



# INTEGRATED REPORT 2024



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# WELCOME



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## About This Report

For more than ten years, we have shared with stakeholders CSN Group's results of operations and progress on environmental, social and governance (ESG) issues through annual Integrated Reports, as part of our on-going commitment to transparency and accountability. First published in 2012, this report offers a comprehensive view of the Group's activities. Since 2020, it has been published annually and has undergone independent assurance.

This 2024 edition covers the period from January 1 to December 31 and includes all operations under CSN's operational control across the steel, mining, cement, logistics, and energy segments, in Brazil and globally. Any exceptions are noted throughout the text or in footnotes.

This report has been prepared in accordance with globally recognized standards and frameworks: the Global Reporting Initiative (GRI) Standards; the International Integrated Reporting Framework, as consolidated under the International Sustainability Standards Board (ISSB); the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD); and the Sustainability Accounting Standards Board (SASB) Iron & Steel Producers, Metals & Mining and Construction Materials Sustainability Accounting Standards. All

financial information is compliant with the International Financial Reporting Standards (IFRS) and the standards of the Brazilian Accounting Standards Committee (CPC), the International Accounting Standards Board (IASB), and the International Financial Reporting Interpretations Committee (IFRIC). CSN Mineração's financial statements have been audited by Mazars and Grant Thornton, and are available on our [Investor Relations website](#).

Supplementing the information in this report, GRI, SASB, TCFD, and TNFD disclosures are available in our ESG Databook, designed to meet the specific informational needs of different stakeholders. You can access the ESG Databook [here](#).

All information presented in this report and in the ESG Databook has been reviewed and approved by the Board of Directors and undergone independent assurance by Grant Thornton, ensuring its accuracy and reliability. As part of the assurance engagement, the Board of Directors received a report outlining the key findings and conclusions from the assurance. The independent assurance statement is available on page 183 of this report.

Additional information on CSN Group's performance can be found in our [Management Report](#), [Reference Form](#), Form 20-F Annual Report, [financial statements](#), [Climate](#)



→ A CSN employee at the Porto Real facility – Porto Real (RJ)

[Action Report](#), [previous editions of our integrated report](#) and on our websites at [ri.csn.com.br](https://ri.csn.com.br) and [esg.csn.com.br](https://esg.csn.com.br).

We hope you find this report useful and informative. If you have any questions or feedback about this report, please write to [sustentabilidade@csn.com.br](mailto:sustentabilidade@csn.com.br).



# How to navigate this report



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## Arrows



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## Contents



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Click this icon to access interactive content.



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Click this icon to access links pointing to additional online content.





→ A flybelt-type conveyor belt that connects the limestone mining site to the material processing and clinkering facility – Barroso (MG)

## Material Topics

Material topics describe an organization's most significant economic, environmental, and social impacts, as well as issues that can directly influence stakeholders' assessments and decisions. The CSN Group regularly conducts materiality assessments to review and update our material topics, ensuring alignment with stakeholder expectations and evolving market dynamics.

In 2023, the CSN Group carried out a structured materiality review consisting of two complementary phases. The first phase involved a comprehensive review of relevant documents, including five market studies, four ESG rating assessments, and 20 industry benchmarking assessments. The second phase assessed CSN Mineração's stakeholder engagement channels. The process included workshops with multiple internal departments to identify and assess existing engagement and feedback channels.

The material topics were also considered with inputs from existing channels and structured results from ESG and financial institution questionnaires, *Linha Verde* ("Green Line") cases, Whistleblower Channel cases, and stakeholder engagement plan (SEP) reports. Feedback gathered from workshops with managers was also incorporated, providing a broad and representative view of the expectations and concerns of customers, employees, local communities, suppliers, financial institutions, investors, industry associations, and civil society organizations.

## Double materiality incorporates two perspectives: financial and impact

The materiality assessment conducted in 2023 introduced two key improvements over previous assessments. The first was that it incorporated a financial materiality perspective within the double materiality approach. This approach assesses both external economic, social, and environmental impacts and the potential internal impact of the material topics on the organization's business operations and financial performance. The double materiality approach aligns with the International Sustainability Standards Board's (ISSB) Sustainability Disclosure Standards IFRS 1 and 2, as well as the European Sustainability Reporting Standards (ERS). This European standard will be mandatory for companies covered by the Corporate Sustainability Reporting



Directive (CSRD). Using this standard will enable us to identify the risks and opportunities inherent in our operations with greater precision and using internationally recognized practices.

The second key improvement was the integration of the materiality review with the CSN Group's stakeholder engagement and feedback channels, following an approach known as "organic materiality." This approach enables us to continuously and systematically gather stakeholder concerns and expectations, providing a dynamic and in-depth understanding of impacts from the material topics.

As a result, the CSN Group identified ten priority topics for our materiality matrix, five of which are material from both an impact and a financial perspective. These topics are addressed across the company via a robust corporate governance and risk management structure, and through innovation and new technology adoption. The material topics have been approved by the Board of Directors, confirming their alignment with company strategy.

## CSN GROUP'S MATERIAL TOPICS







## Eco-efficiency

This topic addresses the organization's environmental management practices to ensure regulatory compliance, mitigate negative environmental impacts, and optimize the use of natural resources across operations. It covers practices related to water stewardship (reducing water footprint and improving efficiency in water and effluent management), waste management (minimizing waste generation, optimizing disposal methods, promoting reuse, and advancing circular economy strategies), and air emissions (particulate matter, NOx, SOx, and other pollutants). This topic is material from an impact perspective.

### ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Revenue generated from sales of waste and co-products (R\$ million)	337.6	320.6	324.7
Waste circularity <sup>1</sup>	93%	96%	96%
Water withdrawal ('000 megaliters)	92.6	99.1	94.2

<sup>1</sup> Class 1 and 2 waste sent for recycling, re-refining, reuse, and co-processing.

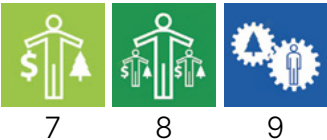


### Priority disclosures:

- GRI 303-1, 303-2, 303-3, 303--4, 303-5, 305-7, 306-1, 306-2, 306-3, 306-4 and 306-5
- SASB EM-IS-120a.1, EM-IS-140a.1, EM-IS-150a.1, EM-MM-120a.1, EM-MM-140a.1, EM-MM-150a.4, EM-MM-150a.7, EM-MM-150a.8, EM-MM-150a.9, EM-MM-150a.10, EM-CM-120a.1, EM-CM-140a.1 and EM-CM-150a.1



### Global Compact Principles



### Sustainable Development Goals (SDGs)



### Integrated Reporting Capitals









## Eco-efficiency (continued)


→ A CSN-maintained protected area – Volta Redonda (RJ)




### ESG TARGETS







 Positive

 Negative

 In progress

 Met

 New target

Segment	Target	Target KPI	Performance in 2024	Status
Steel	Reduce particulate matter emissions per metric ton of crude steel produced at the Presidente Vargas Steelworks (UPV) by 40% by 2030	Particulate matter emissions per metric ton of crude steel (kgPM/t) In 2019 (baseline): 0.78 In 2030 (target year): 0.47	0.60	
CSN Group	By 2025, compile and transparently disclose the volumes of water permitted, withdrawn, and discharged at CSN Group facilities, intersecting this data with water scarcity risks in the river basins where they are located	To make publicly available a platform that disclosed water-related information	Information was compiled in 2024. The platform will be published in 2025	
CSN Mineração	Maintain water intensity <sup>1</sup> below 0.45 m <sup>3</sup> of water withdrawn per metric ton of ore produced	Water withdrawn per metric ton of ore produced (m <sup>3</sup> /t)	0.20	
	Reach 94% water recirculation by 2032	Percentage of water recirculation In 2023 (baseline): 88.2% In 2032 (target year): 94.0%	92	
CSN Cimentos	Achieve 50% thermal substitution by 2030	% thermal substitution In 2024: 29.7%	-	
CSN Cimentos	Reduce particulate matter emissions by 25% by 2035 compared to a 2024 baseline	Particulate emissions (g/t of clinker produced) In 2024: 86 g	86	

<sup>1</sup> Water intensity is calculated based on total iron ore production (wet and dry) and water withdrawal for ore processing, including water used at the central plant, Pires Complex, and potable water supplies.





# Tailings Dams and Co-products

This topic addresses dam safety, tailings management, and repurposing mine tailings. It also describes CSN Group's dam closure and reclamation practices. This topic is material from a financial and impact perspective.

→ Aerial view of the Vigia Dam at CSN Mineração – Ouro Preto (MG)



## ESG TARGETS

Positive
 Negative
 In progress
 Met
 New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Group	Decharacterize CSN Group's upstream-raised tailings dams by 2030	Number of decharacterize dams In 2020 (baseline): 1 In 2030 (target year): 8	Five dams decharacterize: Vigia Auxiliary, Vigia, B5, Taboquinha 1, and Taboquinha 2	

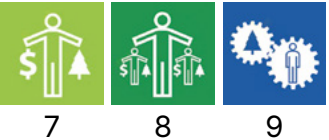


## Priority disclosures:

- SASB EM-MM-150a.5, EM-MM-150a.6, EM-MM-540a.1, EM-MM-540a.2 and EM-MM-540a.3



## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting Capitals







## Climate Change

This topic refers to the CSN Group's climate mitigation and adaptation strategies, including efforts to reduce greenhouse gas (GHG) emissions and manage climate-related risks and opportunities. This topic is material from a financial and impact perspective.

→ An aerial view of the Itá hydroelectric plant



### ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Metric tons of CO <sub>2</sub> e emissions per metric ton of crude steel	1.99	2.07	1.94
Kilograms of CO <sub>2</sub> e per metric ton of cementitious material	500	485	494
Kilograms of CO <sub>2</sub> e per metric ton of ore	7.92	7.01	6.49

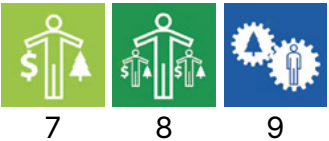


### Priority disclosures:

- GRI 201-2, 302-1, 302-2, 302-3, 302-4, 305-1, 305-2, 305-3, 305-4 and 305-5
- SASB EM-IS-110a.1, EM-IS-110a.2, EM-IS-130a.1, EM-IS-130a.2, EM-MM-110a.1, EM-MM-110a.2, EM-MM-130a.1, EM-CM-110a.1, EM-CM-110a.2 and EM-CM-130a.1



### Global Compact Principles



### Sustainable Development Goals (SDGs)



### Integrated Reporting Capitals









## Climate Change


(continued)

### ESG TARGETS








 Positive

 Negative

 In progress

 Met

 New target

Segment	Target	Target KPI	Performance in 2024	Status
Steel	Reduce CO <sub>2</sub> e emissions per metric ton of crude steel by 10% by 2030, based on the World Steel Association (WSA) methodology	Metric tons of CO <sub>2</sub> e per metric ton of crude steel In 2018 (baseline): 2.10 In 2030 (target year): 1.89	1.94	
	By 2035, reduce CO <sub>2</sub> e emissions per metric ton of crude steel by 20%, based on the World Steel Association (WSA) methodology	Metric tons of CO <sub>2</sub> e per metric ton of crude steel In 2018 (baseline) 2.10 In 2035 (target year): 1.68	1.94	
CSN Mineração	Reduce CO <sub>2</sub> e emissions per metric ton of ore produced by 30% by 2035 (Scopes 1 and 2) <sup>1</sup>	CO <sub>2</sub> e kg/t of ore produced (Scopes 1 and 2) In 2020 (baseline) <sup>2</sup> : 7.10 In 2035 (target year): 4.97	6.49	
	Achieve net-zero scope 1 and 2 emissions by 2044	Scope 1 and 2 emissions (tCO <sub>2</sub> e) In 2020 (baseline) <sup>2</sup> : 155,499 In 2044 (target year): 0	207,882	
	Maintain a 100% renewable electricity supply at CSN Mineração	Percent renewable electricity supply In 2020 (baseline): 100%	100%	
CSN Cimentos	By 2030, reduce CO <sub>2</sub> e emissions per metric ton of cementitious material by 23%, based on the Global Cement and Concrete Association (GCCA) methodology	Kilos of CO <sub>2</sub> per metric ton of cementitious material In 2020 (baseline) <sup>3</sup> : 509 In 2030 (target year): 392	494	
	Reduce the clinker factor in cement by 16%	Clinker factor In 2020 (baseline): 63.7% In 2030 (target year): 53.5%	61.4%	

<sup>1</sup> This disclosure does not include emissions from land-use changes.

<sup>2</sup> The target's baseline year was adjusted from 2019 to 2020 to reflect the period when the use of dam-free dry tailings disposal became an established practice. This major shift in tailings management significantly altered the GHG emissions profile, making 2020 a more accurate and relevant baseline year.

