 years	0	0	2	3	1	2	2	0
Total	**28**	**22**	**27**	**23**	**34**	**12**	**59**	**16**

1. Considers effective employees since 2021, the year in which data monitoring for Lusosider and SWT reporting began.

Hirings and turnover rates of Steel Industry (Abroad) Segment[1]

	Lusosider				SWT			
	2021		2022		2021		2022	
	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]
By gender								
Men	12.3%	8.5%	10.7%	9.8%	5.1%	1.7%	7.5%	1.8%
Women	7.7%	15.4%	15.4%	7.7%	1.2%	1.2%	5.9%	3.5%
By age group								
Less than 30 years	33.3%	14.3%	43.8%	37.5%	12.9%	1.4%	24.3%	1.3%
Between 30 and 50 years	12.5%	11.3%	10.5%	8.1%	4.6%	2.5%	5.7%	4.0%
Over 50 years	0.0%	0.0%	3.8%	5.7%	0.3%	0.6%	0.7%	0.0%
Total	**11.8%**	**9.3%**	**11.2%**	**9.5%**	**4.6%**	**1.6%**	**7.3%**	**2.0%**

1. Considers effective employees since 2021, the year in which data monitoring for Lusosider and SWT reporting began.
2. The hiring rate is calculated as the number of hirings in the year over the year-end headcount.
3. The turnover rate is calculated as the number of dismissals in the year over the headcount at the end of the year.

GRI 401-1 | New employee hires and employee turnover

Hirings and dismissals of Mining Segment[1]

	CSN Mineração						Other mining[2]					
	2020		2021		2022		2020		2021		2022	
	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals
By gender												
Men	480	799	1,404	874	986	1,196	91	71	93	109	178	129
Women	192	191	711	326	538	262	13	18	38	33	86	38
By age group												
Less than 30 years	456	454	1,205	561	126	35	53	81	80	65	17	18
Between 30 and 50 years	201	490	849	576	1,395	1,420	48	72	45	69	247	145
Over 50 years	15	46	61	63	3	3	3	22	6	8	0	4
By region												
North	na	na	na	na	na	na	71	33	76	81	196	110
Southeast	672	990	2,115	1,200	1,524	1,458	33	56	55	61	68	57
Total	**672**	**990**	**2,115**	**1,200**	**1,524**	**1,458**	**104**	**89**	**131**	**142**	**264**	**167**

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.
2. Other mining includes: ERSA Mineração (RO) and Minérios Nacional (MG).

Hirings and turnover rates of Mining Segment[1]

	CSN Mineração						Other mining[4]					
	2020		2021		2022		2020		2021		2022	
	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]
By gender												
Men	8.4%	14.0%	23.3%	14.4%	16.4%	19.9%	22.9%	21.9%	22.4%	26.4%	40.4%	29.3%
Women	18.9%	19.9%	56.6%	24.9%	36.1%	18.0%	22.1%	18.7%	57.1%	52.6%	97.3%	40.5%
By age group												
Less than 30 years	20.9%	22.0%	51.6%	23.8%	39.3%	25.6%	10.5%	22.9%	57.5%	48.6%	86.9%	47.7%
Between 30 and 50 years	5.1%	12.4%	19.9%	13.4%	12.2%	17.9%	2.1%	16.7%	17.2%	26.4%	41.4%	26.2%
Over 50 years	2.4%	7.6%	8.9%	9.0%	6.8%	9.9%	0.0%	38.0%	7.4%	10.1%	5.0%	16.4%
By region												
North	na	na	na	na	na	na	26.5%	12.7%	26.6%	28.5%	58.9%	32.6%
Southeast	10.0%	14.8%	29.1%	16.3%	20.3%	19.5%	18.2%	31.4%	28.0%	31.5%	34.3%	29.0%
Total	**10.0%**	**14.8%**	**29.1%**	**16.3%**	**20.3%**	**19.5%**	**23.1%**	**21.5%**	**27.2%**	**29.7%**	**49.8%**	**31.2%**

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.
2. The hiring rate is calculated as the number of hirings in the month over the effective headcount for the month. For annual data, monthly rates were summed.
3. The turnover rate is calculated as the number of dismissals in the month over the effective headcount for the month. For annual data, monthly rates were summed.
4. Other mining includes: ERSA Fundição (RO) and Minérios Nacional – MIPE (MG).

GRI 401-1 | New employee hires and employee turnover

Hirings and dismissals of Cements Segment[1]

	2021		2022	
	Hirings	Dismissals	Hirings	Dismissals
By gender				
Men	107	107	160	155
Women	39	24	98	56
By age group				
Less than 30 years	72	50	8	6
Between 30 and 50 years	65	71	248	202
Over 50 years	9	10	2	3
By region				
Northeast	na	na	35	28
Southeast	146	131	223	183
Total	**146**	**131**	**258**	**211**

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

Hirings and dismissals of Logistics Segment[1]

	2020		2021		2022	
	Hirings	Dismissals	Hirings	Dismissals	Hirings	Dismissals
By gender						
Men	52	331	265	186	385	165
Women	21	48	96	65	129	65
By age group						
Less than 30 years	51	107	205	106	10	10
Between 30 and 50 years	22	177	141	113	504	220
Over 50 years	0	95	15	32	0	0
By region						
Northeast	64	255	258	182	460	152
Southeast	9	124	103	69	54	78
Total	**73**	**379**	**361**	**251**	**514**	**230**

1. Considers effective employees in the CLT, Apprentice Program and Capacitar Program categories.

Hirings and turnover rates of Cements Segment[1]

	2021		2022	
	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]
By gender				
Men	14.7%	14.7%	18.7%	18.5%
Women	22.2%	13.7%	42.2%	23.8%
By age group				
Less than 30 years	30.0%	21.0%	46.2%	26.4%
Between 30 and 50 years	11.3%	12.3%	16.1%	18.7%
Over 50 years	10.5%	11.2%	10.3%	9.4%
By region				
Northeast	na	na	15.3%	8.8%
Southeast	16.2%	14.5%	24.0%	19.8%
Total	**16.2%**	**14.5%**	**23.6%**	**19.6%**

1. 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 summed.
3. The turnover rate is calculated as the number of terminated in the month over the effective headcount for the month. For annual data, monthly rates were summed.

Hirings and turnover rates of Logistics Segment[1]

	2020		2021		2022	
	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]	Hiring rate[2]	Turnover rate[3]
By gender						
Men	3.3%	22.1%	18.4%	13.0%	24.3%	10.5%
Women	10.3%	23.9%	57.5%	30.3%	51.2%	25.3%
By age group						
Less than 30 years	11.0%	24.1%	48.2%	25.2%	51.4%	23.2%
Between 30 and 50 years	2.2%	17.7%	14.2%	11.5%	22.2%	9.2%
Over 50 years	0.0%	36.6%	6.1%	13.3%	9.9%	7.6%
By region						
Northeast	5.7%	23.4%	24.5%	17.5%	36.6%	12.0%
Southeast	1.4%	20.3%	17.1%	11.4%	9.5%	13.8%
Total	**4.1%**	**22.2%**	**21.8%**	**15.2%**	**28.0%**	**12.5%**

1. 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 summed.
3. The turnover rate is calculated as the number of terminated in the month over the effective headcount for the month. For annual data, monthly rates were summed.

GRI 403-9 | Work-related injuries

Health and safety indicators of CSN Group[1]

	2020			2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	42,190,781	28,191,955	**70,382,736**	43,592,372	31,431,803	**75,024,175**	46,614,362	34,816,909	**81,431,271**
Number of reportable accidents	137	36	**173**	113	67	**180**	89	57	**146**
Number of accidents with serious consequences (except deaths)	8	0	**8**	4	8	**12**	11	6	**17**
Number of deaths resulting from accidents at work	0	1	**1**	0	2	**2**	3	1	**4**
Total number of days lost and debited	4,741	6,650	**11,391**	2,541	14,633	**17,174**	24,827	8,837	**33,664**
Frequency rate of reportable accidents at work[2]	0.65	0.26	**0.49**	0.52	0.43	**0.48**	0.38	0.33	**0.36**
Frequency rate of accidents with serious consequences (except deaths)[2]	0.04	0.00	**0.02**	0.02	0.05	**0.03**	0.05	0.03	**0.04**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.01	**0.00**	0.00	0.01	**0.01**	0.01	0.01	**0.01**
Accident severity rate[2]	22	47	**32**	12	93	**46**	107	51	**83**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories and third parties. Does not cover SWT and Lusosider due to differences in data consolidation methodology. Types of accidents at work can include death, amputation of limbs, laceration, fracture, burns, among others. The greatest risks of high-consequence injuries are related to the critical activities mapped and addressed in the OHS Management Manual. The movement of vehicles and mobile equipment, power outages, electricity service, cargo handling, work at heights, hot work, contact with moving parts, hazardous chemicals, confined space, flammable gases and liquids are critical activities. The identification of health and safety risks is carried out using internationally recognized qualitative and/or quantitative methodologies (NBR ISO 31000:2018) and appropriate to each situation.
2. Rates calculated with the factor of 200,000 man-hours worked.

GRI 403-9 | Work-related injuries

Health and safety indicators of Steel Industry (Brazil) Segment[1]

	2020			2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	23,512,167	13,194,521	**36,706,688**	22,667,592	14,984,843	**37,652,435**	23,128,607	17,310,062	**40,438,669**
Number of reportable accidents	60	17	**77**	63	33	**96**	47	33	**80**
Number of accidents with serious consequences (except deaths)	6	0	**6**	3	7	**10**	9	4	**13**
Number of deaths resulting from accidents at work	0	0	**0**	0	2	**2**	0	0	**0**
Total number of days lost and debited	2,606	202	**2,808**	1,258	13,691	**14,949**	4,792	1,780	**6,572**
Frequency rate of reportable accidents at work[2]	0.51	0.26	**0.42**	0.56	0.44	**0.51**	0.41	0.38	**0.40**
Frequency rate of accidents with serious consequences (except deaths)[2]	0.05	0.00	**0.03**	0.03	0.09	**0.05**	0.08	0.05	**0.06**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.00	**0.00**	0.00	0.03	**0.01**	0.00	0.00	**0.00**
Accident severity rate[2]	22	3	**15**	11	183	**79**	41	21	**33**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories and third parties.
2. Rates calculated with the factor of 200,000 man-hours worked.

Health and safety indicators of Steel Industry (Abroad) Segment[1]

	2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	1,574,713	283,013	**1,857,726**	1,576,321	216,880	**1,793,201**
Number of reportable accidents	82	13	**95**	113	5	**118**
Number of accidents with serious consequences (except deaths)	NA	NA	**NA**	2	0	**2**
Number of deaths resulting from accidents at work	0	0	**0**	0	0	**0**
Total number of days lost and debited	292	205	**497**	1,139	102	**1,241**
Frequency rate of reportable accidents at work[2]	10.41	9.19	**10.23**	14.34	4.61	**13.16**
Frequency rate of accidents with serious consequences (except deaths)[2]	NA	NA	**NA**	0.25	0.00	**0.22**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Accident severity rate[2]	37	145	**54**	145	94	**138**

1. Considers effective employees and third parties.
2. Rates calculated with the factor of 200,000 man-hours worked.

GRI 403-9 | Work-related injuries

Health and safety indicators of Mining Segment (CSN Mineração)[1]

	2020			2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	10,988,422	7,057,793	**18,046,215**	11,880,492	8,528,265	**20,408,757**	12,435,839	9,121,021	**21,556,860**
Number of reportable accidents	14	7	**21**	18	22	**40**	18	10	**28**
Number of accidents with serious consequences (except deaths)	2	0	**2**	1	0	**1**	1	0	**1**
Number of deaths resulting from accidents at work	0	0	**0**	0	0	**0**	0	0	**0**
Total number of days lost and debited	851	364	**1,215**	746	449	**1,195**	845	543	**1,388**
Frequency rate of reportable accidents at work[2]	0.25	0.20	**0.23**	0.30	0.52	**0.39**	0.29	0.22	**0.26**
Frequency rate of accidents with serious consequences (except deaths)[2]	0.04	0.00	**0.02**	0.02	0.00	**0.01**	0.02	0.00	**0.01**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Accident severity rate[2]	15	10	**13**	13	11	**12**	14	12	**13**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories and third parties.
2. Rates calculated with the factor of 200,000 man-hours worked.