<sup>3</sup> The baseline was recalculated retroactively to incorporate newly acquired assets. The emissions reduction target has been approved by the Science Based Targets Initiative (SBTi) and already accounts for assets acquired in 2022. Note: CSN Cimentos' previous target to reduce electricity consumption was discontinued, as CSN Group achieved 100% self-sufficiency in renewable electricity following the acquisition and integration of new assets in 2022 and 2023. Likewise, the thermal energy reduction target was discontinued due to the integration of these new cement assets over the same period. As part of this transition, the company's decarbonization roadmap was retroactively updated to reflect the segment's revised emissions profile.








## Biodiversity


This topic describes the organization’s practices to mitigate biodiversity impacts and compensation, reforestation, monitoring, and conservation efforts. It also addresses progress in managing ecosystem services, and nature-related risks and opportunities. This topic is material from an impact perspective.


### ESG TARGETS



 Positive

 Negative

 In progress

 Met

 New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Group	Using the BIO Methodology, evaluate biodiversity conditions at all operational sites with significant impacts to biodiversity by 2025	Percentage of operations assessed In 2023 (baseline): 70% In 2025 (target year): 100%	100%	
CSN Mineração and Minérios Nacional (MIPE)	Achieve no net loss for biodiversity and, whenever possible, a net gain	This is a composite indicator based on quantitative factors (area impacted × area protected or restored to offset impacts)	2.5 ha cleared	

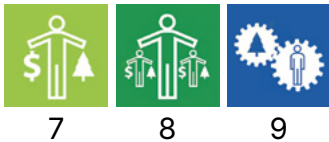


### Priority disclosures:

- GRI 101-1, 101-2, 101-4, 101-5, 101-8
- SASB EM-MM-160a.1, EM-CM-160a.1



### Global Compact Principles



### Sustainable Development Goals (SDGs)



### Integrated Reporting capitals














## Local Communities

This topic describes CSN community engagement practices, efforts to minimize impacts from operations on communities, and private social investments aimed at reducing inequalities, fostering transparent dialog, and promoting local development. This topic is material from an impact perspective.

## ESG TARGETS

 Positive  Negative  In progress  Met  New target

Segment	Target	Target KPI	Performance in 2024	Status
Steel	By 2024, implement two community projects for the elderly in Volta Redonda	Project implementation	2 projects implemented: <i>Os Bailes da Vida</i> and <i>Resgatando Saberes</i>	
	By 2028, expand capacity-building programs for local organizations to cover 80% of the areas where the <i>Garoto Cidadão</i> program is present, supporting the social and sustainable development of these communities	Percentage of areas reached In 2023 (baseline): 36% In 2028 (target year): 80%	Capacity-building sessions were delivered in São Paulo (SP) and Volta Redonda (RJ), benefiting 51 organizations. Training provided in 43% of the areas where the <i>Garoto Cidadão</i> program is present	
CSN Mineração	By 2027, expand initiatives and roll out our stakeholder engagement plan in municipalities directly affected by our operations	Initiatives during the year	Two initiatives: Social and Economic Monitoring Program and environmental and social risk assessment for the P15 project	

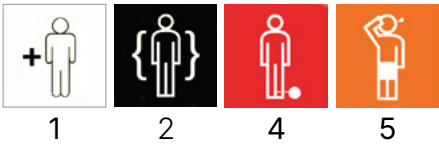


## Priority disclosures:

- GRI 203-1, 413-1 and 413-2
- SASB EM-MM-210b.1



## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting capitals







## Human Rights

This topic relates to issues regarding respect for and protection of human rights. It is particularly material to the mining segment, addressing potential impacts on local communities, indigenous peoples, and traditional populations, as well as aspects related to decent work, including the eradication of child, forced, or slave-like labor. This topic is material from an impact perspective.

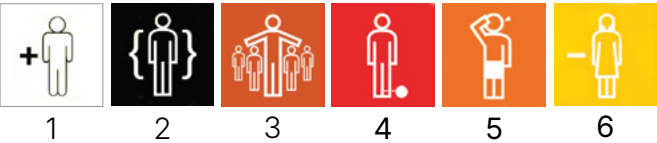


### Priority disclosures:

- GRI 408-1, 409-1 and 411-1
- SASB EM-MM-210a.1, EM-MM-210a.2 and EM-MM-210a.3



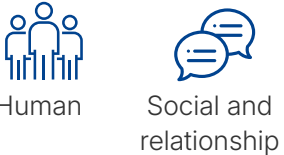
### Global Compact Principles



### Sustainable Development Goals (SDGs)



### Integrated Reporting capitals












## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Employees trained in human rights (thousand) <sup>1</sup>	20.1	29.3	31.2


<sup>1</sup> Refers to CSN's direct employees in Brazil, who represent 96% of the workforce. This disclosure is inclusive of all direct employees, including employees terminated prior to 12/31/2024. For this reason, the number of employees trained exceeds the total headcount.

## ESG TARGETS

 Positive  Negative  In progress  Met  New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Cimentos	Implement a Stakeholder Engagement Plan (SEP) at the Alhandra/PB and Arcos/MG sites by 2025	Plan implementation	Completed	
CSN Mineração	In 2024, update the human rights training provided to CSN Mineração's Security team	Refresher training	Refresher training taken	
	By 2025, complete 50% of the recommendations from the human rights due diligence conducted in Congonhas (MG)	Percentage of recommendations implemented	56%	
	By 2027, complete 100% of the recommendations from the human rights due diligence conducted in Congonhas (MG)	Percentage of recommendations implemented	56%	






### Health, Safety and Well-being

This topic describes efforts to promote a safe and healthy workplace for employees and contractors through occupational health and safety programs. It also includes health promotion efforts going beyond occupational safety to foster quality of life and wellbeing of employees. This topic is material from a financial and impact perspective.

ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Number of injuries	4	6	0
TRIFR <sup>1</sup>	1.79	1.80	1.87



<sup>1</sup> Total Recordable Injury Frequency Rate: includes both lost-time and non-lost-time injuries involving employees and contractors, calculated per 1 million hours worked.







### Priority disclosures:

- GRI 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9 and 403-10
- SASB EM-IS-320a.1, EM-MM-320a.1, EM-CM-320a.1 and EM-CM-320a.2

ESG TARGETS

 Positive  Negative  In progress  Met  New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Group	Reduce the reportable injury frequency rate by at least 30% by 2030	The reportable injury frequency rate includes both lost-time and non-lost-time accidents for employees and contractors, per 1 million hours worked In 2020 (baseline year): 2.46 In 2030 (target year): 1.72	1.87	
	Reduce the number of lost workdays among employees by at least 30% by 2030	Lost workdays involving employees. In 2021 (baseline): 2,541 In 2030 (target year): 1,779	2,550	
	Achieve a zero fatality rate	Number of fatal injuries involving employees and contractors	0	
CSN Mineração	Reduce the reportable injury frequency rate by at least 30% by 2030 <sup>1</sup>	The reportable injury frequency rate includes both lost-time and non-lost-time accidents for employees and contractors, per 1 million hours worked: 1.96 In 2030 (target year): 1.37	0.99	

<sup>1</sup> This target was met in 2024 and will be maintained through 2030.



### Global Compact Principles





### Sustainable Development Goals (SDGs)





### Integrated Reporting capitals







## People Management and DE&I

This topic addresses the CSN Group's strategy and key initiatives to develop employees, retain talents, improve the organizational climate, and ensure alignment with our strategic objectives and culture. It also includes efforts to foster a diverse, equitable, and inclusive workplace, particularly regarding gender, race, and the employment of individuals with disabilities. This topic is material from a financial and impact perspective.






## ESG SCORECARD PERFORMANCE



KPI	2022	2023	2024
Female representation at CSN Group <sup>1</sup>	20.5%	23%	25%
Female representation in leadership positions at CSN Group <sup>2</sup>	13%	15%	15.5%

<sup>1</sup> Includes direct employees in Brazil as well as participants in the Apprentice, Internship, and Capacitar programs. These figures differ from GRI disclosures, as the GRI data does not cover the Internship Program. The data exclude businesses acquired after the target was set, as well as roles brought in through insourcing initiatives from 2024 onward, as part of CSN's commitment to preserving the jobs of employees already occupying those roles.

<sup>2</sup> Includes the following levels: Supervisor, Coordinator, Manager, General Manager and Executive.

## ESG TARGETS

 Positive  Negative  In progress  Met  New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Group	Reach 28% female representation in the workforce by 2025 <sup>1</sup>	Percentage of women in total workforce In 2020 (baseline): 14.3% In 2025 (target year): 28.0%	25	
CSN Mineração	Double the percentage of women in the workforce by 2025	Percentage of women in total workforce In 2019 (baseline): 13% In 2025 (target year): 26%	26	

<sup>1</sup> Includes direct employees in Brazil as well as participants in the Apprentice, Internship, and Capacitar programs. These figures differ from GRI disclosures as the GRI data does not cover the Internship Program. The data excludes businesses acquired after the target was set, as well as roles brought in through insourcing initiatives from 2024 onward, as part of CSN's commitment to preserving the jobs of employees already occupying those roles.

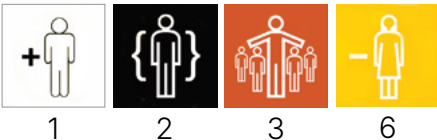


## Priority disclosures:

- GRI 401-1, 404-3, 405-1, 405-2 and 406-1
- SASB EM-MM-310a.1, EM-MM-310a.2



## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting capitals







## Ethics and Compliance


This topic addresses governance and management practices to ensure compliance with applicable laws and ethical business conduct, including preventive measures and mechanisms for reporting, investigating, and addressing misconduct. This topic is material from a financial and impact perspective.



## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Percentage of employees trained in compliance <sup>1</sup>	83%	100%	100%

<sup>1</sup> Refers to CSN's direct employees in Brazil, who represent 96% of the workforce.

## ESG TARGETS

 Positive  Negative  In progress  Met  New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Group	Maintain 100% compliance training coverage among active employees, including the Code of Conduct and Anti-Corruption Policy <sup>1</sup>	Percentage of employees trained in compliance	100%	
	Continually improve compliance with best governance practices established by CVM Instruction No. 80/2022	Percentage of full or partial conformity to best practices, as outlined in CVM Instruction No. 80/2022 In 2018 (baseline) 41%	76%	

<sup>1</sup> Refers to CSN's direct employees in Brazil, who represent 96% of the workforce.



## Priority disclosures:

- GRI 205-1, 205-2, 205-3, 207-1, 207-2, 207-3 and 207-4
- SASB EM-MM-510a.1, EM-MM-510a.2 and EM-CM-520a.1



## Global Compact Principles



10



## Sustainable Development Goals (SDGs)



## Integrated Reporting capitals



Human



Social and relationship



Value chain

This topic describes the CSN Group's strategy and key initiatives to promote sustainable development throughout our value chain, including suppliers, customers, and other partners. It covers the processes in place to ensure compliance and adopt ESG best practices within the supply chain. This topic is material from an impact perspective.



Priority disclosures:

- GRI 204-1, 308-1 and 414-1
- SASB EM-IS-430a.1, EM-CM-410a.1 and EM-CM-410a.2



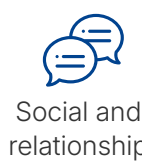
Global Compact Principles



Sustainable Development Goals (SDGs)



Integrated Reporting capitals



ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Percentage of spending on locally-based suppliers	27.8%	34.4%	41.1%
Suppliers assessed through compliance due diligence	936	3394 <sup>1</sup>	1,616

<sup>1</sup> The significant increase in 2023 reflects the integration of assets acquired by CSN Cimentos in the previous year.

ESG TARGETS

Positive Negative In progress Met New target

Segment	Target	Target KPI	Performance in 2024	Status
CSN Group	Assess 100% of critical suppliers using the Supply Chain ESG Risk Matrix for social and environmental aspects by 2026	Percentage of suppliers assessed	-	



# Messages from **THE LEADERSHIP**



## IN THIS CHAPTER

- Message from the  
Board of Directors

- Message from the CEO



→ Limestone blending stockpiles for clinker feed – Barroso (MG)

## Message from the Board of Directors

The year 2024 was challenging for CSN Group, amid a volatile global landscape marked by commodity price fluctuations, exchange rate impacts on imports, and a complex economic environment. It is in precisely these moments that we, the Board of Directors, reaffirm our confidence in CSN's business model, grounded in integration, resilience, operational efficiency, and financial discipline—four pillars that successfully navigated our businesses through this turbulent period.

A major highlight from the year was **CSN Mineração's** exceptional levels of production performance, supported by disciplined cost control and operational efficiency gains. Lower mining costs, paired with a well-calibrated commercial strategy, ensured a solid performance in the segment. Looking forward, we are excited about our pipeline of strategic investments, such as the completion of our P15 Itabirite Plant—a key milestone that will strengthen CSN's global position by expanding capacity for high-grade ore while improving margins, strengthening cash flow, and contributing to the decarbonization of the global steel value chain.

CSN's business diversification strategy with the expansion of **CSN Cimentos** has proven crucial in balancing exposure to global market effects. CSN Cimentos delivered outstanding performance in 2024, significantly outpacing industry growth—fueled by momentum in civil construction and infrastructure investments. We also

CSN Group blends tradition with innovation to stay ahead of market trends

delivered record EBITDA in this segment, surpassing R\$ 1 billion for the first time. Our geographic expansion and portfolio diversification strategy further strengthened CSN Cimentos' position as an industry-leading player with top-tier margins.

The **steel** segment faced headwinds in the year, notably from increased import pressures and the effects of China's trade policy, which exerted downward pressure on global steel markets. The influx of Chinese products in 2023 and 2024 added to the challenges for the domestic industry, requiring a strategic response to protect our competitive position. The imposition of provisional antidumping duties on metal sheets in October 2024 provided important relief, and we anticipate that the final



ruling will further strengthen our position in the market. Despite these challenges, we advanced our operational recovery—increasing production, cutting costs, and growing our share of the domestic steel market.

In **logistics**, infrastructure integration and development remain top priorities. Construction on the Transnordestina Railway—one of CSN Group's most strategic projects—has continued to progress, with Phase I now 71% complete. This infrastructure will be essential for optimizing the transportation of grains, minerals, and other materials, boosting our efficiency and adding value across our operations. We also announced the acquisition of Grupo Tora, a strategic addition that expands our logistics footprint and enhances our road transport and multimodal integration capabilities—optimizing transportation throughput and improving operational efficiency.

**We have strengthened our ESG governance** through initiatives that support employee safety and generate positive social impact

In the **energy** segment, we consolidated our platform with 100% renewable electricity, providing a self-sufficient, competitive and secure energy supply across operations. Our transition to the Natural Gas Free Market was another strategic milestone, enabling greater flexibility, lower costs, and supporting the decarbonization efforts at our Presidente Vargas Steelworks. We are also modernizing and expanding our renewable generation assets, strengthening our clean energy capabilities.

Further progress was made on our sustainability and innovation agenda throughout the year. We reduced our steel business emissions intensity by 8% relative to our baseline, and pioneered the use of green hydrogen technology from Portuguese firm UTIS in the blast furnace 2 regenerators—an important step toward more

sustainable steelmaking. In addition, we continued to strengthen our ESG governance through initiatives focused on employee safety, diversity, and positive social impact in the communities where we operate.

Looking ahead, we remain committed to a disciplined management approach focused on value creation and business sustainability. We will continue to prioritize strategic investments that support sustainable growth, preserve financial strength, and advance our goal of deleveraging and achieving investment-grade status. With a diversified portfolio, operational excellence, and a long-term vision, CSN is well-positioned to meet future challenges and continue on its path of growth.

**CSN Group Board of Directors**



→ A Transnordestina Logística locomotive – Salgueiro (PE)



## Message from the CEO

At CSN Group, we operate on the belief that maximizing synergy among our business segments—steel, mining, cement, logistics, and energy—is an imperative for long-term value creation. It was this approach that enabled us to navigate the challenges of 2024, including high interest rates, a strong dollar, and a softening in demand. Amid these headwinds, our combined strengths—strategic investments, financial discipline, innovation, and cost efficiency—allowed us to adapt and drive operational excellence, sustaining our position as one of Brazil's leading industrial groups.

In navigating an environment marked by geopolitical uncertainty and persistently high domestic interest rates, we continued to rely on strong, prudent management. During the year, we chose not to pursue aggressive expansion through cement acquisitions in Brazil, and we sold a 10.74% stake in CSN Mineração to Itochu Corporation—as part of our commitment to structural solidity, deleveraging, and building resilience to navigate across economic cycles.

In the **steel segment**, we stayed the course in restoring our legacy as one of the market's lowest-cost producers—and we are on track to achieve this. We maintained our investment plan focused on increasing output and rebuilding margins. These efforts yielded a 9.1% reduction in slab production costs and a 9.2% increase in sales volumes, taking our domestic market share to 24.2%—a level not reached since 2020.

**CSN Cimentos** had an exceptional year, demonstrating sharp execution of our business strategy. The segment's results were impressive: a record sales volume of over 13.5 million metric tons, while unit costs declined as we captured synergies and diluted fixed costs. We are proud to be establishing ourselves as a major player in the Brazilian cement sector, growing our market share to approximately 21%, with an industry-leading EBITDA margin of 28.5%—substantially above our peers.

**CSN Mineração** had another strong year operationally, with a 3.78 million increase in production output that supported significant cost reductions, as reflected in a C1 cost of US\$ 21.0 per metric ton. Looking to 2025, we anticipate new stimulus measures from the Chinese government, likely to drive local demand and offset global trade constraints.

In **logistics**, we achieved strong results at both MRS Logística and Transnordestina (FTL), boosting rail segment net revenue by 9.3% and achieving an EBITDA margin of 48.3%. In port logistics, the year was highly positive as container operations rebounded on the back of a recovery in the overseas shipping market, resulting in a 134.2% increase in container volumes and a 35.4% increase in net revenue—with an impressive EBITDA margin of 36.9%.



→ Benjamin Steinbruch,  
CEO



In the **energy**, CSN was among the first players to capture opportunities from the opening natural gas market in Rio de Janeiro, transitioning our Presidente Vargas Steelworks (UPV) to the free market, a move that has helped to boost industrial competitiveness while furthering our commitment to the energy transition.

We also made strong progress on our environmental agenda. In mining, we achieved a 9% reduction in greenhouse gas (GHG) emissions; in cements (a segment that accounts for over 40% of the Group's total emissions), CSN continued to report one of the world's lowest CO<sub>2</sub> intensities and is on track to reduce emissions per metric ton of cement by 23% by 2030—a target now validated by the Science Based Targets initiative (SBTi). In the steel segment, innovative technologies and more efficient raw materials reduced our CO<sub>2</sub> intensity by 8% compared to our baseline.

Through CSN Inova, we deployed new technologies and optimized industrial processes. In five years, these projects generated over R\$ 620 million in financial gains, while accelerating our digital transformation and reducing waste. One of the highlights from the year was Selene,



→ Ore stackers at CSN Mineração – Congonhas (MG)

a project that will use renewable electricity to produce hydrogen—supporting our commitment to sustainability and a low-carbon economy.

These results have only been possible because of the thousands of dedicated employees who are engaged around our purpose. Safety remains a non-negotiable value. Our AGIR program significantly reduced accident severity rates in the year and helped us achieve our target of zero fatalities among employees and contractors. We also delivered further on our diversity commitment through our *EMPODERA* and *Primeira Liderança* initiatives, which increased female representation in our operations. We now have more than 7,000 women in our workforce. In social responsibility, we invested R\$ 66 million in projects that benefited over 6,000 people.

In 2025, we will continue to pursue strategic opportunities—but always the CSN way: with responsibility, financial discipline, and sustainable value creation for all of those sharing our journey.

**Benjamin Steinbruch**  
CEO, CSN Group



# 2024 OVERVIEW



## IN THIS CHAPTER

• The Year at a Glance

• Awards and Recognition





## 2024 Highlights

### Mining



**Highest production**

levels since 2019



**41,997,000**

metric tons of iron ore produced  
(produced + sourced)



**42,552,000**

metric tons sold



**R\$ 13 billion**  
net revenue



**R\$ 5.8 billion**  
Adjusted EBITDA





## Steel



**3,786,000**

metric tons of steel produced  
(+14.9% compared to 2023 and the highest since 2022)



**3,474,000**

metric tons of rolled products produced  
(+11.9% compared to 2023)



**R\$ 23,179 million**

in net revenue



**R\$ 1,603 million**

Adjusted EBITDA





## Cement



**13,524,000**

metric tons of cement sold  
(+5.9% compared to 2023)



**R\$ 4,766 million**

in net revenue



**R\$ 1,361 million**

Adjusted EBITDA





## Energy



**R\$ 521 million**  
in net revenue



**R\$ 143 million**  
Adjusted EBITDA



## Logistics



**R\$ 3,245 million**  
in net revenue



**R\$ 1,527 million**  
Adjusted EBITDA





## Innovation



**R\$ 620 million**

in savings generated by  
CSN Inova projects



World-first innovation in steelmaking:

**green hydrogen  
injection**

into the regenerators of UPV's  
Blast Furnace #2



**Selene project**

for commercial-scale green  
hydrogen production





## Governance



### Industry Top Rated 2024 badge

awarded by rating agency Sustainalytics:  
CSN was recognized as an ESG leader in the steel sector



### Completed our Supply Chain ESG Risk Matrix



### Secured approval of CSN Cimentos' SBTi CO<sub>2</sub> reduction target



### 100% of employees trained in compliance





## People



**Zero**  
fatalities in the year



**A 10.4% increase**  
in women in the workforce



**R\$ 66 million**  
invested in corporate social responsibility projects, benefiting more than 6,000 people





## Environment



**6% reduction**

in CO<sub>2</sub> emission intensity in steelmaking



**7% reduction**

in CO<sub>2</sub> emission intensity in mining



**5% reduction**

in CSN Group's water withdrawals



**R\$ 1.3 billion**

in environmental investments (CAPEX + OPEX)





# Awards and Recognition

## Top 100 Open Corps

CSN climbed from 41<sup>st</sup> to 18<sup>th</sup> in the overall ranking and ranked 3<sup>rd</sup> in the Mining and Metals category, underscoring our leadership in the open innovation ecosystem.

## Exame Magazine Biggest & Best 2024

CSN Mineração was ranked 3<sup>rd</sup> in the "Steel, Mining, and Metallurgy" category, consolidating its position as one of the largest and most successful mining companies in Brazil.

## Broadcast Empresas 2024

Organized by *Grupo Estado*, CSN Mineração secured second place in the 24<sup>th</sup> edition of the awards, which recognized the company's strong growth in shareholder value.



## O Grande Encontro – High-Performance Teams 2024

Hosted by the Brazilian Union for Quality (UBQ), the event recognizes stand-out business initiatives in innovation and operational excellence. CSN Mineração won:

- **1<sup>st</sup> place in LEAN:** crushing circuit material feed optimization
- **1<sup>st</sup> Place in Agile Methods:** applying AI in preventing shipping rate reductions due to critical safety factors.
- **2<sup>nd</sup> Place in 5S:** transformation of a model equipment maintenance workshop.
- **3<sup>rd</sup> place in Maintenance and Reliability Management (GMC):** increased availability of heavy haul trucks at the Casa de Pedra Mine.



## Great Place to Work (GPTW)

CSN Cimentos was recognized as one of the 20 best workplaces in the state of Rio de Janeiro, reflecting its strong commitment to employee well-being and building a positive organizational culture.

## Ser Humano Award – (Brazilian Association of Human Resources - Brazil Chapter (ABRH-Brazil))

CSN Cimentos earned 1<sup>st</sup> place in the Development category for its “Industrial Academy” program, recognized for advancing professional training and upskilling in the industrial sector.

## InterZAC 2024 Awards

Organized by the Brazilian Zinc-Aluminum Coaters Association (ZAC), CSN received the award for surpassing 5 million metric tons of Galvalume® produced at its CSN Paraná facility.

## P4E Program

CSN Cimentos participated in the 2024 edition of Danone’s supplier development program, competing with other top-tier partners and reinforcing its role as a strategic industry partner.



## ANTT Destaques 2024 Award

Transnordestina Logística received an award in the Infrastructure Management category for its “Upper and lower rail base grinding” project, designed to enhance railway construction safety. The company also won silver in the Regulatory Excellence category and was ranked among the top three in Environmental Sustainability for its innovative environmental inspection data and community engagement system.

## SESI SDG 2024 Badge

The CSN Foundation received the SESI SDG Badge for the second year in a row, this time in recognition of its Environmental Education Program (PEA). The award reaffirms the organization’s commitment to ESG principles and sustainable development.

## Racial Equality Badge

The CSN Foundation was certified by the São Paulo Municipal Office for Human Rights and Civics and joined the city’s Racial Diversity Network, underscoring its on-going commitment to inclusion and racial equity.

## Human Rights and Diversity Award

In recognition of its efforts to promote human rights and diversity through its *Garoto Cidadão* and *Bolsa de Teatro* programs, the CSN Foundation once again received the Human Rights and Diversity Badge from the São Paulo City Hall’s Office for Human Rights and Civics.



# Corporate PROFILE



## IN THIS CHAPTER

- About CSN Group

- Business Model



# About CSN Group

Companhia Siderúrgica Nacional (“CSN” or “CSN Group”) is a Brazilian multinational headquartered in São Paulo, recognized as the largest integrated industrial conglomerate in the country’s basic industries sector. Founded in 1941 during Brazil’s *Estado Novo* era by decree of then-President Getúlio Vargas, CSN played a foundational role in the country’s early industrialization. The steel produced by CSN enabled the development of Brazil’s first manufacturing industries, forming the backbone of the nation’s emerging industrial sector.