Health and safety indicators of Mining Segment (Other mining)[1]

	2020			2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	937,974	646,802	**1,584,776**	981,668	409,659	**1,391,327**	1,216,174	635,954	**1,852,128**
Number of reportable accidents	7	3	**10**	3	0	**3**	1	0	**1**
Number of accidents with serious consequences (except deaths)	0	0	**0**	0	0	**0**	0	0	**0**
Number of deaths resulting from accidents at work	0	1	**1**	0	0	**0**	0	0	**0**
Total number of days lost and debited	93	6,015	**6,108**	73	0	**73**	15	0	**15**
Frequency rate of reportable accidents at work[2]	1.49	0.93	**1.26**	0.61	0.00	**0.43**	0.16	0.00	**0.11**
Frequency rate of accidents with serious consequences (except deaths)[2]	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.31	**0.13**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Accident severity rate[2]	20	1,860	**771**	15	0	**10**	2	0	**2**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories and third parties.
2. Rates calculated with the factor of 200,000 man-hours worked.

GRI 403-9 | Work-related injuries

Health and safety indicators of Cements Segment[1]

	2020			2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	1,636,422	1,801,259	**3,437,681**	2,148,172	2,090,272	**4,238,444**	3,244,222	1,770,995	**5,015,216**
Number of reportable accidents	3	0	**3**	3	5	**8**	3	3	**6**
Number of accidents with serious consequences (except deaths)	0	0	**0**	0	0	**0**	0	0	**0**
Number of deaths resulting from accidents at work	0	0	**0**	0	0	**0**	0	0	**0**
Total number of days lost and debited	15	0	**15**	0	136	**136**	72	236	**308**
Frequency rate of reportable accidents at work[2]	0.37	0.00	**0.17**	0.28	0.48	**0.38**	0.18	0.34	**0.24**
Frequency rate of accidents with serious consequences (except deaths)[2]	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.00	0.00	**0.00**
Accident severity rate[2]	2	0	**1**	0	13	**6**	4	27	**12**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories and third parties.
2. Rates calculated with the factor of 200,000 man-hours worked.

Health and safety indicators of Logistics Segment[1]

	2020			2021			2022		
	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated	Employees	Third parties	Consolidated
Total man-hours worked	3,428,771	4,956,599	**8,385,369**	3,582,261	4,811,871	**8,394,132**	4,076,597	5,375,888	**9,452,485**
Number of reportable accidents	25	2	**27**	11	7	**18**	16	10	**26**
Number of accidents with serious consequences (except deaths)	0	0	**0**	0	1	**1**	1	1	**2**
Number of deaths resulting from accidents at work	0	0	**0**	0	0	**0**	3	1	**4**
Total number of days lost and debited	585	0	**585**	165	357	**522**	18,653	6,098	**24,751**
Frequency rate of reportable accidents at work[2]	1.46	0.08	**0.64**	0.61	0.29	**0.43**	0.78	0.37	**0.55**
Frequency rate of accidents with serious consequences (except deaths)[2]	0.00	0.00	**0.00**	0.00	0.04	**0.02**	0.05	0.04	**0.04**
Frequency rate of deaths resulting from accidents at work[2]	0.00	0.00	**0.00**	0.00	0.00	**0.00**	0.15	0.04	**0.08**
Accident severity rate[2]	34	0	**14**	9	15	**12**	915	227	**524**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories and third parties.
2. Rates calculated with the factor of 200,000 man-hours worked.

GRI 403-10 | Work-related ill health

Hazards to workers' health are identified and mitigated through health and safety audits and risk management routines (learn more about these practices on page 98). Among the risks listed are: noise, temperature, dust, oil and grease, vibration, exposure to chemical agents and ergonomic risks. There was no record of any case of occupational disease in the CSN Group in 2022. In the previous period, 28 cases of osteomolecular disorders had been registered in employees, 21 at CSN Siderurgia, 1 at Lusosider and 6 at CSN Mineração.

GRI 404-1 | Average hours of training per year per employee

Average hours of training per employee of CSN Group[1]

	2020	2021	2022
By gender			
Men	9.5	14.0	17.3
Women	5.5	11.5	14.8
By functional level			
Executive	0.0	2.0	0.6
Leadership	10.6	10.7	10.8
Specialist	4.1	7.5	7.2
Engineer	9.8	15.2	20.7
Higher level	3.5	8.5	7.6
Technician	10.5	13.1	19.4
Administrative	3.2	5.7	9.9
Operational	8.9	14.6	17.3
Trainee Program	na	na	77.7
Internship Program	na	na	33.4
Capacitar Program	57.5	19.2	24.8
Apprentice Program	2.6	7.1	8.6
Total	**8.7**	**13.6**	**16.8**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program, Internship Program and Trainee Program categories. Does not cover SWT and Lusosider due to differences in data consolidation methodology. Average is calculated as total training hours delivered in the year divided by headcount on 12/31.

Average hours of training per employee of CSN Corporate[1]

	2020	2021	2022
By gender			
Men	2.2	6.0	8.7
Women	1.8	4.0	9.4
By functional level			
Executive	0.0	1.0	0.4
Leadership	2.2	2.9	4.0
Specialist	4.0	4.5	2.7
Engineer	13.1	90.0	11.3
Higher level	1.1	3.8	5.2
Technician[2]	0.1	9.7	100.7
Administrative	0.9	3.5	10.3
Operational	15.2	10.4	13.9
Trainee Program	na	na	77.7
Internship Program	na	na	6.8
Apprentice Program	1.5	3.6	1.0
Total	**2.0**	**5.2**	**9.0**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program, Internship Program and Trainee Program categories. Average is calculated as total training hours delivered in the year divided by headcount on 12/31.
2. The significant variations are a consequence of the small number of people in these categories (15 engineers and 2 technicians).

GRI 404-1 | Average hours of training per year per employee

Average hours of training per employee of Steel Industry (Brazil) Segment[1]

	2020	2021	2022
By gender			
Men	6.0	10.8	13.1
Women	4.5	9.6	15.2
By functional level			
Executive	0.0	0.2	1.3
Leadership	9.8	9.5	10.5
Specialist	1.5	2.8	14.4
Engineer	8.8	13.1	24.3
Higher level	1.7	5.4	10.4
Technician	6.7	9.5	17.0
Administrative	2.8	3.8	10.7
Operational	5.8	11.4	12.1
Internship Program	na	na	0.0
Capacitar Program	16.9	19.4	21.5
Apprentice Program	1.9	6.9	13.4
Total	**5.8**	**10.6**	**13.5**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program, Internship Program and Trainee Program categories. Average is calculated as total training hours delivered in the year divided by headcount on 12/31.

Average hours of training per employee of Steel Industry (Abroad) Segment[1]

	Lusosider		SWT	
	2021	2022	2021	2022
By genaer				
Men	18.9	21.3	39.2	37.0
Women	20.8	30.8	38.6	50.9
By functional level				
Executive	4.3	9.0	na	na
Leadership	24.7	12.1	na	na
Engineer	5.3	7.2	na	na
Higher level	40.7	99.7	na	na
Technician	2.9	20.0	na	na
Administrative	0.6	21.4	na	na
Operational	25.0	29.0	na	na
Total	**19.1**	**22.3**	**39.1**	**38.4**

1. Considers effective employees since 2021, the year in which data monitoring for Lusosider and SWT reporting began. Average is calculated as total training hours delivered in the year divided by headcount on 12/31. SWT does not have control by functional level.

GRI 404-1 | Average hours of training per year per employee

Average hours of training per employee of Mining Segment[1]

	CSN Mineração			Other mining		
	2020	2021	2022	2020	2021	2022
By gender						
Men	16.8	21.2	28.7	3.2	3.4	6.3
Women	6.5	14.4	17.5	0.7	5.3	8.5
By functional level						
Executive	0.0	10.5	1.2	0.0	0.0	0.0
Leadership	1.9	10.3	15.8	0.4	4.0	3.3
Specialist	2.6	9.3	9.5	0.0	0.0	0.0
Engineer	10.6	13.5	18.3	0.0	16.3	8.4
Higher level	4.4	8.2	11.1	0.2	1.7	4.2
Technician	14.2	17.1	22.3	6.2	3.8	13.1
Administrative	7.6	8.4	14.5	0.0	2.1	5.6
Operational	16.7	23.0	30.0	3.0	3.3	6.3
Internship Program	na	na	0.0	na	na	26.0
Capacitar Program	1,028.1	19.2	50.4	0.0	0.0	35.7
Apprentice Program	0.0	2.8	33.2	0.0	0.0	0.6
Total	**15.3**	**20.0**	**26.3**	**2.9**	**3.6**	**6.7**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program, Internship Program and Trainee Program categories. Average is calculated as total training hours delivered in the year divided by headcount on 12/31.

Average hours of training per employee of Cements Segment[1]

	2020	2021	2022
By gender			
Men	9.3	13.4	11.4
Women	3.1	7.2	10.8
By functional level			
Executive	0.0	0.0	0.5
Leadership	11.5	10.9	6.9
Specialist	21.9	16.3	5.9
Engineer	6.7	17.1	5.2
Higher level	2.1	4.7	3.5
Technician	8.2	12.6	11.4
Administrative	3.2	8.3	6.4
Operational	9.0	13.3	13.8
Internship Program	na	na	31.0
Apprentice Program	7.7	8.4	4.5
Total	**8.2**	**12.2**	**11.3**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program, Internship Program and Trainee Program categories. Average is calculated as total training hours delivered in the year divided by headcount on 12/31.

Average hours of training per employee of Logistics Segment[1]

	2020	2021	2022
By gender			
Men	9.1	17.5	13.9
Women	0.8	17.7	10.9
By functional level			
Executive	0.0	0.0	0.3
Leadership	8.8	1.7	10.6
Specialist	2.8	14.8	6.6
Engineer	12.8	28.7	13.3
Higher level	8.6	19.5	7.3
Technician	10.0	12.5	25.4
Administrative	4.4	15.2	6.7
Operational	9.5	18.3	14.6
Internship Program	NA	NA	0.0
Apprentice Program	8.9	13.0	13.1
Total	**9.1**	**17.5**	**13.5**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program, Internship Program and Trainee Program categories. Average is calculated as total training hours delivered in the year divided by headcount on 12/31.

GRI 404-3 | Percentage of employees receiving regular performance and career development reviews

Percentage of CSN Group employees submitted to performance review by Segment[1]

	Steel Industry (Brazil)		CSN Mineração		Other mining		Cements		Logistics[2]		CSN Group	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
By gender												
Men	88.1%	95.3%	86.6%	91.7%	75.1%	84.0%	83.3%	91.2%	56.6%	60.8%	85.0%	91.4%
Women	71.5%	92.1%	77.8%	81.8%	81.4%	93.6%	83.6%	93.4%	69.5%	95.1%	74.0%	88.7%
By functional level												
Executive	88.2%	100%	0.0%	100%	na	na	na	na	na	100%	78.9%	100%
Leadership	95.9%	99.5%	96.5%	99.0%	90.9%	100%	93.0%	100%	89.4%	100%	95.0%	99.5%
Specialist	88.0%	97.3%	95.2%	97.5%	na	na	100.0%	100.0%	90.9%	95.5%	90.0%	97.3%
Engineer	96.1%	99.4%	88.1%	96.7%	69.2%	100%	90.5%	95.2%	80.0%	94.7%	92.2%	98.3%
Higher level	92.3%	98.2%	89.6%	94.0%	92.3%	100%	88.5%	97.1%	91.0%	94.8%	91.4%	97.0%
Technician	95.1%	97.6%	90.3%	94.4%	80.0%	87.0%	94.1%	96.5%	81.3%	84.7%	92.0%	95.7%
Administrative	91.5%	97.9%	85.9%	91.0%	85.7%	88.2%	87.5%	96.5%	60.5%	85.1%	85.9%	95.0%
Operational	85.5%	93.6%	84.6%	89.5%	73.9%	83.4%	75.8%	86.3%	47.4%	53.3%	82.4%	89.1%
Capacitar Program	26.4%	4.3%	54.5%	23.4%	na	na	na	na	na	na	47.8%	20.7%
Total	**87.3%**	**94.8%**	**85.1%**	**89.9%**	**75.9%**	**85.2%**	**83.4%**	**91.6%**	**58.3%**	**64.3%**	**83.1%**	**90.9%**