Since its privatization in 1993, CSN has consistently diversified its operations. With over 84 years of history, CSN operates synergistically across five core segments:

## STEEL

The mainstay of multiple industrial sectors



## MINING

Producing high-grade iron ore for domestic and overseas markets



## CEMENT

Supplying essential materials for Brazil’s infrastructure development



## LOGISTICS

Ensuring efficient transport and distribution of materials and finished products



## ENERGY

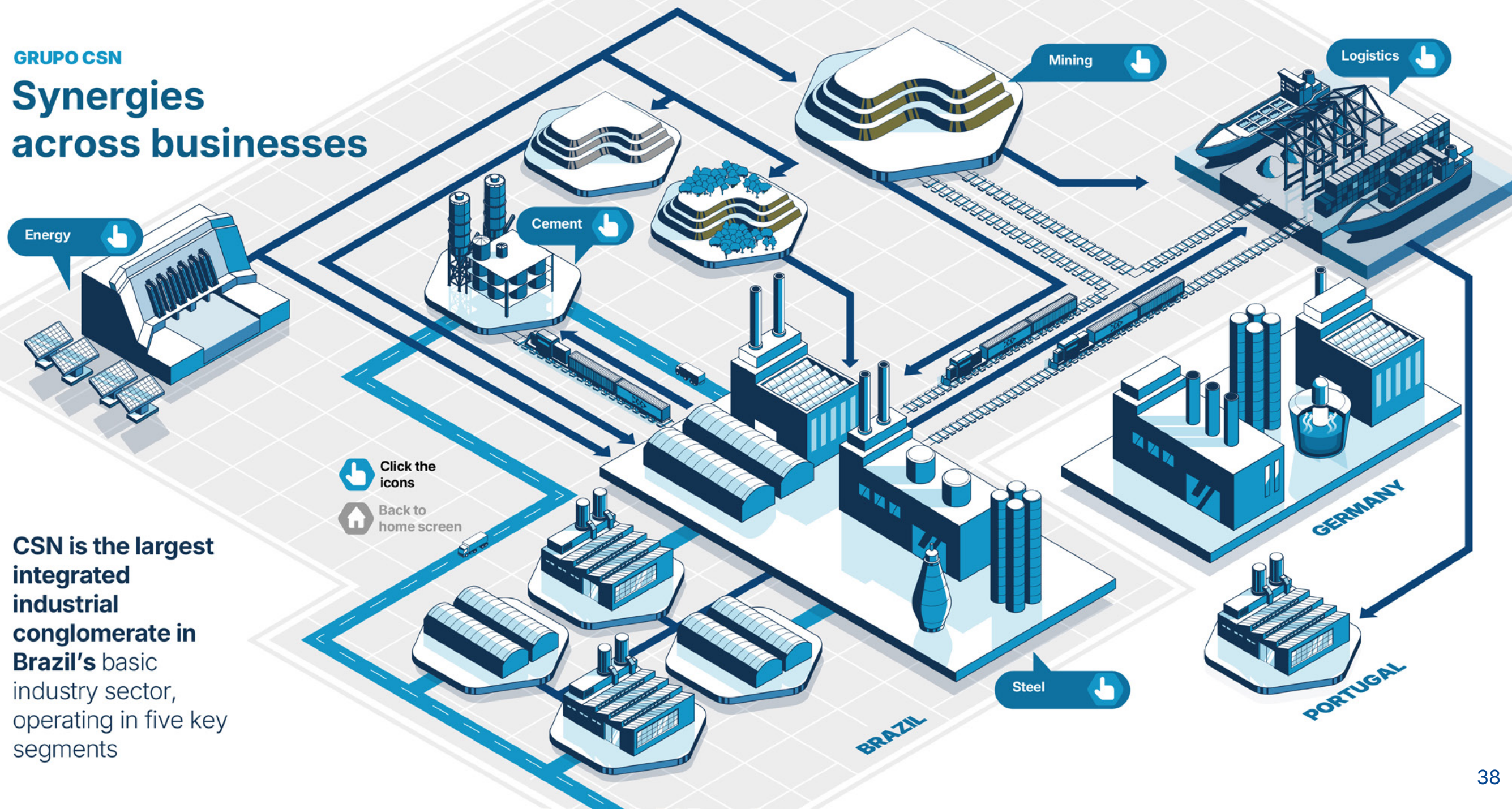
A strategic asset that ensures energy self-sufficiency and cost competitiveness





GRUPO CSN

# Synergies across businesses



CSN is the largest integrated industrial conglomerate in Brazil's basic industry sector, operating in five key segments



In recent years, CSN has invested in expanding and bolstering its operations. In 2024, we executed two strategic transactions to expand our presence in key markets. In the steel segment, we increased our stake in Panat-lântica—one of Brazil's most modern flat steel service centers—to 29.92%. In logistics, we acquired a 70% share in Grupo Tora, a leading transport and distribution company in Brazil. These moves will strengthen CSN's structural resilience and support our long-term growth and diversification strategy.

CSN's diversified business model enables us to capture cross-business synergies and improve our competitiveness in global markets. Our integrated operations and optimized processes drive increased productivity and cost optimization. CSN Inova, our innovation platform, supports our forward-looking vision and ongoing investments in disruptive technologies, sustainability, and digital transformation. This ensures that CSN remains at the forefront of market trends, solidifying our reputation as a resilient company that blends tradition with innovation.

## Diversified

**operations** strengthen CSN's global competitiveness



## Commitment to Society

The CSN Foundation supplements our business model by translating social responsibility into meaningful, high-impact initiatives. Through education, culture, institutional support, and curation activities, the Foundation seeks to transform communities and foster sustainable development—reaffirming CSN's role as a company that goes beyond profit to advance social well-being and help build a more just and sustainable future.

→ A young participant in our Garoto Cidadão program



# CSN Group's Essence:

CSN operates under an overarching commitment to excellence, innovation, and sustainability. Guided by a clear mission, an inspiring vision, and solid core values, CSN Mineração strives to balance consistent performance with corporate responsibility, building a future that reflects our pride in being a Brazilian company.



## FAZER BEM

We seek to set the standard in everything we do, always striving for operational excellence. We work with passion, take ownership of our actions, and achieve consistent results with safety, quality, and customer satisfaction.



## FAZER MAIS

We achieve more with less, driven by innovation and commitment. We consistently strive to optimize results and processes, ensuring continuous and responsible growth.



## FAZER PARA SEMPRE

We are committed to continuous learning as we work to build a sustainable future. That is our definition of success.



## MISSION

Leverage integration and innovation to achieve sustainable, lasting development.



## VISION

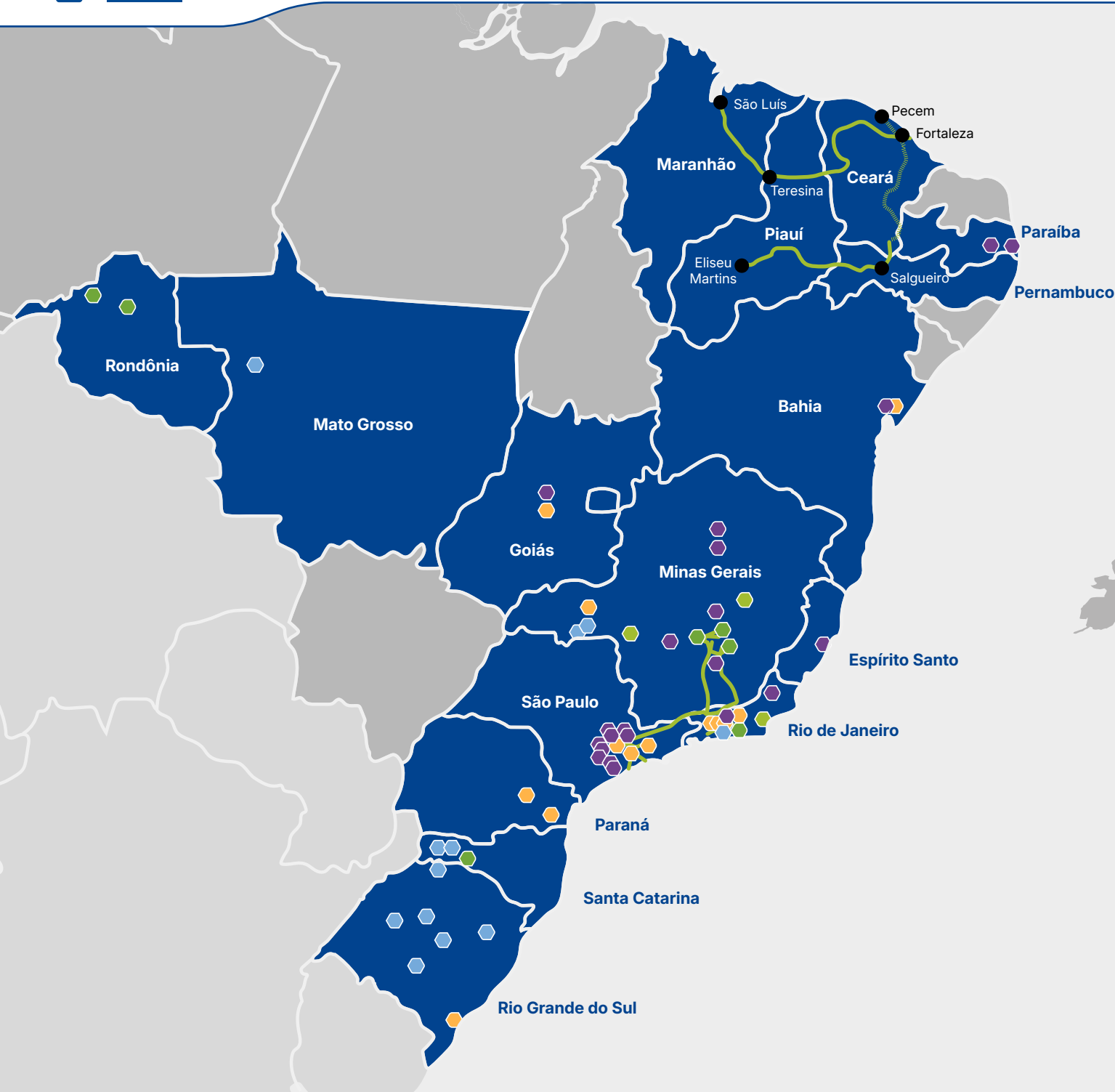
To be Brazil's most respected industrial group and a globally recognized industry leader, strengthening what it means to be Brazilian.



## VALUES

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





# Operations in Brazil and Globally



Leveraging synergies across five integrated business segments, CSN optimizes processes, enhances efficiency, and maximizes cost savings






## NORTH

### Rondônia



- |   |                                |                 |
|---|--------------------------------|-----------------|
|  | ERSA – Other mining operations | Ariquemes       |
|  | ERSA – Other mining operations | Itapuã do Oeste |

## NORTHEAST

### Maranhão

- |   |             |          |
|---|-------------|----------|
|  | FTL Railway | São Luís |
|---|-------------|----------|



### Piauí

- |   |              |                |
|---|--------------|----------------|
|  | FTL Railway  | Teresina       |
|  | TLSA Railway | Eliseu Martins |



### Pernambuco

- |   |                                     |           |
|---|-------------------------------------|-----------|
|  | TLSA – Transnordestina Logística SA | Salgueiro |
|---|-------------------------------------|-----------|



### Ceará

- |   |  |           |
|---|--|-----------|
|  | FTL – Ferrovia Transnordestina Logística | Fortaleza |
|  | TLSA – Transnordestina Logística SA      | Fortaleza |

### Bahia


- |   |  |          |
|---|--|----------|
|  | Prada Distribuição - Steel distributor | Camaçari |
|  | Grinding                               | Candeias |

### Paraíba



- |   |        |          |
|---|--------|----------|
|  | Cement | Alhandra |
|  | Cement | Caaporã  |

## MIDWEST

### Mato Grosso











- |   |              |           |
|---|--------------|-----------|
|  | Sacre II SHP | Brasnorte |
|---|--------------|-----------|

### Goiás













- |   |                                 |            |
|---|---------------------------------|------------|
|  | Grinding                        | Cocalzinho |
|  | Metalgráfica Iguaçu – Packaging | Goiânia    |

## SOUTHEAST











### Minas Gerais

- |   |  |                |
|---|--|----------------|
|  | MIPE – Other mining operations               | Rio Acima      |
|  | CSN Mineração - Casa de Pedra                | Congonhas      |
|  | CSN Mineração – Pires                        | Ouro Preto     |
|  | Prada Embalagens - Steel packaging           | Uberlândia     |
|  | Cement                                       | Montes Claros  |
|  | Cement                                       | Pedro Leopoldo |
|  | Cement                                       | Barroso        |
|  | Cement                                       | Arcos          |
|  | Igarapava HPP¹ - Hydropower plant            | Igarapava      |
|  | Cachoeira dos Macacos SHP - Hydropower plant | Perdizes       |


### São Paulo

- |   |  |                        |
|---|--|------------------------|
|  | Prada Embalagens - Steel packaging     | São Paulo              |
|  | Prada Distribuição - Steel distributor | Mogi das Cruzes        |
|  | Prada Distribuição - Steel distributor | Vargem Grande Paulista |
|  | Aggregates                             | Mairiporã              |
|  | Aggregates                             | Sorocaba               |
|  | Aggregates                             | Cajamar                |
|  | Aggregates                             | Barueri                |
|  | Grinding                               | Sorocaba               |
|  | Concrete                               | Guarujá                |
|  | Concrete                               | Santo André            |
|  | Concrete                               | São Jose dos Campos    |
|  | Concrete                               | São Vicente            |

### Rio de Janeiro



- |   |   |   |  |                |
|---|---|---|--|----------------|
|   |  |  | Presidente Vargas Plant                | Volta Redonda  |
|  |   |   | Cement                                 | Cantagalo      |
|  |   |   | Grinding                               | Rio de Janeiro |
|  |   |   | CSN Porto Real                         | Porto Real     |
|  |   |   | Prada Distribuição - Steel distributor | Valença        |
|  |   |   | Prada Embalagens - Steel packaging     | Resende        |
|  |   |   | Sepetiba TECON - Container Terminal    | Itaguaí        |
|  |   |   | TECAR PORT - Solid Bulk Terminal       | Itaguaí        |

### Espírito Santo





- |  |          |         |
|--|----------|---------|
|  | Grinding | Vitória |
|--|----------|---------|

## South






### Paraná

- |   |                                 |              |
|---|---------------------------------|--------------|
|  | CSN Paraná                      | Araucária    |
|  | Metalgráfica Iguaçu – Packaging | Ponta Grossa |

### Santa Catarina

- |   |   |          |
|---|---|----------|
|  | Santa Ana SHP - Hydropower plant        | Angelina |
|  | Foz de Chapecó HPP¹ - Hydropower plant  | Chapecó  |
|  | Itá HPP¹ - Hydropower plant             | Itá      |
|  | Quebra-Queixo Hydroelectric Power Plant | Ipuaçu   |


### Rio Grande do Sul

- |   |   |            |
|---|---|------------|
|  | Furnas do Segredo SHP¹ - Hydropower plant | Jaguari    |
|  | Dona Francisca HPP¹ - Hydropower plant    | Nova Palma |
|  | Ceran¹                                    | -          |
|  | CEEE - G                                  | -          |
|  | Prada Embalagens - Steel packaging        | Pellets    |

¹ Non-controlling interests in subsidiaries


## UNITED STATES

### New York

- |   |         |               |
|---|---------|---------------|
|  | CSN LLC | New York (HQ) |
|---|---------|---------------|


## GERMANY

### Thuringia






- |   |                     |                 |
|---|---------------------|-----------------|
|  | Stahlwerk Thüringen | Unterwellenborn |
|---|---------------------|-----------------|

## PORTUGAL

### Setubal

- |   |           |        |
|---|-----------|--------|
|  | Lusosider | Seixal |
|---|-----------|--------|

### KEY

-  Steel    Cement    Logistics    Mining    Energy



# Business Model

CSN uses the business model framework established by the International Integrated Reporting Council (IIRC) to demonstrate how we create financial and non-financial value. This model provides a comprehensive overview of how the CSN Group utilizes its available capitals—financial, manufactured, intellectual, social & relationship, human, and natural—to deliver outcomes that create lasting positive impact for shareholders, employees, communities, and the environment. CSN's business model illustrates our approach to balancing economic performance with social and environmental responsibility.



Click the icon for each capital below to learn more about the different inputs and value creation KPIs.

Financial capital

Manufactured capital

Intellectual capital

Social and relationship capital

Human capital

Natural capital

Inputs

Operating model

Value creation

Innovation and Technology

Our Essence

ESG Management

Corporate Governance

Risk management





# Modernization **AND EXPANSION**



## IN THIS CHAPTER

- Growth Strategy

- Innovation and Technology

CM7935



# Growth Strategy

CSN pursues a strategy centered on sustainable growth and long-term value creation. We are focused on diversifying our business portfolio and enhancing synergies across our core segments: steel, mining, cement, logistics, and energy. With sustainability and innovation as guiding principles, CSN actively works to solidify our leadership in these key markets while advancing the decarbonization of our operations.

This strategy is reflected in projects designed to increase operational efficiency through investments in technology and innovation—driving competitiveness and reducing environmental impacts. Our goal in these projects is not only to expand market share but also to transform and modernize our operations, developing future-ready solutions while also prioritizing environmental responsibility and the well-being of our communities.



→ Long steel products  
– Presidente Vargas Steelworks, Volta Redonda (RJ)

## Steel

Steelmaking is CSN Group's flagship business, where a fully integrated value chain—from iron ore and tin extraction via our subsidiaries CSN Mineração (CMIN) and Estanho Rondônia S.A. (ERSA), to the production and marketing of an extensive portfolio of steel products. These include flat steel, coated and galvanized products, pre-painted products, tinplate, long steels (rebar and wire rod), as well as cans and packaging.

The centerpiece of CSN's steel operations is the Presidente Vargas Steelworks (UPV) in Volta Redonda (RJ), one of Latin America's largest steel production facilities, with an installed capacity of 5.6 million metric tons per year. UPV is equipped to meet the most demanding standards of quality and innovation across multiple industries.

It also serves international markets, including Lusosider in Portugal, with capacity to process up to 550,000 metric tons annually of cold-rolled, pickled, and oiled steel, along with tinplate supplied from Brazil. Supplementing our global presence is CSN LLC in the US, which imports and distributes a broad range of steel products—galvanized and Galvalume® steel, pre-painted coils, tinplate, cold- and hot-rolled steels, and long products.

In Brazil, CSN operates advanced steel processing facilities in Porto Real (RJ) and Araucária (PR), serving the automotive, appliance, and construction markets. The Araucária facility has annual capacity for 295,000 metric tons of galvanized and Galvalume® products, 131,000



metric tons of pre-painted products, 150,000 metric tons of narrow strips and plates, and 384,000 metric tons of pickled hot-rolled coils. Porto Real specializes in galvanized steel, Galvanew, and plate products, with annual capacities of 350,000 metric tons of galvanized steel and 354,000 metric tons of strips and plates.

CSN's vertically integrated value chain further extends to Prada Distribuição, a distributor of high-quality flat and long steel for the automotive, construction, appliance, and packaging sectors across Brazil. Prada Embalagens, one of Brazil's leading producers of steel cans and packaging, operates facilities in São Paulo, Paraná, Rio de Janeiro, Minas Gerais, Goiás, and Rio Grande do Sul, with processing capacity exceeding 65,000 metric tons of steel annually. These products serve a wide range of industries, with CSN holding a significant share in the steel packaging market.





## SWT

Internationally, CSN operates Stahlwerk Thüringen (SWT) in Germany, a long steel mill serving the construction sector, with an annual capacity of 1.1 million metric tons. SWT uses electric arc furnaces (EAF) powered entirely by renewable electricity, producing 100% of its steel from scrap. This process supports the production of green steel with a CO<sub>2</sub> emissions intensity of just 204 kg per metric ton of steel. The plant holds Environmental Product Declaration (EPD) certification confirming its low carbon footprint and commitment to sustainable steelmaking.



### Steelmaking assets

# 2 steel-works

(Brazil and Germany)

# 3 rolling

and galvanizing facilities

# 6 steel

packaging production facilities

# 18 steel

distribution centers

→ Green steel produced at  
Stahlwerk Thüringen –  
Thuringia, Germany







→ Blast Furnace 2 at the Presidente Vargas Steelworks – Volta Redonda (RJ)

## Steel Segment Strategy

CSN's steel segment strategy is built around operational excellence, improving productivity, and maximizing value across the entire steel value chain. This vision is supported by a comprehensive modernization and upgrade plan with a focus on the Presidente Vargas Steelworks (UPV), including critical operations such as sintering, coking, steelmaking, blast furnaces, and hot rolling.

In 2024, CSN advanced this initiative with major overhauls in sintering operations. Upgrades included the replacement of 600 particulate collection system plates in sintering line 3 (completed in July) and improvements to sintering line 2 (completed in September). These modifications are part of a broader investment cycle extending into 2025, aimed at reducing particulate emissions and rebuilding sinter production capacity.

Key improvements include the installation of electrostatic precipitators, bag filters, and advanced technologies that capture polluting particles before they are released into the atmosphere. CSN is also investing in the modernization of more than 400 kilometers of conveyor belts that make up UPV's raw materials handling system, aiming to increase efficiency and reduce material spills and financial losses. In addition, CSN has completed the installation of mist cannon systems—equipment that sprays a mist to trap dust particles, creating a protective barrier in the most sensitive areas of the operation. These cannons, which operate similarly to jet turbines, can project mist over distances of 50 to 150 meters, preventing particle dispersion.

By 2020, CSN plans to invest an additional R\$ 8 billion to expand capacity and improve product margins. Major investments include blast furnace overhauls and the installation of new coke batteries to achieve self-sufficiency and reduce dependence on external suppliers. This is expected to improve cost stability and add up to R\$ 2.6 billion to EBITDA by the end of the investment cycle.

CSN has also actively advocated for fair trade policies to protect Brazil's steel industry. A key milestone in 2024 was the imposition of a provisional 40% antidumping duty on metal sheet imports from China—positively impacting domestic pricing and contributing to a roughly 20% increase in CSN's sales.

Reducing CO<sub>2</sub> emissions is another core pillar of CSN's strategy and we are investing extensively in low-carbon steel technologies, as we believe this is the future of the steel industry. Today, 19% of CSN's global steel output qualifies as green steel. Stahlwerk Thüringen (SWT), CSN's mill in Germany, produces green steel using an electric arc furnace powered entirely by renewable energy and 100% scrap-based feedstock. In 2024, SWT delivered 838,000 metric tons of green steel to global markets for use in construction, offshore projects, public railways, and infrastructure.

In Brazil, CSN successfully tested the use of charcoal to replace fossil coal in Blast Furnace 3—validating a technological route to significantly lower CO<sub>2</sub> emissions in steel production. We are also upgrading steam generators



## R\$ 8 billion in planned investments to expand production capacity

and boilers to increase cogeneration output and reduce natural gas use, further supporting emission reductions.

Another innovation highlight is CSN's world-first use of green hydrogen injection in the regenerators of Blast Furnace 2—using technology from Portuguese firm UTIS that has already been implemented in our cement operations—delivering higher blast temperatures, reduced coke consumption, and a significant drop in CO<sub>2</sub> emissions.

Beyond technology, CSN is investing in workforce training, with a special focus on good practices, lean manufacturing (to eliminate waste and improve productivity), and continuous improvement processes. In 2024, we expanded our transformation office to oversee over 1,000 active improvement teams at UPV, tasked with tracking performance against strategic KPIs and the extent to which operational gains are translated into tangible financial results. These efforts generated cost savings of approximately R\$ 800 million and reversed a projected deficit into a R\$ 20 million surplus—underscoring the effectiveness of lean methodologies in driving competitiveness.



→ A logistics employee at  
the Presidente Vargas  
Steelworks - Volta  
Redonda, RJ







## Mining

CSN Group's mining operations are carried out through our subsidiaries CSN Mineração S.A. (CMIN), Estanho Rondônia S.A. (ERSA), and Minérios Nacional S.A. (MIPE).

CSN Mineração is Brazil's second-largest iron ore exporter and eighth largest producer globally. With certified reserves of over 2 billion metric tons, the company operates high-quality mining assets in the Iron Quadrangle region of Minas Gerais—one of Brazil's most mineral-rich areas. Our flagship operations include the Casa de Pedra mine complex and the Engenho-Pires operation, straddling the municipalities of Congonhas, Belo Vale, and Ouro Preto.

At the Casa de Pedra complex, CSN Mineração operates a central processing plant with an annual production capacity of 22.5 million metric tons of iron ore. Complementing our portfolio is the Pires beneficiation plant, a dry processing facility that adds another 10.5 million metric tons per year in production capacity. The Pires site also features mobile screening facilities and an Ore Treatment Facility (ITM) that further enhances operational efficiency and sustainability.

CSN Mineração has used innovative tailings management solutions to achieve dam-independent operations. All mined ore is processed through filtration and dry stacking, eliminating the need for conventional tailings dams and ultimately improving operational safety while minimizing environmental impacts. CSN Mineração was the first company in the world to implement large-scale dry tailings filtering.