1. Considers effective employees in the CLT and Capacitar Program categories. It does not cover SWT and Lusosider, as the companies do not have systematic corporate processes for assessing 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.
2. The Logistics Segment, especially for operational positions, has a lower percentage of professionals evaluated than in the other segments. This condition is mainly a reflection of the adherence difficulties for employees to carry out the self-assessment and has been the target of communication and support actions to overcome these challenges.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of CSN Group by functional level[1]

	2020			2021			2022		
	Total employees	Men	Women	Total employees	Men	Women	Total employees	Men	Women
Executive	17	88.2%	11.8%	19	89.5%	10.5%	20	90.0%	10.0%
Leadership	1,119	89.1%	10.9%	1,136	89.0%	11.0%	1,228	87.3%	12.7%
Specialist	254	60.2%	39.8%	240	62.5%	37.5%	252	63.1%	36.9%
Engineer	775	84.5%	15.5%	843	84.0%	16.0%	912	83.0%	17.0%
Higher level	1,177	48.8%	51.2%	1,149	49.1%	50.9%	1,288	46.8%	53.2%
Technician	3,267	82.5%	17.5%	3,431	81.8%	18.2%	3,079	87.7%	12.3%
Administrative	602	65.9%	34.1%	617	64.7%	35.3%	693	46.5%	53.5%
Operational	15,986	91.3%	8.7%	16,886	89.1%	10.9%	16,929	86.2%	13.8%
Capacitar Program	45	20.0%	80.0%	366	9.3%	90.7%	475	5.9%	94.1%
Apprentice Program	333	60.1%	39.9%	460	42.2%	57.8%	796	43.3%	56.7%
Trainee Program	2	na	na	0	na	na	48	54.2%	45.8%
Total	**23,577**	**85.7%**	**14.3%**	**25,147**	**82.8%**	**17.2%**	**25,720**	**80.2%**	**19.8%**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year. Does not cover SWT and Lusosider due to differences in data consolidation methodology.

Age group diversity of CSN Group by functional level[1]

	2020			2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Executive	0.0%	47.1%	52.9%	0.0%	42.1%	57.9%	0.0%	50.0%	50.0%
Leadership	3.4%	76.3%	20.3%	3.6%	77.1%	19.3%	4.4%	75.8%	19.8%
Specialist	3.5%	76.4%	20.1%	3.8%	76.3%	20.0%	4.8%	76.2%	19.0%
Engineer	11.7%	77.4%	10.9%	10.8%	79.0%	10.2%	11.7%	76.6%	11.6%
Higher level	24.6%	67.2%	8.2%	25.7%	66.0%	8.2%	27.6%	64.2%	8.2%
Technician	25.7%	65.4%	8.9%	24.4%	66.9%	8.8%	20.6%	69.1%	10.3%
Administrative	34.8%	52.6%	12.5%	34.2%	53.6%	12.2%	38.7%	52.5%	8.8%
Operational	29.5%	60.1%	10.4%	30.2%	58.7%	11.1%	30.2%	57.4%	12.4%
Capacitar Program	48.9%	51.1%	0.0%	73.0%	27.0%	0.0%	72.2%	27.6%	0.2%
Apprentice Program	100%	0.0%	0.0%	100%	0.0%	0.0%	99.9%	0.1%	0.0%
Trainee Program	na	na	na	na	na	na	95.8%	4.2%	0.0%
Total	**27.9%**	**61.6%**	**10.6%**	**29.1%**	**60.1%**	**10.8%**	**30.1%**	**58.3%**	**11.6%**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year. Does not cover SWT and Lusosider due to differences in data consolidation methodology.

GRI 405-1 | Diversity of governance bodies and employees

Ethnic-racial diversity of CSN Group by functional level[1]

	2021					
	Yellow	White	Indigenous	Black	Brown	Not informed
Executive	0.0%	89.5%	0.0%	5.3%	5.3%	0.0%
Leadership	0.9%	65.6%	0.4%	6.3%	25.1%	1.8%
Specialist	2.1%	77.5%	0.0%	1.3%	17.1%	2.1%
Engineer	0.9%	67.4%	0.0%	5.7%	22.8%	3.2%
Higher level	1.4%	67.6%	0.3%	5.3%	22.7%	2.7%
Technician	1.7%	53.4%	0.2%	11.0%	32.6%	1.0%
Administrative	1.8%	47.2%	0.3%	7.3%	37.6%	5.8%
Operational	1.3%	35.5%	0.4%	17.6%	41.7%	3.5%
Capacitar Program	0.5%	31.7%	0.3%	21.3%	44.5%	1.6%
Apprentice Program	2.2%	36.3%	0.0%	20.0%	39.1%	2.4%
Trainee Program	na	na	na	na	na	na
Total	**1.4%**	**42.5%**	**0.3%**	**14.9%**	**37.8%**	**3.0%**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year. Does not cover SWT and Lusosider due to differences in data consolidation methodology.

Ethnic-racial diversity of CSN Group by functional level[1]

	2022					
	Yellow	White	Indigenous	Black	Brown	Not informed
Executive	0.0%	90.0%	0.0%	5.0%	5.0%	0.0%
Leadership	0.7%	63.9%	0.3%	6.4%	27.2%	1.5%
Specialist	2.8%	74.6%	0.0%	2.0%	17.9%	2.8%
Engineer	1.3%	65.2%	0.0%	6.5%	24.2%	2.7%
Higher level	1.6%	64.5%	0.2%	4.7%	25.8%	3.2%
Technician	1.8%	50.6%	0.2%	11.1%	34.7%	1.5%
Administrative	1.6%	45.0%	0.7%	9.8%	36.7%	6.2%
Operational	1.3%	34.6%	0.4%	17.7%	43.0%	3.1%
Capacitar Program	1.9%	26.9%	0.0%	20.8%	46.1%	4.2%
Apprentice Program	1.3%	36.8%	0.3%	21.2%	40.2%	0.3%
Trainee Program	2.1%	81.3%	0.0%	6.3%	10.4%	0.0%
Total	**1.4%**	**41.2%**	**0.3%**	**15.1%**	**39.2%**	**2.8%**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year. Does not cover SWT and Lusosider due to differences in data consolidation methodology.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of Steel Industry (Brazil) Segment by functional level[1]

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Executive	87.5%	12.5%	88.2%	11.8%	88.2%	11.8%
Leadership	88.0%	12.0%	88.1%	11.9%	86.3%	13.7%
Specialist	58.7%	41.3%	57.5%	42.5%	57.7%	42.3%
Engineer	85.7%	14.3%	85.8%	14.2%	85.6%	14.4%
Higher level	49.2%	50.8%	49.1%	50.9%	47.8%	52.2%
Technician	84.5%	15.5%	83.2%	16.8%	89.0%	11.0%
Administrative	42.5%	57.5%	46.2%	53.8%	48.1%	51.9%
Operational	91.5%	8.5%	89.2%	10.8%	86.0%	14.0%
Capacitar Program	20.5%	79.5%	9.7%	90.3%	0.0%	100%
Apprentice Program	60.7%	39.3%	42.5%	57.5%	50.2%	49.8%
Trainee Program	na	na	na	na	54.2%	45.8%
Total	**85.7%**	**14.3%**	**83.4%**	**16.6%**	**80.2%**	**19.8%**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year.

Age group diversity of Steel Industry (Brazil) Segment by functional level[1]

	2020			2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Executive	0.0%	50.0%	50.0%	0.0%	41.2%	58.8%	0.0%	47.1%	52.9%
Leadership	3.5%	76.3%	20.2%	3.2%	78.9%	17.9%	4.0%	76.7%	19.3%
Specialist	3.3%	78.3%	18.5%	5.6%	75.6%	18.8%	6.0%	75.6%	18.5%
Engineer	11.0%	74.7%	14.3%	9.2%	76.2%	14.6%	11.2%	73.2%	15.6%
Higher level	27.0%	65.0%	7.9%	30.6%	61.6%	7.8%	34.4%	58.1%	7.5%
Technician	23.8%	66.2%	10.0%	22.1%	67.9%	10.0%	19.7%	67.4%	12.9%
Administrative	40.4%	51.0%	8.6%	40.8%	50.0%	9.2%	37.4%	51.1%	11.6%
Operational	29.1%	61.6%	9.4%	29.8%	60.1%	10.1%	29.4%	58.8%	11.8%
Capacitar Program	47.4%	52.3%	0.0%	74.3%	25.7%	0.0%	66.4%	33.2%	0.4%
Apprentice Program	100%	0.0%	0.0%	100%	0.0%	0.0%	99.8%	0.2%	0.0%
Trainee Program	na	na	na	na	na	na	95.8%	4.2%	0.0%
Total	**27.7%**	**62.3%**	**10.0%**	**29.2%**	**60.5%**	**10.3%**	**30.0%**	**58.3%**	**11.6%**

1. Considers effective employees hired in the CLT, Apprentice Program, Capacitar Program and Trainee Program categories on the base date of December 31 of each year.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of Steel Industry (Abroad) Segment by functional level[1]

	2021		2022	
	Men	Women	Men	Women
Executive	100%	0.0%	100%	0.0%
Leadership	92.8%	7.2%	94.0%	6.0%
Engineer	90.5%	9.5%	91.7%	8.3%
Higher level	62.1%	37.9%	64.0%	36.0%
Technician	83.3%	16.7%	100%	0.0%
Administrative	30.4%	69.6%	30.8%	69.2%
Operational	96.1%	3.9%	96.6%	3.4%
Apprentice Program	95.2%	4.8%	95.7%	4.3%
Total	**89.0%**	**11.0%**	**89.4%**	**10.6%**

1. Considers effective employees on the base date of 12/31 since 2021, the year in which data monitoring for reporting by Lusosider and SWT began.

Age group diversity of Steel Industry (Abroad) Segment by functional level[1]

	2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Executive	0.0%	33.3%	66.7%	0.0%	0.0%	100%
Leadership	0.0%	49.7%	50.3%	0.0%	51.9%	48.1%
Engineer	4.8%	81.0%	14.3%	0.0%	87.5%	12.5%
Higher level	3.6%	67.9%	28.6%	3.1%	64.6%	32.3%
Technician	22.2%	55.6%	22.2%	16.7%	50.0%	33.3%
Administrative	0.0%	65.0%	35.0%	15.4%	57.7%	26.9%
Operational	18.1%	45.2%	36.7%	18.8%	47.8%	33.4%
Apprentice Program	100%	0.0%	0.0%	100%	0.0%	0.0%
Total	**15.6%**	**48.6%**	**35.8%**	**16.1%**	**50.0%**	**33.9%**

1. Considers effective employees on the base date of 12/31 since 2021, the year in which data monitoring for reporting by Lusosider and SWT began.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of Mining Segment (CSN Mineração) by functional level[1]

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Executive	0.0%	0.0%	100%	0.0%	100%	0.0%
Leadership	90.4%	9.6%	89.6%	10.4%	88.6%	11.4%
Specialist	62.8%	37.2%	66.7%	33.3%	60.9%	39.1%
Engineer	83.8%	16.2%	82.8%	17.2%	78.9%	21.1%
Higher level	39.0%	61.0%	42.6%	57.4%	42.9%	57.1%
Technician	80.0%	20.0%	80.0%	20.0%	85.6%	14.4%
Administrative	53.0%	47.0%	56.6%	43.4%	53.1%	46.9%
Operational	90.8%	9.2%	89.0%	11.0%	83.8%	16.2%
Capacitar Program	0.0%	100%	9.1%	90.9%	10.7%	89.3%
Apprentice Program	50.0%	50.0%	46.7%	53.3%	38.8%	61.2%
Total	**85.7%**	**14.3%**	**82.2%**	**17.8%**	**78.9%**	**21.1%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

Age group diversity of Mining Segment (CSN Mineração) by functional level[1]