CMIN Mineração is Brazil's **second-largest iron ore exporter** and eighth largest producer globally

At Minérios Nacional, iron ore is produced by processing tailings from the Fernandinho mine, located in Rio Acima, Minas Gerais, southeastern Brazil. This CSN Group subsidiary has an annual production capacity of 1 million metric tons.

ERSA, located in the state of Rondônia, extracts cassiterite from the Santa Bárbara mine in Itapuã do Oeste and smelts the ore into tin at its facility in Ariquemes. The plant has an installed capacity of 3,200 metric tons of tin per year—an essential raw material used in producing tinplate, the type of steel commonly used in metal packaging.

→ Drilling rigs operating at the Casa de Pedra Complex – Congonhas, MG





## Mining assets

**2 iron ore mines**

**3 iron**  
ore beneficiation plants

**1 tin**  
mine

**1 tin**  
smelting plant

## Mining Strategy

CSN Mineração is investing R\$ 13.2 billion in the state of Minas Gerais along 2030 to expand production capacity, improve iron ore grades, and advance its sustainable mining strategy. The investment also includes initiatives to recover and repurpose tailings currently stored in dams being decommissioned.

The main project of this investment strategy is the construction of a new iron ore beneficiation plant at the Casa de Pedra complex in Congonhas. The P15 Itabirite Plant marks a major milestone for CSN Mineração. During the construction phase—currently in progress—the project will create approximately 4,000 jobs. Once operational in 2027, the plant will support 1,500 jobs, increasing CSN Mineração's workforce in Minas Gerais by 20%.

The Itabiritos P15 Plant will boast an annual production capacity of 16.5 million metric tons of pellet feed—a high-grade ore with 67% iron content (Fe), ideally suited for producing low-carbon steel using natural gas or hydrogen as reducing agents. Targeting strategic markets including Japan, Europe, and the Middle East, this new plant will accelerate the decarbonization of the global steel industry.

CSN Mineração is also investing in initiatives such as the B4 and Casa de Pedra rougher magnetic separation projects—which will add two high-intensity magnetic concentration plants to process tailings stored in the B4 and Casa de Pedra dams, with an expected annual output of 5 million metric tons of pellet feed—as well as other projects within our strategic roadmap to repurpose mine tailings, decommission additional dams, and incorporate circular economy principles by repurposing the tailings currently stored in these facilities.

**CSN Mineração has introduced innovative solutions** to repurpose tailings in new applications



# EXPANSION PROJECTS - PHASE 1

## Pires Tailings Rec.



• 1.1 Mtpy • 64% Fe • Startup 1T26

## B4 Tailings Rec.



• 2.5 Mtpy • 66% Fe • Startup 1T27

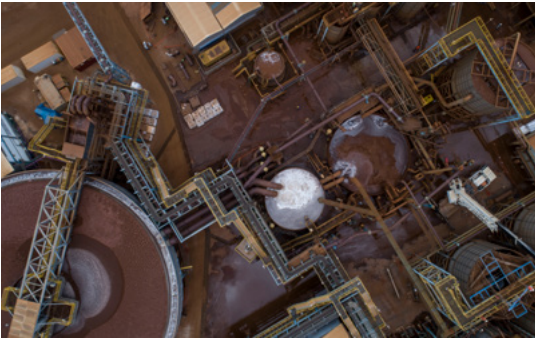
## P15 Itabirite



• 16.5 Mtpy • 67% Fe • Startup 4T27

Works in progress

## Ultrafines Rec.



• 1.0 Mtpy • 66% Fe • Startup 4T27

Detail engineering in progress

## Casa de Pedra Tailings Rec.



• 2.5 Mtpy • 66% Fe • Startup 3T29

Continued progress on mineral characterization and process route design

## Tecar expansion



• From 45Mtpy to 60 Mtpy

The project will incrementally increase capacity

CSN Mineração is exploring the expansion of its international presence through the Low-Carbon Iron Hub, a joint venture in the United Arab Emirates dedicated to the production of HBI (hot briquetted iron). HBI is a critical raw material in lower-carbon steel production, enabling cleaner and more efficient processes within the steel industry. CSN Mineração’s potential stake of up to 10% in the project aligns with our strategic commitment to innovation and sustainability in the mining and metals industry.

To accommodate the projected increase in production over the coming years, the company is also expanding its logistics infrastructure. Tecar Port, a centerpiece in its export logistics, is being expanded to increase its iron ore shipping capacity from 45 to 60 million metric tons per year. This investment will make the company’s iron ore more competitive in the global market, reducing logistical bottlenecks and optimizing shipping to key consumer markets.

Projected  
**15 million**  
 metric-ton increase  
 in iron ore shipping capacity





## The Iron Ore of the Future

CSN Mineração is leading the way in developing more sustainable and efficient solutions for the iron ore and steelmaking industries. One of the most promising examples is high-grade pellet feed—a raw material for producing iron ore pellets—produced at P15.

Pellet feed consists of fine iron ore particles (below 0.15 millimeters) obtained through flotation and/or magnetic recovery. Once agglomerated into small pellets, this material is fed into steelmaking processes. Its main advantage is its suitability for direct reduction (DR) processes, in which iron ore is reduced directly without melting the metal, using natural gas or hydrogen instead of traditional coke as the reducing agent.

Using natural gas as a reducing agent delivers significant environmental benefits, including elimination of coke and up to 50% reduction in carbon emissions from steel production—With the use of hydrogen, reductions can potentially reach up to 98%. This shift is critically important, as the steel industry is one of the largest industrial sources of global CO<sub>2</sub> emissions.

Beyond the substantial emissions reductions in steelmaking, CSN Mineração's pellet feed delivers additional advantages. With 67% iron content and minimal impurities, it is recognized for its efficiency and exceptional quality. The strong global demand for direct-reduction pellet feed reflects both its premium quality and its role in enabling decarbonization of the global steel sector.

→ A pellet feed stockpile









→ An employee at a CSN Cimentos Brazil facility – Montes Claros (MG)

## Cement

Now a leading player in Brazil's cement industry, CSN Cimentos is a fast-growing business that is strategically integrated with CSN's operations. With an installed capacity of 17 million metric tons per year, CSN Cimentos serves the Southeast, Midwest, and Northeast regions of Brazil, offering a diverse range of products, including technical cements, aggregates, and concrete.

CSN's operations in the cement segment began in 2009, in Rio de Janeiro. In 2015, we expanded our presence with a new cement mill in Arcos (MG), increasing our installed capacity to 4.3 million metric tons per year. In 2021, we acquired Elizabeth Cimentos S.A., located in Alhandra (PB), an integrated plant with an annual capacity of 1.3 million metric tons. However, it was in 2022 that we made a strategic leap, becoming the second-largest cement producer in Brazil by acquiring the Brazilian operations of the Franco-Swiss company LafargeHolcim. This move added to our portfolio five additional integrated cement plants, five grinding facilities, 19 concrete plants, six aggregate units, and high-quality limestone reserves.

Currently, CSN operates 13 industrial facilities (seven integrated mills and six grinding units), eight aggregate and concrete facilities, and 27 distribution centers. Completing CSN Cimentos' portfolio is Revalora, a waste management platform that uses technologies to convert industrial and urban waste into alternative fuels. This enables the partial replacement of fossil fuels in cement manufacturing, reducing carbon emissions and supporting

sustainable operations. Revalora not only minimizes environmental impact, but also optimizes costs and turns waste into value-added production inputs.

Our cement business also produces and markets agricultural limestone, an example of a circular economy application. Limestone that does not meet the specifications for cement production could be disposed of as inert waste, but through a beneficiation process, it becomes a valuable input for soil acidity amendment in agriculture—ultimately maximizing the efficiency and sustainability of our assets.

In just ten years, CSN Cimentos has become  
the **second-largest cement player** in Brazil





→ Fortaço franchise storefront – Bragança Paulista, São Paulo

### Cement Assets

**7 integrated**  
cement plants

**6 grinding**  
facilities

**8 concrete**  
and aggregates operations

**27 cement**  
distribution centers

**50+ franchised**  
retail stores



### Cement Business Strategy

CSN Cimentos has adopted a business model centered on value creation and sustainability, serving a wide range of market segments. In 2024, the company posted impressive growth, increasing sales while maintaining the lowest production costs and highest margins in the industry. Market share expansion was driven by the company's successful geographic growth strategy, leveraging a robust logistics network. To support long-term growth, CSN plans to invest an additional R\$ 7.7 billion in three new integrated plants located in strategic regions of southern, northern, and northeastern Brazil—markets where its presence is still incipient. This expansion will boost CSN Cimentos' production capacity from 17 Mtpy to a potential 26 Mtpy.



### Fortaço Franchise Network

CSN Cimentos distributes its bagged cement products through its Fortaço network, a franchise model that transforms hardware stores into full-service points of sale offering complete construction and renovation solutions. Beyond offering CSN's full cement portfolio, Fortaço also provides added value through private-label credit cards and partnerships with payment platforms—enhancing customer access and improving retailer competitiveness.





## New Integrated plant

In 2024, CSN announced one of its flagship projects: a new integrated cement facility in Itaperuçu, in the metropolitan area of Curitiba, Paraná. With an estimated investment of R\$ 3 billion, the plant will have an annual production capacity of 3.6 million metric tons, a footprint of 150 hectares, and raw material reserves that will last for over 80 years. Once completed, it will be among Brazil's largest cement plants. The project is currently in the environmental licensing stage, with construction expected to begin in 2025. CSN also plans to invest in 30 kilometers of new roads to connect upcoming plants and mines to the regional highway network, especially the Rodovia dos Minérios (PR-092) highway. These infrastructure improvements will facilitate the transportation of cement and limestone, serving both the agribusiness and construction sectors, while supporting regional development and job creation.

CSN Cimentos has continued to modernize its operations to reduce costs, increase efficiency, and capture additional synergies from recent acquisitions. In 2004, cost per product sold was successfully reduced by 7.1%. The company's geographic expansion continues, supported by strong growth in the bulk cement segment, which now accounts for 40% of total sales. With an expanding logistics network and new distribution centers, the company aims to increase its nationwide presence. In addition to organic growth, CSN is actively evaluating strategic acquisitions to strengthen geographic coverage.

Looking ahead to 2025 and beyond, the company projects continued robust growth, fueled by both strategic and external factors—including rising demand in civil construction driven by federal programs such as *Novo PAC* (Growth Acceleration Program) and the *Minha Casa Minha Vida* housing program.

CSN Cimentos has one of the lowest CO<sub>2</sub> intensities in the global cement industry. In 2023, the company launched ECOCEM50, a high-performance, low-carbon cement with emissions of approximately 312 kgCO<sub>2</sub>e per metric ton. This product exceeds performance standards under NBR 16697, incorporating low-carbon alternatives to clinker in its formulation. ECOCEM50 has been used in large-scale infrastructure projects—buildings, dams, and highways—particularly in Minas Gerais, São Paulo, Rio de Janeiro, and Espírito Santo.

→ Rawmill – CSN  
Cimentos Brasil,  
Barroso (MG)





CSN CIMENTOS

# Value-added products

Click the icons

Back to home screen

Agricultural products

AGRICULTURAL PRODUCTION PROCESS

Agricultural limestone

Distribution

Aggregates

Mining

Production

Grinding

Green hydrogen

Storage

Steelmaking

Mining

Slag

Steel

STEEL PRODUCTION PROCESS

Distribution

Concrete

INDUSTRIAL PRODUCTION PROCESS

Waste

Waste/coproducts  
Raw material

Sourcing raw materials within our integrated conglomerate makes **CSN** one of the most competitive cement players in Brazil





→ Container operations –  
Sepetiba Tecon Terminal,  
Itaguaí (RJ)



## Logistics

CSN Group's logistics network plays a critical role in value creation across its business segments by ensuring efficient, integrated, and innovative transportation of raw materials and finished products. The Group operates a robust system of ports and railways, seamlessly connecting its mining, steel, and cement operations.

In port logistics, CSN holds the concession for Sepetiba Tecon, a terminal specializing in cargo consolidation, container handling, and finished goods movement, with an annual capacity of up to 660,000 TEUs. CSN Mineração operates TECAR, our own port terminal at the Port of Itaguaí (Rio de Janeiro). With an annual capacity to ship 45 million metric tons of iron ore and receive 4 million metric tons of reducing agents (such as coal and coke), TECAR is a strategic logistics asset supporting CSN Mineração's export capacity.

In the rail sector, CSN is a significant shareholder of MRS Logística S.A., holding a combined direct and indirect stake of 37.49%<sup>1</sup> in the company. Operating a 1,643 km railway network, MRS links Brazil's Iron Quadrangle (MG) to the southern region of Rio de Janeiro and major ports, providing efficient transport of outbound iron ore shipments from CSN Mineração and inbound coal, coke, and iron ore to the Presidente Vargas Steelworks (UPV).