	2020			2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Executive	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%	100%	0.0%
Leadership	2.9%	80.0%	17.1%	2.1%	78.9%	19.0%	3.4%	77.5%	19.1%
Specialist	4.7%	74.4%	20.9%	0.0%	81.0%	19.0%	4.3%	76.1%	19.6%
Engineer	12.1%	82.2%	5.7%	13.2%	82.1%	4.6%	10.9%	82.4%	6.7%
Higher level	17.5%	75.0%	7.5%	16.3%	75.7%	7.9%	14.6%	77.6%	7.8%
Technician	28.1%	65.5%	6.4%	26.3%	67.2%	6.4%	22.3%	70.6%	7.1%
Administrative	39.0%	52.0%	9.0%	34.3%	57.6%	8.1%	34.7%	56.1%	9.2%
Operational	33.4%	56.0%	10.6%	33.3%	55.4%	11.3%	34.0%	53.6%	12.4%
Capacitar Program	100%	0.0%	0.0%	72.3%	27.7%	0.0%	77.4%	22.6%	0.0%
Apprentice Program	100%	0.0%	0.0%	100%	0.0%	0.0%	100%	0.0%	0.0%
Total	**29.8%**	**60.5%**	**9.7%**	**30.9%**	**59.3%**	**9.8%**	**32.0%**	**57.4%**	**10.6%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of Mining Segment (Other mining) by functional level[1]

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Executive	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Leadership	95.5%	4.5%	90.9%	9.1%	90.6%	9.4%
Specialist	0.0%	100%	0.0%	0.0%	0.0%	0.0%
Engineer	77.8%	22.2%	84.6%	15.4%	80.0%	20.0%
Higher level	52.9%	47.1%	38.5%	61.5%	26.1%	73.9%
Technician	83.8%	16.2%	83.3%	16.7%	94.7%	5.3%
Administrative	40.0%	60.0%	35.7%	64.3%	30.8%	69.2%
Operational	93.3%	6.7%	91.1%	8.9%	86.7%	13.3%
Capacitar Program	0.0%	0.0%	0.0%	0.0%	66.7%	33.3%
Apprentice Program	0.0%	0.0%	0.0%	0.0%	33.3%	66.7%
Total	**88.3%**	**11.7%**	**87.3%**	**12.7%**	**81.6%**	**18.4%**

1. Considers effective employees hired in the CLT. Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

Age group diversity of Mining Segment (Other mining) by functional level[1]

	2020			2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Executive	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Leadership	4.5%	68.2%	27.3%	18.2%	54.5%	17.3%	9.4%	71.9%	18.8%
Specialist	0.0%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Engineer	33.3%	55.6%	11.1%	38.5%	61.5%	0.0%	40.0%	60.0%	0.0%
Higher level	0.0%	100%	0.0%	0.0%	100%	0.0%	13.0%	82.6%	4.3%
Technician	21.6%	70.3%	8.1%	26.7%	63.3%	10.0%	13.2%	71.1%	15.8%
Administrative	30.0%	60.0%	10.0%	42.9%	50.0%	7.1%	53.8%	38.5%	7.7%
Operational	27.6%	55.2%	17.2%	28.0%	53.0%	19.1%	30.8%	54.2%	15.0%
Capacitar Program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%
Apprentice Program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%
Total	**26.6%**	**57.7%**	**15.7%**	**27.4%**	**55.2%**	**17.5%**	**30.1%**	**56.0%**	**13.8%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of Cements Segment by functional level[1]

	2021		2022	
	Men	Women	Men	Women
Leadership	85.9%	14.1%	83.7%	16.3%
Specialist	100%	0.0%	100%	0.0%
Engineer	90.5%	9.5%	87.0%	13.0%
Higher level	52.1%	47.9%	52.8%	47.2%
Technician	84.0%	16.0%	93.8%	6.2%
Administrative	25.0%	75.0%	34.8%	65.2%
Operational	93.4%	6.6%	87.8%	12.2%
Apprentice Program	0.0%	100.0%	38.1%	61.9%
Total	**79.9%**	**20.1%**	**78.8%**	**21.2%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

Age group diversity of Cements Segment by functional level[1]

	2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Leadership	4.2%	80.3%	15.5%	5.1%	70.4%	24.5%
Specialist	0.0%	70.0%	30.0%	0.0%	73.3%	26.7%
Engineer	14.3%	76.2%	9.5%	13.0%	73.9%	13.0%
Higher level	15.6%	71.9%	12.5%	16.5%	70.1%	13.4%
Technician	21.9%	70.1%	8.0%	13.5%	74.2%	12.4%
Administrative	32.5%	66.3%	1.3%	33.9%	63.4%	2.7%
Operational	31.7%	57.5%	10.7%	28.0%	59.1%	12.9%
Apprentice Program	100%	0.0%	0.0%	100%	0.0%	0.0%
Total	**25.6%**	**64.4%**	**10.0%**	**25.4%**	**62.0%**	**12.6%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

GRI 405-1 | Diversity of governance bodies and employees

Gender diversity of Logistics Segment by functional level[1]

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Executive	100%	0.0%	100%	0.0%	100%	0.0%
Leadership	88.0%	12.0%	90.1%	9.9%	90.8%	9.2%
Specialist	60.0%	40.0%	68.2%	31.8%	82.6%	17.4%
Engineer	89.3%	10.7%	84.0%	16.0%	84.8%	15.2%
Higher level	50.0%	50.0%	48.5%	51.5%	45.3%	54.7%
Technician	80.8%	19.2%	81.3%	18.7%	85.3%	14.7%
Administrative	58.1%	41.9%	59.3%	40.7%	51.8%	48.2%
Operational	98.3%	1.7%	96.9%	3.1%	95.8%	4.2%
Apprentice Program	59.4%	40.6%	29.3%	70.7%	10.9%	89.1%
Total	**87.9%**	**12.1%**	**86.9%**	**13.1%**	**85.9%**	**14.1%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

Age group diversity of Logistics Segment by functional level[1]

	2020			2021			2022		
	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years	Less than 30 years	Between 30 and 50 years	Over 50 years
Executive	0.0%	0.0%	100%	0.0%	0.0%	100%	0.0%	0.0%	100%
Leadership	5.1%	70.9%	23.9%	6.3%	71.1%	22.5%	7.0%	72.5%	20.4%
Specialist	0.0%	70.0%	30.0%	0.0%	77.3%	22.7%	0.0%	82.6%	17.4%
Engineer	28.6%	67.9%	3.6%	12.0%	88.0%	0.0%	15.2%	78.8%	6.1%
Higher level	26.7%	65.3%	8.0%	23.9%	69.4%	6.7%	22.0%	70.0%	8.0%
Technician	27.6%	60.3%	12.2%	24.7%	63.9%	11.4%	25.5%	60.8%	13.7%
Administrative	50.0%	40.5%	9.5%	51.9%	42.0%	6.2%	50.6%	44.7%	4.7%
Operational	22.9%	61.0%	16.1%	24.4%	59.6%	16.0%	23.7%	61.3%	15.0%
Apprentice Program	100%	0.0%	0.0%	100%	0.0%	0.0%	100%	0.0%	0.0%
Total	**5.1%**	**70.3%**	**24.6%**	**6.3%**	**70.6%**	**23.1%**	**25.7%**	**60.5%**	**13.8%**

1. Considers effective employees hired in the CLT, Apprentice Program and Capacitar Program categories on the base date of December 31 of each year.

GRI 405-2 | Ratio of basic salary and remuneration of women to men

Ratio of average wage of women in relation to that of men at CSN Group by functional level[1]

	2020	2021	2022
Executive	67.5%	78.2%	79.9%
Leadership	122.9%	127.4%	123.1%
Specialist	96.3%	94.8%	92.0%
Engineer	93.4%	91.0%	89.2%
Higher level	90.9%	93.1%	91.7%
Technician	80.9%	82.3%	88.4%
Administrative	93.8%	92.2%	91.5%
Operational	87.4%	86.4%	88.2%
Capacitar Program	99.8%	100%	100.6%
Apprentice Program	100.8%	103.2%	96.1%
Trainee Program	na	na	100%
Consolidated	**116.2%**	**101.2%**	**95.2%**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee 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 it is clear that there are salary differences. The remuneration of each function in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for defining remuneration.

Ratio of average wage of women in relation to that of men at Steel Industry (Brazil) Segment by functional level[1]

	CSN Siderurgia			Cia Metalurgia Prada		
	2020	2021	2022	2020	2021	2022
Executive	66.6%	80.2%	80.4%	na	na	na
Leadership	124.5%	139.7%	135.7%	114.7%	95.3%	127.5%
Specialist	94.4%	93.4%	88.6%	112.4%	117.1%	103.0%
Engineer	95.5%	95.9%	95.9%	na	123.1%	0.0%
Higher level	95.0%	98.7%	94.2%	79.4%	86.9%	100.8%
Technician	79.7%	84.5%	89.9%	66.8%	63.0%	71.9%
Administrative	93.2%	94.4%	92.1%	100.8%	85.4%	86.3%
Operational	84.8%	84.7%	86.9%	74.6%	74.5%	76.5%
Capacitar Program	99.8%	100%	100%	na	na	na
Apprentice Program	101.8%	97.5%	99.9%	97.0%	109.4%	80.9%
Trainee Program	na	na	100%	na	na	na
Consolidated	**120.1%**	**109.2%**	**103.7%**	**75.4%**	**68.7%**	**74.3%**

1. Considers effective employees in the CLT, Apprentice Program, Capacitar Program and Trainee 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 it is clear that there are salary differences. The remuneration of each function in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for defining remuneration.

Ratio of average wage of women in relation to that of men at Steel Industry (Abroad) Segment by functional level[1]

	Lusosider[2]		SWT[3]	
	2021	2022	2021	2022
Executive	82.1%	150.0%	100%	100%
Leadership	na	na	100%	100%
Engineer	105.7%	94.0%	100%	100%
Higher level	na	na	100%	100%
Technician	99.1%	na	100%	100%
Administrative	121.4%	111%	100%	100%
Operational	na	na	100%	100%
Consolidated	**58.1%**	**na**	**100%**	**100%**

1. Considers effective employees since 2021, the year in which data monitoring for Lusosider and SWT reporting began.
2. Data grouped into the Executive and Leadership categories in view of the reduced staff.
3. Data collected on hourly wages.

GRI 405-2 | Ratio of basic salary and remuneration of women to men

Ratio of average wage of women in relation to that of men at Mining Segment by functional level[1]

	CSN Mineração			Other mining		
	2020	2021	2022	2020	2021	2022
Leadership	117.7%	115.4%	116.5%	115.6%	191.2%	94.9%
Specialist	101.2%	91.7%	87.4%	na	na	na
Engineer	89.7%	84.5%	80.1%	116.8%	97.6%	94.3%
Higher level	82.6%	81.3%	86.0%	74.4%	71.7%	69.1%
Technician	83.2%	83.7%	90.5%	94.3%	98.1%	111.1%
Administrative	94.7%	89.9%	87.0%	67.9%	87.2%	78.7%
Operational	91.6%	89.3%	89.3%	87.6%	86.6%	88.9%
Capacitar Program	na	100.0%	102.3%	na	na	100%
Apprentice Program	100%	100%	100%	na	na	150.0%
Consolidated	**110.4%**	**91.3%**	**84.5%**	**104.0%**	**117.2%**	**98.5%**

1. 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 it is clear that there are salary differences. The remuneration of each function in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for defining remuneration.

Ratio of average wage of women in relation to that of men at Logistics Segment by functional level[1]

	2020	2021	2022
Leadership	111.8%	120.0%	103.1%
Specialist	92.8%	89.0%	105.0%
Engineer	72.4%	84.0%	99.5%
Higher level	85.7%	88.1%	87.5%
Technician	87.2%	87.4%	84.6%
Administrative	89.5%	92.9%	91.0%
Operational	100.4%	94.3%	108.4%
Apprentice Program	115.2%	136.0%	144.6%
Consolidated	**144.4%**	**126.1%**	**111.7%**

1. Considers effective employees in the CLT and Apprentice 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 it is clear that there are salary differences. The remuneration of each function in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for defining remuneration.

Ratio of average wage of women in relation to that of men at Cements Segment by functional level[1]

	2021	2022
Leadership	64.8%	69.0%
Engineer	96.4%	99.3%
Higher level	92.6%	94.6%
Technician	64.3%	68.3%
Administrative	93.3%	104.2%
Operational	84.1%	84.2%
Apprentice Program	na	73.2%
Consolidated	**88.7%**	**84.2%**

1. Considers effective employees in the CLT and Apprentice 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 it is clear that there are salary differences. The remuneration of each function in the company is defined based on market research, following the Hay Group methodology, and does not consider gender as a criterion for defining remuneration.

GRI 411-1 | Incidents of violations involving rights of indigenous peoples

There is no record of violations of the rights of indigenous peoples in CSN Group operations. The Company fully complies with Brazilian legislation and the determinations of the Indian Foundation (Funai) and the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama). None of the units directly or indirectly affects indigenous communities.

GRI 412-1 | Operations that have been subject to human rights reviews or impact assessments

SASB EM-MM-210a.3 | Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict

Currently, risk assessment related to human rights aspects is incorporated into the CSN Group's Compliance Program, covering 100% of operations. Guided by the United Nations Guiding Principles on Business and Human Rights, the Company has been improving its mechanisms for this type of assessment. In 2022, a pilot project on the methodology of Due Diligence on Human Rights (DDDH) was started at CSN Mineração (learn more on page 106). As of 2023, the methodology will be implemented.

SASB EM-IS-000.A | Raw steel production, percentage from: (1) basic oxygen furnace processes, (2) electric arc furnace processes
SASB EM-IS-000.B | Total iron ore production
SASB EM-IS-000.C | Total coking coal production

Production indicators of the Steel Industry Segment[1]

	2020	2021		2022	
	Steel Industry Brazil	Steel Industry Brazil	Steel Industry Abroad	Steel Industry Brazil	Steel Industry Abroad
Total steel production (tons)	3,816,090	4,388,668	811,277.0	3,906,104	765,032.1
Production of steel in oxygen furnace (tons)	3,816,090	4,388,668	na	3,906,104	na
% steel production in oxygen furnace	100%	100%	na	100%	na
Production of steel in electric arc furnace (tons)	na	na	811,277.0	na	765,032.1
% steel production in electric arc furnace	na	na	100%	na	100%
Total consumption of iron ore (tons)[2]	4,084,792.5	4,372,677.4	na	3,600,863.5	na
Total consumption of coking coal (tons)[2]	988,268.0	860,642.6	na	768,949.1	na

1. According to WSA (World Steel Association) methodology.
2. There is no production of iron ore and coking coal in CSN's steel operations.

SASB EM-IS-140a.1 | (1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress

Water indicators of the Steel Industry Segment

	2020	2021		2022	
	Steel Industry Brazil	Steel Industry Brazil	Steel Industry Abroad	Steel Industry Brazil	Steel Industry Abroad
Total withdrawal of fresh water (thousand cubic meters)	83,794.8	81,595.1	1,306.8	74,127.1	1,264.9
% recycled/recirculated water	93.6%	94.0%	0.0%	94.4%	0.0
Withdrawal of fresh water in areas with water stress (thousand cubic meters)	16.5	16.2	200.5	18.8	180.8
% withdrawal in areas with water stress	0.02%	0.02%	15.3%	0.03%	14.3%
Total water consumption	7,895.0	13,486.2	792.7	10,946.2	756.3
Water consumption in areas with water stress	0.3	1.7	134.5	3.8	122.3
% consumption in areas with water stress	0.004%	0.01%	17.0%	0.03%	16.2%

SASB EM-IS-150a.1 | Amount of waste generated, percentage hazardous, percentage recycled

Waste indicators of the Steel Industry Segment

	2020	2021		2022	
	Steel Industry Brazil	Steel Industry Brazil	Steel Industry Abroad	Steel Industry Brazil	Steel Industry Abroad
Total volume of waste generated (tons)	3,975,198.4	3,844,389.3	281,948.0	3,439,157.0	130,067.3
Volume of hazardous waste generated (tons)	17,190.7	28,398.2	14,069.0	37,169.2	16,183.1
% hazardous waste	0.4%	0.7%	5.0%	1.1%	12.4%
Volume of waste destined for recycling (tons)	3,793,784.6	3,691,228.5	254,418.0	3,208,071.7	96,579.0
% waste destined for recycling	95.4%	96.0%	90.2%	93.3%	74.3%

SASB EM-IS-320a.1 | (1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees

Health and safety indicators according to OSHA standard of the Steel Industry (Brazil) Segment

	2020		2021		2022	
	Employees	Third parties	Employees	Third parties	Employees	Third parties
Number of recordable incidents	60	17	63	33	47	33
Number of fatal accidents	0	0	0	2	0	0
Number of near misses registered	376	0	103	35	237	84
Number of workers at the end of the period	15,008	5,603	15,587	5,785	14,337	4,233
Number of man-hours worked (MHW)	23,512,167	13,194,521	22,667,592	14,984,843	23,128,607	17,310,062
Recordable incident frequency rate (TRIR by 200k MHW)	0.51	0.26	0.56	0.44	0.41	0.38
Fatal accident frequency rate	0.00	0.00	0.00	0.03	0.00	0.00
Near miss frequency rate by 200k MHW	3.2	0	0.91	0.47	2.05	0.97

Health and safety indicators according to OSHA standard of the Steel Industry (Abroad) Segment

	2021		2022	
	Employees	Third parties	Employees	Third parties
Number of recordable incidents	82	13	113	5
Number of fatal accidents	0	0	0	0
Number of near misses registered	na	na	118	0
Number of workers at the end of the period	1,014	42	1,046	42
Number of man-hours worked (MHW)	1,574,713	283,013	1,576,321	216,880
Recordable incident frequency rate (TRIR)	10.41	9.19	14.34	4.61
Fatal accident frequency rate	0.00	0.00	0.00	0.00
Near miss frequency rate	na	na	14.97	0.00

SASB EM-IS-430a.1 | Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues

CSN Siderurgia purchases iron ore directly from CSN Mineração, leveraging the circular economy in its business model through a vertical operation. This approach also avoids any risk of material impacts on the supply of this input for the steelmaking process, since the Company ensures levels of excellence in CSN Mineração's operations.

Metallurgical coal is purchased from more than 20 international suppliers, all large companies (adjusted EBITDA greater than US$ 1 billion) with operations in Australia, the United States and Colombia. The main risks in this supply chain are associated with the environmental impacts of coal mining, working conditions in mines and logistical constraints that can be imposed by extreme natural events or stress conditions in global supply chains.

To mitigate our exposure in the metallurgical coal supply chain, we have structured supplier assessment processes and the formalization of contracts that include, among others, human rights, environmental, compliance and force majeure clauses. Acting only with large companies that are duly evaluated in the hiring process is the first mitigation barrier, ensuring the selection of solid partners and good management practices. The contractual clauses formalize the commitment to labor and environmental compliance and the fight against corruption, in addition to providing for the resolution of supply interruption events through a force majeure mechanism in a transparent manner and with minimal impact on business.

SASB EM-MM-000.A | Production of (1) metal ores and (2) finished metal products

Production indicators of the Mining Segment

	2020		2021		2022	
	CSN Mineração	Other mining	CSN Mineração	Other mining	CSN Mineração	Other mining
Total production of iron ores (tons)	21,891,493	754,000	27,239,252	865,000	24,279,000	574,000
Total production of tin (tons)	na	419	na	285	na	471

SASB EM-MM-000.B | Total number of employees, percentage contractors

Workforce of the Mining Segment

		2020	2021	2022
CSN Mineração S.A.	A. Direct employees	6,519	7,477	7,572
	B. Third parties	3,462	3,828	2,266
	% representativeness of third parties over employees (B/A)	53.1%	51.2%	29.9%
Other mining[1]	A. Direct employees	477	464	571
	B. Third parties	271	169	67
	% representativeness of third parties over employees (B/A)	56.8%	36.4%	11.7%

1. Other mining includes: ERSA Mineração (RO) and Minérios Nacional (MG).

SASB EM-MM-140a.1 | (1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

Water indicators of the Mining Segment

	CSN Mineração			Other mining[1]		
	2020	2021	2022	2020	2021	2022
Total withdrawal of fresh water (thousand cubic meters)	16,471.2	17,291.4	15,736.8	433.7	496.4	572.1
Withdrawal of fresh water in areas with water stress (thousand cubic meters)	123.5	107.4	124.2	0.0	0.0	0.0
% withdrawal in areas with water stress	0.7%	0.6%	0.8%	0.0%	0.0%	0.0%
Total water consumption	7,975.2	10,283.4	9,232.9	408.3	478.9	541.2
Water consumption in areas with water stress	NA	105.3	24.0	0.0	0.0	0.0
% consumption in areas with water stress	NA	1.0%	0.3%	0.0%	0.0%	0.0%

1. Other mining includes: ERSA Mineração (RO) and Minérios Nacional (MG).

SASB EM-MM-150a.5 | Total weight of tailings produced
SASB EM-MM-150a.6 | Total weight of waste rock generated

Mineral waste indicators

	2020		2021		2022	
	CSN Mineração	Other mining[1]	CSN Mineração	Other mining[1]	CSN Mineração	Other mining[1]
Total mineral waste generated (tons)	**28,403,705**	**1,410,883**	**30,582,411**	**1,615,542**	**36,919,484**	**2,332,215**
Total tailings generated (tons)[3]	5,870,789	716,000	4,486,492	793,000	4,416,484	712,000
Total waste rock generated (tons)[2]	22,532,916	694,883	26,095,919	822,542	32,503,000	1,620,215

1. Other mining includes: ERSA Mineração (RO) and Minérios Nacional (MG).
2. Minérios Nacional does not have waste rock generated.
3. Only Minérios Nacional data is included.

SASB EM-MM-150a.4 | Total weight of non-mineral waste generated
SASB EM-MM-150a.7 | Total weight of hazardous waste generated
SASB EM-MM-150a.8 | Total weight of hazardous waste recycled

Hazardous waste indicators of the Mining Segment

	2020		2021		2022	
	CSN Mineração	Other mining[1]	CSN Mineração	Other mining[1]	CSN Mineração	Other mining[1]
Volume of hazardous waste generated (tons)	1,956	101	2,218	70	2,695	53
Volume of hazardous waste directed to recycling treatment (tons)[2]	1,895	101	2,033	70	2,607	53

1. Other mining includes: ERSA Mineração (RO) and Minérios Nacional (MG).
2. Considers the total waste destined for co-processing, recycling and re-refining.

SASB EM-MM-150a.9 | Number of significant incidents associated with hazardous materials and waste management

There is no record in CSN's Mining Segment operations of any significant incident related to the management of hazardous materials and waste.

SASB EM-MM-160a.2 | Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation

There is no risk of acid drainage in CSN's Mining Segment operations, including iron ore and limestone mining processes.

SASB EM-MM-160a.3 | Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat

CSN Mineração's Casa de Pedra unit is located close (within a 5km radius) to the Cachoeira de Santo Antônio Municipal Natural Park, a fully protected conservation unit. In 2022, 100% of CSN Mineração's proven mineral reserves were found within or close to sites with protected conservation status or habitat of endangered species.
Both CSN Mineração and Minérios Nacional – MIPE, have mineral resources that have not yet been subject to a study of long-term reserves (probable reserves), which in the future may meet the requirements of the SASB indicator due to potential overlapping or proximity to areas with status of protected conservation.
ERSA is located within the Jamari National Forest, a sustainable use conservation unit created under Decree No. 9,224 of September 1984.
In 2022, 100% of ERSA Fundição's probable and proven reserves were found within or close to sites with protected conservation status or habitat of threatened species. The average percentage of tin in reserves in the same year was 0.028% for probable reserves and 0.048% for proved reserves.

SASB EM-MM-210a.1 | Percentage of (1) proved and (2) probable reserves in or near areas of conflict

CSN's Mining Segment units are not located in or close to areas of active conflict.
The reporting of this indicator uses the official definitions of the Upssala Conflict Data Program (UCDP): "A conflict, both state-based and non-state, is deemed to be active if there are at least 25 battle-related deaths per calendar year in one of the conflict's dyads."

SASB EM-MM-210a.2 | Percentage of (1) proved and (2) probable reserves in or near indigenous land

The reporting of this indicator uses the official data available on the website of the National Foundation for Indigenous Peoples as a source of information, no indigenous lands were identified within or close (5km radius) to CSN's Mining Segment operations.

SASB EM-MM-210b.2 | Number and duration of non-technical delays

No non-technical delays were recorded in CSN's mining operations in 2022.