CSN also controls Ferrovia Transnordestina Logística (FTL), a 1,237-km rail line with a current transportation capacity of approximately 3.2 million metric tons per year. In addition, CSN is responsible for Transnordestina Logística S.A. (TLSA), the largest linear infrastructure project underway in Brazil. Once completed, it will span 1,206 kilometers, connecting inland Piauí to the Port of Pecém (CE), with a projected throughput of 33 million metric tons annually. In 2024, FTL posted EBITDA of R\$ 82 million with a 35% margin, an 11% increase year over year.

Also in 2024, CSN expanded its logistics platform through the acquisition of a 70% stake in Grupo Tora, one of Brazil's largest logistics operators, expanding its capacity for road transportation and storage. This expansion supports the Group's broader strategy of multimodal integration to enhance operational efficiency across our businesses.

CSN's integrated logistics system—combining road, rail, and port infrastructure—provides a distinct competitive advantage, enabling scalability, optimized resource allocation, and reliable transportation of both raw materials and finished goods.

<sup>1</sup> A direct stake of 18.75% (CSN) and an indirect stake of 18.74% (CMIN).



## Logistics Assets

# 1 solid bulk

port terminal

# 1 container

port terminal

# 3,653

kilometers of railway network currently built and

# 433 Km

under development



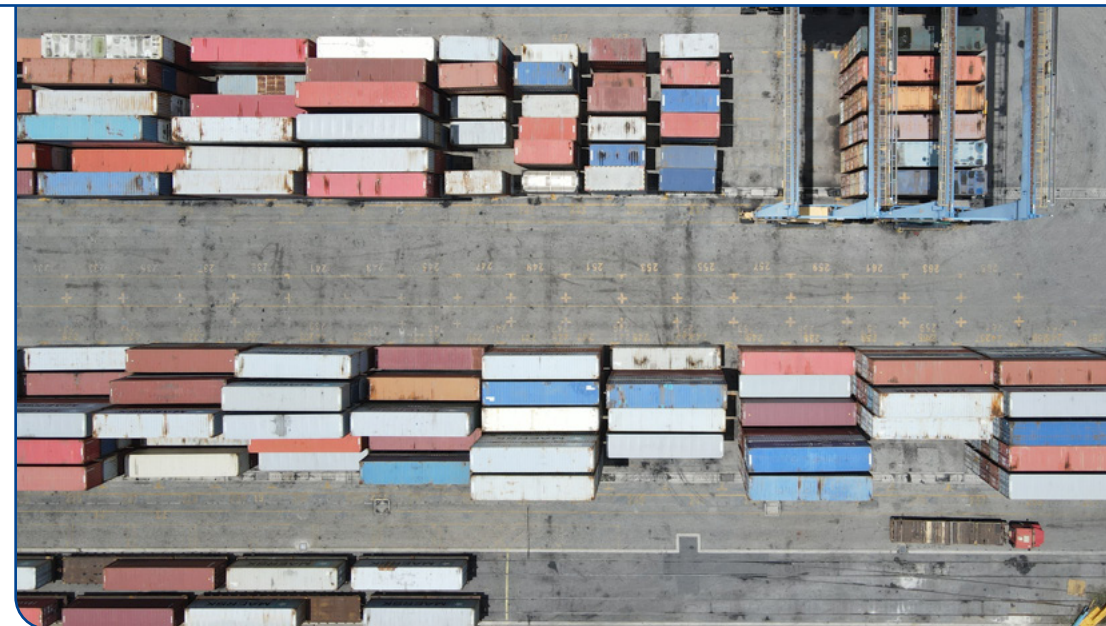
## Logistics Strategy

CSN's logistics strategy focuses on maximizing asset utilization, enhancing operational efficiency, and supporting the expansion of our operations. The CSN Group takes an integrated approach that leverages the inherent strengths of each logistics asset, with a focus on infrastructure modernization and diversification across transport modes.

In the port segment, the ongoing modernization of Sepetiba Tecon will enhance CSN's competitive edge by expanding cargo handling capacity and improving end-to-end integration across the logistics chain. The installation of rubber tyre gantry (RTG) cranes has enabled greater cargo diversification and operational verticalization. Moreover, the terminal's strategic location near Brazil's key industrial hubs—combined with its rail connection to MRS Logística—supports the implementation of a one-stop-shop logistics model, streamlining operations and reducing lead times.

To accommodate our projected production growth, CSN Mineração is expanding the capacity of our TECAR port terminal in Itaguaí from 45 million to 60 million metric tons per year. TECAR is a critical part of CSN Mineração's logistics strategy, supporting efficient exports of iron ore to international markets and strengthening CSN's global competitiveness.

In the railway segment, CSN has continued to expand Transnordestina Logística (TLSA), one of Brazil's most significant infrastructure projects. With Phase 1 reaching



→ Container yard – Sepetiba Tecon terminal, Itaguaí (RJ)

71% completion, operations are expected to startup by 2027, boosting freight capacity for grains, ores, fertilizers, fuels, and cement across the Northeast region. In 2024, Section 2 of the railway—spanning 358 kilometers between the states of Piauí and Ceará—was completed ahead of schedule, with test runs set to begin in 2025. To date, 773 kilometers, or 64% of the total planned railway, have been completed. This strategic project will improve regional logistics and link new productive regions to global markets.

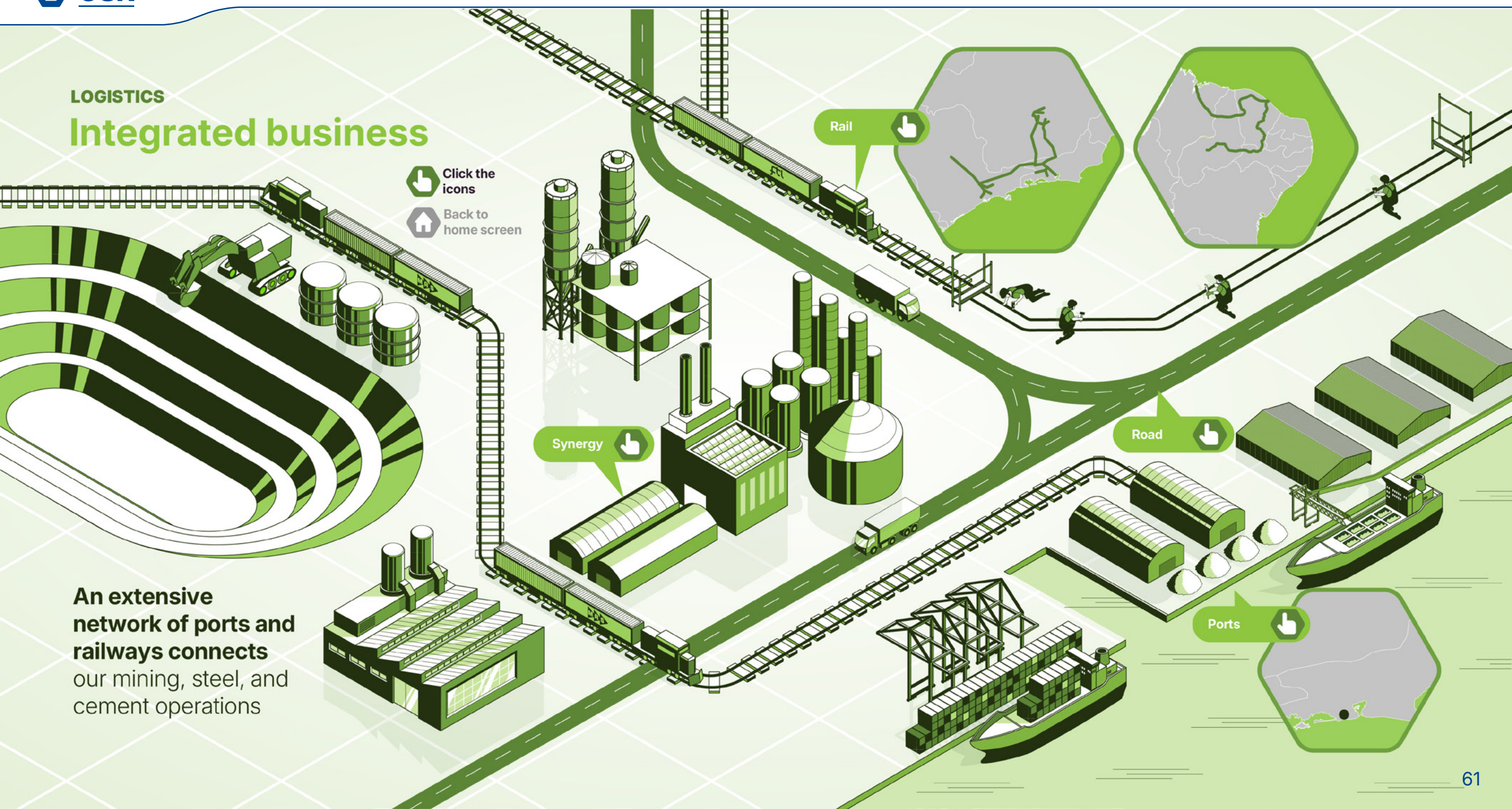
CSN is also developing NELOG, a new logistics hub at the Port of Pecém (CE) that will handle cargo streams from TLSA, in line with CSN's vertical integration strategy. Designed as a private-use terminal, NELOG will span 83.5 hectares, with direct maritime access to North America, Europe, and Asia, and is projected to generate an average annual EBITDA of R\$ 0.8 billion.



# LOGISTICS Integrated business

Click the icons  
 Back to home screen

An extensive network of ports and railways connects our mining, steel, and cement operations







→ Aerial view of the Itá  
hydroelectric dam – Itá  
(SC)

## Energy

CSN's investments in energy have significantly reduced operating costs and enhanced overall competitiveness. With a diversified hydroelectric portfolio, CSN has achieved full self-sufficiency in renewable energy. The operational resilience of the Group's energy assets was notably demonstrated during the floods of May 2024, when our power plants quickly resumed operation and maintained process efficiency even amid extreme weather events.

CSN holds stakes in several hydroelectric plants, including 29.49% of the Itá Hydroelectric Plant (1,450 MW),

located on the border between Santa Catarina and Rio Grande do Sul, and 17.92% of the Igarapava Hydroelectric Plant (210 MW), in Minas Gerais. In 2022, we expanded our portfolio with the acquisition of the Quebra-Queixo Hydroelectric Plant (120 MW), linked to CSN Mineração, and the Cachoeira dos Macacos Small Hydropower Plant (3.4 MW), integrated with CSN Cimentos. The following year, we also acquired Santa Ana Energética S.A. (6.5 MW), Topázio Energética S.A., which operates the Sacre II Small Hydropower Plant (30 MW), and a 98.96% stake in Companhia Estadual de Geração de Energia Elétrica (CEEE-G), with 1,275 MW.

In addition to hydroelectric assets, CSN operates two thermal cogeneration plants (CTE1 and CTE2) and a top pressure recovery turbine (TRT) at the Presidente Vargas Steelworks (UPV) in Volta Redonda (RJ), with a combined capacity of 267 MW. These assets enable the use of steelmaking gases for power generation, optimizing internal energy consumption and contributing to a reduction in CO<sub>2</sub> emissions. In total, across our 27 hydro assets and 3 thermal cogeneration assets, CSN has an installed generation capacity of 2,010 MW, providing a self-sufficient supply of electricity while improving operational efficiency.



## Energy Assets

# 12 hydroelectric

power plants (HPPs)<sup>1</sup>

# 12 small

hydropower plants (SHPs)<sup>1</sup>

# 3 micro

hydropower plants (MHPs)

# 3 cogeneration

plants (CGPs)

<sup>1</sup> CSN is a minority shareholder in seven HPPs and one SHP.



## Energy Strategy

CSN's energy strategy focuses on sustainability and maximizing operational efficiency through self-operated generation capacity. The CSN Group sources 100% of its electricity requirement from renewable energy sources, which not only ensures more sustainable operations but also contributes to decarbonizing other industries by selling surplus electricity on the free market, backed by I-REC (International Renewable Energy Certificate) certificates—adding tangible value to our sustainability agenda.

In addition, self-operated generation capacity provides CSN with key competitive advantages, ensuring greater financial stability by reducing exposure to energy price fluctuations, which tend to increase during the dry season. This makes our business less vulnerable to challenges in the energy sector, while also supporting more efficient financial management.

CSN has been heavily investing in expanding our renewable energy generation capacity, such as the Floriano Solar Farm Cluster in the state of Piauí. In 2024, we received a permit to implement the project with a capacity to add 1,200 MW under the Independent Power Production (IPP) model, spanning the Floriano 1 through 15 solar farms. This project, with a 35-year license, is a significant step in the Group's strategy to further expand clean energy capacity while also diversifying our current portfolio, which is primarily composed of hydroelectric assets.