SASB EM-MM-310a.2 | Number and duration of strikes and lockouts

There were no significant strikes or blockades (involving at least one thousand workers and lasting at least 1 day) in the last three years in any of the units of the Mining Segment (CSN Mineração, Minérios Nacional and ERSA).

SASB EM-MM-320a.1 | (1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees

Health and safety indicators according to OSHA standard of CSN Mineração

	2020		2021		2022	
	Employees	Third parties	Employees	Third parties	Employees	Third parties
Number of recordable incidents in mines	14	7	18	22	18	10
Number of fatal accidents	0	0	0	0	0	0
Number of near misses registered	4,940	49	5,981	405	9,056	1,638
Number of hours of health, safety and emergency preparedness training	72,743	na	110,552	na	118,840	na
Number of workers at the end of the period	6,519	3,462	7,477	3,828	7,572	2,266
Number of man-hours worked	10,988,422	7,057,793	11,880,492	8,528,265	12,435,839	9,121,021
Recordable incident frequency rate in mines	0.25	0.20	0.30	0.52	0.29	0.22
Fatal accident frequency rate	0.00	0.00	0.00	0.00	0.00	0.00
Near miss frequency rate	89.91	1.39	100.69	9.50	145.64	35.92
Average hours of health, safety and emergency preparedness training	11.15	na	14.79	na	15.44	na

Health and safety indicators according to OSHA standard of Other mining

	2020		2021		2022	
	Employees	Third parties	Employees	Third parties	Employees	Third parties
Number of recordable incidents in mines	7	2	3	0	1	0
Number of fatal accidents	0	1	0	0	0	0
Number of near misses registered	4	2	3	1	6	21
Number of hours of health, safety and emergency preparedness training	769	na	1209	na	2681	na
Number of workers at the end of the period	405	271	464	169	571	67
Number of man-hours worked	937,974	646,802	981,668	409,659	1,216,174	634,499
Recordable incident frequency rate in mines	1.49	0.62	0.61	0.00	0.16	0.00
Fatal accident frequency rate	0.00	0.31	0.00	0.00	0.00	0.00
Near miss frequency rate	0.85	0.62	0.61	0.49	0.99	6.62
Average hours of health, safety and emergency preparedness training	0.81	na	1.30	na	4.66	na

SASB EM-MM-510a.1 | Description of the management system for prevention of corruption and bribery throughout the value chain

The Compliance Program is in line with the main market references and frameworks, including the Extractive Industry Transparency Initiative (EITI) Standards, the Organization for Economic Cooperation and Development (OECD) Guidelines, the Rules of Conduct and Recommendations to Combat Extortion and Bribery of the International Chamber of Commerce (ICC), the Business Principles for Combating Bribery of Transparency International (TI), the UN Global Compact Principles (Principle 10) and the Partnering Against Corruption Initiative (PACI) of the World Economic Forum. For more information on the practices covered by the Program, see page 37.

SASB EM-MM-510a.2 | Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index

Production in the Mining Segment only takes place in Brazil, which occupies the 96th position (out of a total of 180) in the Transparency International Corruption Perception Index ranking.

SASB EM-MM-540a.1 | Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP

Inventory of tailings storage facilities of CSN Mineração S.A.

Identification and location[1]	Operational status	Construction method	Maximum allowed storage capacity (thousand m³)	Current amount of tailings stored (thousand m³)	Structure consequence classification	Date of most recent independent technical inspection	Material conclusions of the inspection and mitigation measures	Existence of a specific emergency preparedness and response plan
Casa de Pedra Dam (MG)	Inactive	Downstream method	70,000.0	65,374.8	Low	September 2022	None	Yes
B4 Dam (MG)	Inactive (under de-characterization)	Upstream method	13,001.8	13,001.8	Significant	September 2022	None	Yes
Vigia Dam (MG)	Inactive (under de-characterization)	Upstream method	812.9	812.9	Significant	September 2022	None	Yes

1. All dams are operated by CSN Mineração. There are five tailings piles at CSN Mineração that do not fit into the dam category.

Inventory of tailings storage facilities of CSN's Other mining

Identification and location[1]	Operational status	Construction method	Maximum allowed storage capacity (thousand m³)	Current amount of tailings stored (thousand m³)	Structure consequence classification	Date of most recent independent technical inspection	Material conclusions of the inspection and mitigation measures	Existence of a specific emergency preparedness and response plan
B2 Dam (MG)	Inactive	Downstream method	2,616.5	2,616.5	Significant	September 2022	None	Yes
B2A Dam (MG)	Inactive (under de-characterization)	Downstream method	6,700.0	4,500.0	Significant	September 2022	None	Yes

1. All dams are operated by Minérios Nacional. The ERSA (RO) operation does not have a tailings dam. There is a tailings pile at Minérios Nacional that does not fit the dam category.

SASB EM-CM-000.A | Production by major product line

Production indicators of the Cements Segment

	2020	2021	2022
Total cement production (tons)	3,167,210	3,339,854	5,432,151

1. Data based on the methodology of the Global Cement and Concrete Association (GCCA). In 2022, it includes data from CSN Alhandra.

SASB EM-CM-140a.1 | (1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress

Water indicators of the Cements Segment

	2020	2021	2022
Total withdrawal of fresh water (thousand cubic meters)	246.0	330.1	404.2
% recycled/recirculated water	94.0%	92.0%	93%
Withdrawal of fresh water in areas with water stress (thousand cubic meters)	0.0	0.0	0.0
% withdrawal in areas with water stress	0.0%	0.0%	0.0%
Total water consumption	245.2	328.3	235.7
Water consumption in areas with water stress	0.0	0.0	0.0
% consumption in areas with water stress	0.0%	0.0%	0.0%

SASB EM-CM-150a.1 | Amount of waste generated, percentage hazardous, percentage recycled

Waste indicators of the Cements Segment

	2020	2021	2022
Total volume of waste generated (tons)	2,096.2	9,297.0	2,292.0
Volume of hazardous waste generated (tons)	255.1	132.2	200.6
% hazardous waste	12.2%	1.4%	8.8%
Volume of waste destined for treatment (tons)	428.5	7.785.3	1.365.6
% waste destined for treatment	20.4%	83.7%	59.6%

SASB EM-CM-160a.2 | Terrestrial acreage disturbed, percentage of impacted area restored

Areas disturbed by operations of the Cements Segment in 2022

	CSN Arcos	CSN Alhandra
Total disturbed area (hectares)	165.3	60.5
Disturbed area in restoration process (hectares)	0.0	25.8
Percentage of disturbed areas under restoration (%)	0	42.7%
Restoration activities promoted in the period	There are no areas under recovery related to the current pit area. All disturbed areas are still under exploration.	Relief conformation processes in the pit in recovery and natural management of flora species

SASB EM-CM-320a.1 | (1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees

Health and safety indicators according to OSHA standard of the Cements Segment

	2020		2021		2022	
	Employees	Third parties	Employees	Third parties	Employees	Third parties
Number of recordable incidents	3	0	3	5	3	3
Number of fatal accidents	0	0	0	0	0	0
Number of near misses registered	48	23	28	39	18	19
Number of workers at the end of the period	712	821	909	892	1,291	817
Number of man-hours worked	1,636,422	1,801,259	2,148,172	2,090,272	3,244,222	1,770,995
Recordable incident frequency rate (TRIR)	0.37	0.00	0.28	0.48	0.18	0.34
Fatal accident frequency rate	0.00	0.00	0.00	0.00	0.00	0.00
Near miss frequency rate	5.87	2.55	2.61	3.73	1.11	2.15

SASB EM-CM-320a.2 | Number of reported cases of silicosis

There was no record of any case of silicosis among employees, third parties and former employees of CSN Cimentos.

GRI content index

Statement of use | Companhia Siderúrgica Nacional S.A. has reported in accordance with the GRI Standards for the period of Januari 1st to December 31st, 2022.
GRI 1 used | GRI 1: Foundation 2021
Applicable GRI Sector Standard(s) | Not applicable

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
General disclosures								
GRI 2 | General Disclosures 2021	2-1 | Organizational details	19, 27 and 30	-	-	-	-	-	-
	2-2 | Entities included in the organization's sustainability reporting	3	-	-	-	-	-	-
	2-3 | Reporting period, frequency and contact point	3	-	-	-	-	-	-
	2-4 | Restatements of information	96 and 169	-	-	-	-	-	-
	2-5 | External assurance	3, 244, 245 and 246	-	-	-	-	-	-
	2-6 | Activities, value chain and other business relationships	19, 20, 21, 22, 23, 24, 25, 28, 66, 103, 104 and 169	-	-	-	-	-	-
	2-7 | Employees	88, 96, 170, 171, 172 and 173	-	-	-	-	6	8 and 10
	2-8 | Workers who are not employees	174	-	-	-	-	6	8 and 10
	2-9 | Governance structure and composition	31, 32, 33 and 34	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-10 | Nomination and selection of the highest governance body	32	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	5 and 16
	2-11 | Chair of the highest governance body	32	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-12 | Role of the highest governance body in overseeing the management of impacts	42 and 43	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-13 | Delegation of responsibility for managing impacts	31, 32, 33 and 34	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-14 | Role of the highest governance body in sustainability reporting	3	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-15 | Conflicts of interest	41	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
GRI 2 | General Disclosures 2021	2-16 | Communication of critical concerns	42 and 43	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-17 | Collective knowledge of the highest governance body	36	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-18 | Evaluation of the performance of the highest governance body	36	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-19 | Remuneration policies	36	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-20 | Process to determine remuneration	36	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-21 | Annual total compensation ratio	174	-	-	-	-	1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	16
	2-22 | Statement on sustainable development strategy	14, 15, 16 and 17	-	-	-	-	-	-
	2-23 | Policy commitments	37, 48 and 49	-	-	-	-	10	16
	2-24 | Embedding policy commitments	37, 48 and 49	-	-	-	-	10	16
	2-25 | Processes to remediate negative impacts	38, 39, 50, 116 and 117	-	-	-	-	-	-
	2-26 | Mechanisms for seeking advice and raising concerns	38 and 39	-	-	-	-	10	16
	2-27 | Compliance with laws and regulations	174	-	-	-	-	10	16
	2-28 | Membership associations	175	-	-	-	-	-	16
	2-29 | Approach to stakeholder engagement	5, 52 and 175	-	-	-	-	-	17
	2-30 | Collective bargaining agreements	94	-	-	-	-	3	8

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
Material topics								
GRI 3 | Material topics 2021	3-1 | Process to determine material topics	5	-	-	-	-	-	-
	3-2 | List of material topics	6	-	-	-	-	-	-
Material topic | Safety and de-characterization of dams								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 119 and 120	-	-	-	-	-	-
Material topic | Labor health and safety								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 98, 99, 100, 101 and 102	-	-	-	-	-	-
GRI 403 | Occupational health and safety 2018	403-1 | Occupational health and safety management system	98	-	-	-	-	-	8
	403-2 | Hazard identification, risk assessment, and incident investigation	99, 100 and 101	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-3 | Occupational health services	102	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-4 | Worker participation, consultation, and communication on occupational health and safety	99 and 100	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-5 | Worker training on occupational health and safety	100	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-6 | Promotion of worker health	102	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	98	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-8 | Workers covered by an occupational health and safety management system	98	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-9 | Work-related injuries	101, 206, 207, 208 and 209	-	-	-	-	3, 4, 5 and 6	3 and 8
	403-10 | Work-related ill health	210	-	-	-	-	3, 4, 5 and 6	3 and 8

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
Material topic | Climate change								
GRI 3 | Material topics 2021	3-3 | Management of material topics	44, 45, 46, 47, 48, 49, 53, 61, 62, 63, 64, 65, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139 and 140	-	-	-	-	-	-
GRI 201 | Economic performance 2016	201-2 | Financial implications and other risks and opportunities due to climate change	44, 45, 46, 47, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 134, 135, 136, 137, 138, 139 and 140	-	-	-	-	7, 8 and 9	12 and 13
GRI 302 | Energy 2016	302-1 | Energy consumption within the organization	132, 179 and 180	-	-	-	B.5.1	7, 8 and 9	3, 7, 11, 13 and 17
	302-2 | Energy consumption outside of the organization	181	-	-	-	-	7, 8 and 9	3, 7, 11, 13 and 17
	302-3 | Energy intensity	132 and 181	-	-	-	-	7, 8 and 9	3, 7, 11, 13 and 17
	302-4 | Reduction of energy consumption	124, 126, 127, 128, 129, 130 and 131	-	-	-	-	7, 8 and 9	3, 7, 11, 13 and 17
GRI 305 | Emissions 2016	305-1 | Direct (Scope 1) GHG emissions	133 and 182	-	-	-	B.3.1	7, 8 and 9	12, 13, 14 and 15
	305-2 | Energy indirect (Scope 2) GHG emissions	133 and 182	-	-	-	B.3.2	7, 8 and 9	12, 13, 14 and 15
	305-3 | Other indirect (Scope 3) GHG emissions	133 and 182	-	-	-	-	7, 8 and 9	12, 13, 14 and 15
	305-4 | GHG emissions intensity	124, 127, 130, 133 and 183	-	-	-	-	7, 8 and 9	12, 13, 14 and 15
	305-5 | Reduction of GHG emissions	124, 125, 126, 127, 128, 129, 130 and 131	-	-	-	-	7, 8 and 9	12, 13, 14 and 15
Material topic | Biodiversity								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158 and 159	-	-	-	-	-	-
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	190	The areas of units with lower materiality for the CSN Group were not reported.			-	7, 8 and 9	3, 15 and 17
	304-2 | Significant impacts of activities, products, and services on biodiversity	142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154 and 155	-	-	-	-	7, 8 and 9	3, 15 and 17
	304-3 | Habitats protected or restored	156, 157, 158, 159 and 191	-	-	-	-	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	191	-	-	-	-	7, 8 and 9	3, 15 and 17

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
Material topic | Innovation and technology								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 and 65	-	-	-	-	-	-
Material topic | Waste management, responsible use of materials and circular economy								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 164, 165, 166 and 167	-	-	-	-	-	-
GRI 306 | Waste 2020	306-1 | Waste generation and significant waste-related impacts	164, 165, 166 and 167	-	-	-	-	7, 8 and 9	3, 11, 12 and 17
	306-2 | Management of significant waste-related impacts	164, 165, 166 and 167	-	-	-	-	7, 8 and 9	3, 11, 12 and 17
	306-3 | Waste generated	167, 193, 194, 195, 196, 197, 198 and 199	-	-	-	B.2.1 B.2.3	7, 8 and 9	3, 11, 12 and 17
	306-4 | Waste diverted from disposal	193, 194, 195, 196, 197, 198 and 199	-	-	-	B.2.2	7, 8 and 9	3, 11, 12 and 17
	306-5 | Waste directed to disposal	193, 194, 195, 196, 197, 198 and 199	-	-	-	-	7, 8 and 9	3, 11, 12 and 17
Material topic | Governance, ethics and transparency								
GRI 3 | Material topics 2021	3-3 | Management of material topics	30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 48, 49, 53, 61, 62, 63, 64, 65, 86 and 87	-	-	-	-	-	-
GRI 205 | Anti-corruption 2016	205-1 | Operations assessed for risks related to corruption	37 and 40	-	-	-	-	10	16
	205-2 | Communication and training about anti-corruption policies and procedures	37, 38 and 177	-	-	-	-	10	16
	205-3 | Confirmed incidents of corruption and actions taken	39	-	-	-	-	10	16
GRI 207 | Tax 2019	207-1 | Approach to tax	86 and 87	-	-	-	-	-	1, 10 and 17
	207-2 | Tax governance, control, and risk management	86 and 87	-	-	-	-	-	1, 10 and 17
	207-3 | Stakeholder engagement and management of concerns related to tax	86 and 87	-	-	-	-	-	1, 10 and 17
	207-4 | Country-by-country reporting	87 and 177	-	-	-	-	-	1, 10 and 17
GRI 408 | Child labor 2016	408-1 | Operations and suppliers at significant risk for incidents of child labor	104	-	-	-	-	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	104	-	-	-	-	1, 2, 3, 4, 5 and 6	5, 8 and 16

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
Material topic | Local communities								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117 and 118	-	-	-	-	-	-
GRI 203 | Indirect economic impacts 2016	203-1 | Infrastructure investments and services supported	107 and 108	-	-	-	-	8 and 10	9
GRI 411 | Rights of indigenous peoples 2016	411-1 | Incidents of violations involving rights of indigenous peoples	223	-	-	-	-	-	1 and 2
GRI 412 | Human rights assessment 2016	412-1 | Operations that have been subject to human rights reviews or impact assessments	106 and 223	-	-	-	-	1, 2, 3, 4, 5 and 6	5, 8 and 16
	412-2 | Employee training on human rights policies or procedures	93	-	-	-	-	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	105, 106, 107, 108, 109, 110, 111, 112, 113, 114 and 115	-	-	-	-	-	1, 2, 4, 5 and 10
	413-2 | Operations with significant actual and potential negative impacts on local communities	106, 115, 116, 117 and 118	-	-	-	-	-	1, 2, 4, 5 and 10
Material topic | Diversity and inclusion								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 95, 96 and 97	-	-	-	-	-	-
GRI 405 | Diversity and equal opportunity 2016	405-1 | Diversity of governance bodies and employees	32, 96, 97, 214, 215, 216, 217, 218, 219, 220 and 221	-	-	-	-	6	5 and 10
	405-2 | Ratio of basic salary and remuneration of women to men	222 and 223	-	-	-	-	6	5 and 10
GRI 406 | Non-discrimination 2016	406-1 | Incidents of discrimination and corrective actions taken	39	-	-	-	-	6	5 and 10

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
Material topic | Efficient water use and effluent management practices								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 160, 161, 162 and 163	-	-	-	-	-	-
GRI 303 | Water and effluents 2018	303-1 | Interactions with water as a shared resource	160, 161, 162 and 163	-	-	-	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-2 | Management of water discharge-related impacts	160, 161, 162, 163 and 186	-	-	-	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-3 | Water withdrawal	160, 187 and 188	-	-	-	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-4 | Water discharge	189	-	-	-	-	7, 8 and 9	3, 6, 11, 14 and 17
	303-5 | Water consumption	190	-	-	-	B.1.1 B.1.2	7, 8 and 9	3, 6, 11, 14 and 17
Material topic | Supplier management								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 103 and 104	-	-	-	-	-	-
GRI 308 | Supplier environmental assessment 2016	308-1 | New suppliers that were screened using environmental criteria	103, 104 and 200	-	-	-	-	7, 8 and 9	17
GRI 414 | Supplier social assessment 2016	414-1 | New suppliers that were screened using social criteria	103, 104 and 200	-	-	-	-	-	-
Material topic | Staff management								
GRI 3 | Material topics 2021	3-3 | Management of material topics	48, 49, 53, 61, 62, 63, 64, 65, 88, 89, 90, 91, 92, 93 and 94	-	-	-	-	-	-
GRI 401 | Employment 2016	401-1 | New employee hires and employee turnover	201, 202, 203, 204 and 205	-	-	-	-	1, 2 and 3	8
GRI 404 | Training and education 2016	404-1 | Average hours of training per year per employee	93, 210, 211 and 212	-	-	-	-	-	-
	404-3 | Percentage of employees receiving regular performance and career development reviews	91 and 213	-	-	-	-	-	-

GRI Standard/ Other source	Disclosure	Page	Requirement(s) ommited	Reason	Explanation	UNCTAD	Global Compact	SDG
Additional disclosures - not included in the materiality, but kept in the report for transparency and comparability								
GRI 201 | Economic performance 2016	201-1 | Direct economic value generated and distributed	84	-	-	-	-	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	176	-	-	-	-	6	1, 5 and 8
GRI 204 | Procurement practices 2016	204-1 | Proportion of spending on local suppliers	103 and 176	-	-	-	-	-	-
GRI 206 | Anti-competitive behavior 2016	206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	174	-	-	-	-	10	16
GRI 301 | Materials 2016	301-1 | Materials used by weight or volume	178	-	-	-	-	7, 8 and 9	3, 11, 12 and 17
	301-2 | Recycled input materials used	178	-	-	-	-	7, 8 and 9	3, 11, 12 and 17
GRI 305 | Emissions 2016	305-6 | Emissions of ozone-depleting substances (ODS)	191	-	-	-	-	7, 8 and 9	3, 12, 13, 14 and 15
	305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	141 and 192	-	-	-	-	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	94	-	-	-	-	-	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	104	-	-	-	-	3	-

SASB content index

Iron & Steel Producers 2018

SASB topic	SASB code	Metrics requested by SASB	Page
Greenhouse gas emissions	EM-IS-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	184
	EM-IS-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	124, 125 and 126
Air emissions	EM-IS-120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) manganese (MnO), (6) lead (Pb), (7) volatile organic compounds (VOCs), and (8) polycyclic aromatic hydrocarbons (PAHs)	192
Energy management	EM-IS-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	184
	EM-IS-130a.2	(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable	184
Water management	EM-IS-140a.1	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	224
Waste management	EM-IS-150a.1	Amount of waste generated, percentage hazardous, percentage recycled	225
Workforce health & safety	EM-IS-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	225
Supply chain management	EM-IS-430a.1	Discussion of the process for managing iron ore and/or coking coal sourcing risks arising from environmental and social issues	226
Activity metrics	EM-IS-000.A	Raw steel production, percentage from: (1) basic oxygen furnace processes, (2) electric arc furnace processes	224
	EM-IS-000.B	Total iron ore production	224
	EM-IS-000.C	Total coking coal production	224

Metals & Mining 2021

SASB topic	SASB code	Metrics requested by SASB	Page
Greenhouse gas emissions	EM-MM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	185
	EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	127, 128 and 129
Air quality	EM-MM-120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	192
Energy management	EM-MM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	185
Water management	EM-MM-140a.1	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	226
	EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	174
Waste & hazardous materials management	EM-MM-150a.4	Total weight of non-mineral waste generated	227
	EM-MM-150a.5	Total weight of tailings produced	166 and 227
	EM-MM-150a.6	Total weight of waste rock generated	166 and 227
	EM-MM-150a.7	Total weight of hazardous waste generated	227
	EM-MM-150a.8	Total weight of hazardous waste recycled	227
	EM-MM-150a.9	Number of significant incidents associated with hazardous materials and waste management	228
	EM-MM-150a.10	Description of waste and hazardous materials management policies and procedures for active and inactive operations	163, 165 and 166
Biodiversity impacts	EM-MM-160a.1	Description of environmental management policies and practices for active sites	50, 51, 142, 143, 144, 145, 148 and 149
	EM-MM-160a.2	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	228
	EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	228

Metals & Mining 2021 (continued)

SASB topic	SASB code	Metrics requested by SASB	Page
Security, human rights & rights of indigenous peoples	EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	228
	EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	228
	EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	106 and 223
Community relations	EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	116, 117 and 118
	EM-MM-210b.2	Number and duration of non-technical delays	228
Labor relations	EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	94
	EM-MM-310a.2	Number and duration of strikes and lockouts	228
Workforce health & safety	EM-MM-320a.1	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	229
Business ethics & transparency	EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	37, 38, 39, 40 and 230
	EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	230
Tailings storage facilities management	EM-MM-540a.1	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	230
	EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	119 and 120
	EM-MM-540a.3	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	119 and 120
Activity metrics	EM-MM-000.A	Production of (1) metal ores and (2) finished metal products	226
	EM-MM-000.B	Total number of employees, percentage contractors	226

Construction Materials 2018

SASB topic	SASB code	Metrics requested by SASB	Page
Greenhouse gas emissions	EM-CM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	186
	EM-CM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	131 and 131
Air quality	EM-CM-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) dioxins/furans, (5) volatile organic compounds (VOCs), (6) polycyclic aromatic hydrocarbons (PAHs), and (7) heavy metals	192
Energy management	EM-CM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage alternative, (4) percentage renewable	186
Water management	EM-CM-140a.1	(1) Total fresh water withdrawn, (2) percentage recycled, (3) percentage in regions with High or Extremely High Baseline Water Stress	231
Waste management	EM-CM-150a.1	Amount of waste generated, percentage hazardous, percentage recycled	231
Biodiversity impacts	EM-CM-160a.1	Description of environmental management policies and practices for active sites	50, 51, 142, 143, 144, 145, 152 and 153
	EM-CM-160a.2	Terrestrial acreage disturbed, percentage of impacted area restored	231
Workforce health & safety	EM-CM-320a.1	(1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	231
	EM-CM-320a.2	Number of reported cases of silicosis	231
Product innovation	EM-CM-410a.1	Percentage of products that qualify for credits in sustainable building design and construction certifications	Not applicable, as CSN does not have products of this type.
	EM-CM-410a.2	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Not applicable, as CSN does not have products of this type.
Pricing integrity & transparency	EM-CM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities	174
Activity metrics	EM-CM-000.A	Production by major product line	231

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 hired by Companhia Siderúrgica Nacional S.A ("CSN", "CSN Group" or "Company") for independent and limited assurance report on the information contained in its Integrated Report and Annexes for the year ended December 31, 2022, prepared based on the guidelines of the Global Reporting Initiative ("GRI"), Standards version, and in accordance with the basic conceptual framework for Integrated Reporting, elaborated by International Integrated Reporting Council (IIRC) and 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 in 2022 have been prepared in accordance with the guidelines of The Greenhouse Gas (GHG) Protocol, ABNT NBR ISO 14064-3:2007, the GHG emission guidelines related to steel production from the World Steel Association (WSA) and cement production from the Global Cement and Concrete Association (GCCA) (limits scope), and were verified by the independent auditors of Bureau Veritas Certification Brasil (Bureau Veritas).

CSN management responsibilities

CSN's management is responsible for preparing and presenting in an appropriate manner the sustainability non-financial information disclosed in the Integrated Report and Annexes 2022, using as a reference the Standards for Sustainability Report of Global Reporting Initiative – GRI, and in accordance with internal controls determined to be necessary to allow the preparation of this information free of material distortion, regardless of whether caused by fraud or error.

CSN's management is also responsible for the preparation and proper presentation of information related to greenhouse gas emissions, 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 determined to be necessary to allow the preparation of this information free of material distortion, regardless of whether caused by fraud or error.

Independent auditor's responsibilities

Our responsibility is to express a conclusion on the information contained in the Integrated Report and Annexes of 2022, based on the limited assurance work conducted in accordance with the Ibracon Technical Comunication (CT) 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 the work be performed with the goal of obtaining limited assurance that the information in the 2022 Integrated Report and Annexes, taken together, is free from material misstatement.

A limited assurance work conducted in accordance wich the NBC TO 3000 (ISAE 3000) consists mainly in inquiries to the management of CSN and other CSN's professionals who are involved in the preparation of the information contained in the Integrated Report and Annexes of 2022, as well as in the review of the Verification stantement prepared by Bureau Veritas 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 about sustainability information. 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 Integrated Report and Annexes of 2022 may present material misstatements.

The procedures selected were based on an understanding of the aspects relating to the compilation, materiality and presentation of the information contained in the Integrated Report and Annexes 2022 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 2022, in which material misstatements could exist. The procedures included:

a) The planning of the work, considering the materiality for the activities of CSN, 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 Integrated Report and Annexes of 2022 of CSN;

b) Understanding 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 2022 and its structure and content, using as reference the principles of content and quality of Standards the Sustainability Report of Global Reporting Initiative - GRI (GRI-Standards).

d) The analysis of information and evidence from the SASB (Sustainability Accounting Standards Board) indicators related to material issues.

e) 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 2022;
- analysis of evidence supporting the information disclosed;

f) The cofrontation of indicators of a financial nature with the financial statements and/or accounting records.

We believe that the information, evidence and results obtained in our work are sufficient and appropriate to support our conclusion in the limited form.

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 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 Integrated Report and anexes of 2022.

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, or in relation to future projections.

Our work aimed to apply limited assurance procedures on the sustainability information disclosed in the Integrated Report and Annexes of CSN of 2022, 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 the Bureau Veritas Verification Statement, with regard to greenhouse gas emissions, nothing has come to our knowledge that could indicate that the information contained in the Integrated Report and Annexes of the CSN of 2022, are not balanced, consistent and reliable, in all relevant respects, in accordance with the records and files that served as the basis for its construction, following the guidelines of the Global Reporting Initiative – GRI, Standards version, and the International Integrated Reporting Council (IIRC).

Point your mobile phone camera to the image above and complete our satisfaction research. If not compatible, get a QR Code reader to access the content.

Barueri, April 24, 2023

RUSSELL BEDFORD GM
AUDITORES INDEPENDENTES S/S
2 CRC RS 5.460/O-0 “T” SP

ROGER MACIEL DE OLIVEIRA:90238435091

Assinado de forma digital por ROGER MACIEL DE OLIVEIRA:90238435091
Dados: 2023.04.24 17:40:13 -03'00'

Roger Maciel de Oliveira
Accountant 1 CRC RS 71.505/O-3 "T" SP
Technical Responsible Partner

Corporate information

HEADQUARTERS
Av. Brigadeiro Faria Lima, 3.400
19th and 20th floors
Itaim Bibi – São Paulo (SP)
CEP: 04538-132
Phone: +55 (11) 3049-7100

STEEL INDUSTRY – BRAZIL
CSN –Presidente Vargas Steelworks
Rodovia BR 393
Lúcio Meira, km 5001 s/nº
Vila Santa Cecília
Volta Redonda (RJ)
CEP: 27260-390
Phone: +55 (24) 3344-6000

CSN – Porto Real Branch
Av. Renato Monteiro, 7.777
Polo Urbo Argo Industrial
Porto Real – Rio de Janeiro (RJ)
CEP: 27250-000
Phone: +55 (24) 3358-2900

CSN – Paraná Branch
Rodovia PR 423, 5.500 (parte)
Estação – Araucária (PR)
CEP: 83705-000
Phone: +55 (41) 3641-8000

Companhia Metalúrgica Prada
Package Unit – São Paulo
Rua Engenheiro Francisco Pitta Brito, 138
Santo Amaro – São Paulo (SP)
CEP: 04753-900
Phone: +55 (11) 5682-1000

Companhia Metalúrgica Prada
Distribution Unit – Mogi das Cruzes
Avenida Inal, 190
Vila Industrial – Mogi das Cruzes (SP)
CEP: 08770-042
Phone: +55 (11) 4791-7800

Companhia Metalúrgica Prada
Package Unit – Resende
Rodovia Presidente Dutra, km 298
Polo Industrial – Resende (RJ)
CEP 27330-000
Phone: +55 (11) 5682-1004

STEEL INDUSTRY – ABROAD
Lusosider – Aços Planos S.A.
Avenida da Siderurgia Nacional,
s/n 2840-075
Aldeia de Paio Pires Portugal
Phone: +351 212 278 361

Stahlwerk Thüringen GmbH
Kronacher Str. 6 07333
Unterwellenborn Germany
Phone: +49 3671 4550 6372

MINING
CSN Mineração S.A. – Headquarters
Casa de Pedra Mining Unit
Logradouro Casa de Pedra, s/nº
Zona Rural – Congonhas (MG)
Caixa Postal: 97 – CEP: 36415-000
Phone: +55 (31) 3749-1212

CSN Mineração S.A.
Tecar Unit (Porto de Itaguaí)
Estrada da Ilha da Madeira s/nº, parte
Porto de Itaguaí – Itaguaí (RJ)
CEP: 23826-600

CSN Mineração S.A
Pires Mine
Rodovia BR-040, km 590
Caixa Postal: 18
Congonhas (MG) – CEP: 36415-000
Phone: +55 (31) 3733-5700

CSN Mineração
Corporate Branch São Paulo
Av. Brigadeiro Faria Lima, 3.400 –20th floor – Itaim Bibi
São Paulo (SP) – CEP: 04538-132
Phone: +55 (11) 3049-7100

Estanho de Rondônia S.A.
Rua Estanho, 123
Apoio Rodoviário – Ariquemes (RO)
CEP: 76876-726

CEMENT
CSN – Arcos Branch
Caixa Postal: 24
Logradouro Bocaina, s/nº
Zona Rural – Arcos (MG)
CEP: 35588-000
Phone: +55 (37) 3359-7700

CSN - UPV Branch - Cement unit
Rodovia BR 393 – Lúcio Meira, km 5,001 s/nº
Vila Santa Cecília – Volta Redonda (RJ)
CEP: 27260-390
Phone: +55 (24) 3344-6000

Elizabeth Cimentos
Rua Antônio Rabelo Júnior, 161 – Miramar
João Pessoa – PB
CEP: 58320-000

LOGISTICS
Sepetiba TECON S.A.
Estrada Prefeito Wilson Pedro Francisco, s/nº, parte
Ilha da Madeira Porto de Itaguaí – Itaguaí (RJ)
CEP: 23826-600
Phone: +55 (21) 2688-9366

MRS Logística S.A.
Praia de Botafogo, nº 228
12th floor – Room 1201E – B aisle
Rio de Janeiro (RJ)
CEP: 22250-906
Phone: +55 (21) 2559-4601

Transnordestina Logística S.A.
Av. Francisco Sá, 4829 (parte)
Álvaro Weyne – Fortaleza (CE)
CEP: 60335-195
Phone: -55 (85) 4008-2500

FTL – Ferrovia Transnordestina Logistics S.A.
Av, Francisco Sá, 4829 (parte)
Álvaro Weyne – Fortaleza (CE)
CEP: 60335-195
Phone: +55 (85) 4008-2500

ENERGY
CSN Energia S.A
Avenida Almirante Barroso, 81, room 3301, parte A
Centro, Rio de Janeiro (RJ)
CEP 20031-004

Consórcio de Usina Hidrelétrica de Igarapava
Itá Energética S.A.
ITASA Address
Av. Tancredo Neves, 1900 – Centro
Itá – SC, 89760-000
Itá Energética S.A.
Hydropower Plant ITÁ address
Volta do UVÁ
Aratiba/RS
CEP: 99770-000

Credits

BOARD OF DIRECTORS

Benjamin Steinbruch (President)
Yoshiaki Nakano
Antonio Bernardo Vieira Maia
Miguel Ethel Sobrinho
Fabiam Franklin

EXECUTIVE BOARD

Benjamin Steinbruch (CEO)
Marcelo Cunha Ribeiro (Executive Director of Finance and Investor Relations)
David Moise Salama (Executive Director of Insurance, Credit and Assets)
Luis Fernando Barbosa Martinez (Commercial and Logistics Executive Director)

GENERAL COORDINATION, WRITING AND ELABORATION OF THE REPORT

Institutional Board

Luiz Paulo Teles Ferreira Barreto

Team:

Ana Carolina Diegues de Faria Passaro
Carlos Miranda Lima
Walasse Oliveira

Sustainability, Environment and Occupational Safety Board

Helena Brennand Guerra

Team:

Eduardo Guadagnini Lima
Fernando Henriques Salinas
Flavia Tranjan Andreotti
Karoline Castro Oliveira Francisco
Lívia Ballot De Miranda
Pablo Ricardo Belosevich Sosa
Renan Augusto Cordeiro Dos Reis

CSN Inova

Alessandra Steinbruch
Catarina Lagnado

Investor Relations Department

Marcelo Cunha Ribeiro

Team:

Pedro Gomes
Danilo Dalapria
Rafael Costa Byrro

For the verification and analysis of information, we would like to thank the support and cooperation of the managers and other colleagues involved in all CSN's Corporate units and areas involved:

Presidente Vargas Steelworks (UPV);
CSN Porto Real;
CSN Paraná;
Prada Distribuição;
Prada Embalagens – SP;
Prada Embalagens – Resende;
CSN Mineração;
ERSA;
CSN Cimentos;
TECON – Container Terminal;
TECAR – Solid Bulk Terminal;
Transnordestina Logística S.A;
Former Coal Mining (Criciúma – SC);
SWT – Steelworks Thuringia;
Lusosider

MATERIALITY, CONSULTANCY, CONTENT AND DESIGN

usina82

MANAGEMENT OF ENVIRONMENTAL INDICATORS

GRI, UNCTAD, SASB, SDG, sectorial assessments (World Steel Association, International Council of Mining and Metals, Global Cement and Concrete Association), assessment of water risks and GHG Protocol – Combustech Tecnologia da Combustão Ltda.

PHOTOS

CSN image bank

Companhia Siderúrgica Nacional