Unlike other renewable energy projects, the Floriano Solar Farm Cluster will be entirely used to accommodate future increases in energy demand from the CSN Group, improving synergies across businesses while supporting the Group's continued growth. The project is designed to deliver key benefits to business sustainability, such as self-generation and cost predictability.

The migration to the natural gas free market was another key milestone in the energy segment. In 2024, this migration delivered cost savings of approximately R\$ 100 million, with projected savings of R\$ 200 million annually starting in 2025. In addition, CSN is developing a natural gas trading operation, which will provide greater flexibility in managing our energy portfolio. This initiative will allow us to source gas directly from multiple suppliers, including international markets such as Argentina and Bolivia, at more competitive prices. More competitive natural gas pricing opens up a range of possibilities for its use in steelmaking processes, while creating a wide avenue of decarbonization opportunities at UPV.



## ENERGY

# Clean energy: strategic to our business



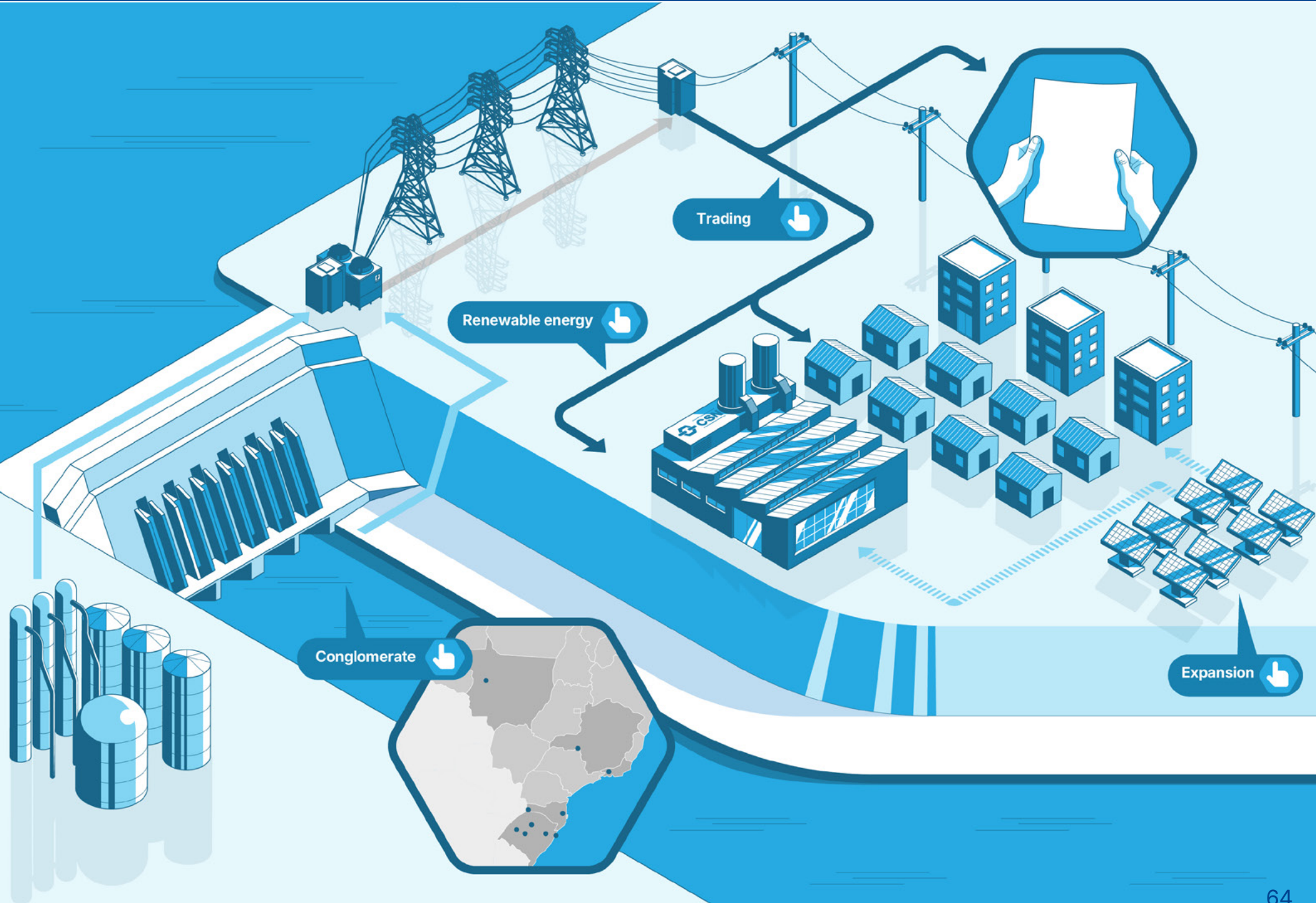
Click the icons



Back to home screen

→ Source  
→ Destination

CSN Energia has a central role in CSN's strategy to enhance sustainability and operating efficiency, while also supporting the decarbonization of other industries





# Innovation and Technology

Innovation is a core pillar that sustains CSN Group's ongoing evolution and competitiveness. We invest in structured programs that actively engage employees to develop creative, transformational solutions supporting our commitment to continuous improvement, operational efficiency, and sustainability. This culture of innovation is fostered through programs and tools that encourage active participation across all organizational levels.

A key example of this is CSN's **Continuous Improvement Program**, which encourages employees to continuously suggest improvement ideas.

In 2024, CSN Mineração completed its 10<sup>th</sup> continuous improvement cycle, leading to the implementation of over 3,000 improvements, with the direct participation of more than 4,800 employees, representing 75% of our total workforce. These initiatives delivered over R\$ 250 million in verified financial gains, confirmed by our budget and finance teams. This cycle was crowned by Lab Week, an event where employees showcased their projects and 21 initiatives received awards across categories including Kaizen ESG, Kaizen Productivity, Quality and Cost, PDCA, and Lean Six Sigma. The event highlighted improvements implemented across the end-to-end value chain—from our mines to our Tecar port—and celebrated five years of CSN Mineração's Continuous Improvement Program, underscoring the positive impact on business growth and competitive positioning.

As part of CSN's **Continuous Improvement Program**, **CSN Lab Ideias** engages employees in innovation cycles based on the Kaizen methodology.

In the steel segment alone, the initiative has generated over 1,300 employee-driven ideas. To encourage engagement, CSN invites both open submissions and submissions targeting strategic themes such as safety, sustainability, environment, and productivity. One dedicated cycle focused on environmental improvements—particularly in sintering plants—to mitigate operational impacts.

Launched at CSN Cimentos in 2022 and structured in semiannual cycles, the program has already engaged 12.7% of employees at the Arcos facility and is set to expand to other sites by 2025. In the second cycle of 2024, implemented improvements increased by 64% compared to the first cycle, resulting in measurable gains of R\$ 1.9 million.

CSN also encourages intrapreneurship through *CSN Conecta*, a program that identifies and accelerates sustainable initiatives with the potential to transform daily operations and create broader industry impact. In 2024, *CSN Conecta* addressed critical topics like diversity, decarbonization, inclusion, and environmental responsibility, fostering an environment where employees are encouraged to design and implement innovative solutions. Among the program's standout projects is a



→ Finalists of the 2024 CSN Conecta Program – São Paulo (SP)

Fueling Management Plan, an in-house developed solution for refueling equipment in the field. This solution not only reduces operating costs and diesel consumption, but was also developed internally at a cost significantly lower than available commercial alternatives. As another initiative as part of the program, CSN implemented an Internet of Things (IoT) system for compressed air management at our Paraná steel facility. This initiative has helped to reduce electricity consumption and minimize effluent generation—enhancing both operational efficiency and environmental sustainability.



## In 2024, CSN's listing in the **100 Open Startups Ranking** recognized our efforts to drive transformational innovation.

To drive business transformation, CSN launched CSN Inova—a strategic platform that fosters innovation and aligns corporate practices with ESG (Environmental, Social, and Governance) principles. CSN Inova operates across business units, identifying challenges throughout the value chain and developing Industry 4.0 solutions to drive efficiency, productivity, digitization, decarbonization, and circular economy practices.

CSN Inova follows a structured methodology that includes deep-dive assessments of strategic challenges, pilot testing, and feasibility and scalability assessments to ensure alignment with CSN's long-term corporate strategy. Between 2019 and 2024, CSN Inova-led projects have generated approximately R\$620 million in value for the CSN Group, primarily driven by cost reductions and operational improvements.

The platform is structured into three main portfolios aimed at identifying new solutions, establishing strategic partnerships, and evaluating projects based on concrete challenges and key financial and operational indicators. These pillars reinforce CSN Mineração's competitive advantage by promoting an innovation-driven management approach that is aligned with corporate objectives and rooted in the pursuit of efficiency and sustainability across all operations.

In addition to these three core areas, CSN Inova operates Inova Bridge, responsible for high-level coordination of CSN ESG Committee. CSN Inova Bridge collaborates with leaders and business units to identify and monitor key challenges and opportunities related to CSN Mineração's material topics, ensuring that innovation strategically contributes to our broader sustainability, social, and governance agenda.

This strategic approach also supports the CSN Group's decarbonization roadmap, a core pillar of our ESG strategy. In the following sections, each of CSN Inova's strategic focus areas will be explored in detail, highlighting how the platform turns challenges into sustainable growth opportunities across the CSN Group.

### CSN Inova value creation pipelines



#### Open Innovation (Pipeline 1)

Increase in productivity and cost efficiency through the adoption of new and disruptive technologies.



#### Corporate Venture Capital (Pipeline 2)

Investing in growth-stage startups and strategic technologies aligned with CSN's long-term goals.



#### Venture Builder (Pipeline 3)

Developing new ventures for the CSN Group.



## Open Innovation

CSN Inova's open innovation platform is designed to address strategic challenges that have a direct impact on the CSN Group's operations and performance. With a focus on technologies that can drive operational efficiency, sustainability, and competitiveness, CSN Inova has become a catalyst for the large-scale adoption of innovative technologies within the CSN Group.

By the end of 2024, CSN Inova's Open Innovation Pipeline (Pipeline 1) had 80 active projects, a 50% growth compared to the prior year. Of these, 22 projects have advanced to scaling, generating tangible benefits including cost savings, operational improvement, and significant progress in sustainability—confirming CSN Inova's role as a centerpiece of CSN Group's digital transformation and innovation strategy. Some of the initiative's key highlights from the year include:

- **Digital transformation in steel and cement operations:** implementation of AI-driven special- and general-purpose image processing systems to optimize industrial processes, leading to measurable improvements in quality and production line efficiency.
- **Energy efficiency and emissions reduction:** installation of hydrogen injection technology in the regenerators of a blast furnace at the Presidente Vargas Steelworks (UPV), significantly reducing coke consumption and CO<sub>2</sub> emissions. This world-first initiative is part of a broader strategy involving partnerships to develop new technologies for low-carbon steel production.



→ CSN Inova has made the Top 100 Open Corps - 100 Open Startups list

- **Operational efficiency and mining decarbonization:** development of cold agglomeration technologies and production of Hot Briquetted Iron (HBI) from pellet feed or iron ore tailings. A parallel initiative is working to reduce fuel use in off-highway vehicles, primarily through hydrogen technology. An MRS system was also implemented to reduce sinter feed moisture content, making rail transport more efficient and cutting operating costs.
- **Logistics optimization:** implementation of digital tools for smarter inventory and freight management, resulting in more efficient deliveries, better oversight of logistics providers, and lower material and resource waste.
- **Innovation in sustainable processes:** expanded use of by-products from mining and steelmaking in cement and concrete production, supporting CSN Group's circular economy approach and our commitment to a more sustainable product portfolio.



## Corporate Venture Capital

As of 2024, CSN Inova's CVC portfolio comprises ten startups, with an annual internal rate of return (IRR) of 46%, accounting for both equity appreciation and cost savings from their innovative solutions. Among these, two companies are in the scaling phase: GaussFleet, which specializes in the management and monitoring of logistical assets within industrial plants, whose solution is helping the company optimize its logistics and improve operational efficiency; and iSystems, which specializes in managing variability in industrial processes, helping CSN improve product quality and production consistency and optimize processes.

Additionally, three other companies are currently at the development stage: Envicore, which works on transforming industrial waste into cementitious material, offering a sustainable solution that reduces environmental impact; 1s1 Energy, which is developing components for the hydrogen value chain, a promising clean energy source; and H2PRO, which focuses on an innovative technology for the efficient production of green hydrogen, a crucial fuel for the decarbonization of industrial processes.

In 2024, CSN entered into a strategic partnership with SOSA, a global leader in open innovation. With hubs in Tel Aviv, New York, and London, SOSA connects startups, corporations, and governments with the world's most dynamic tech ecosystems. The partnership focuses especially on Israeli startups developing solutions for ESG challenges, such as emission reduction, resource efficiency, and alternative fuels. This collaboration

Partnerships established through CSN Inova's corporate venture capital (CVC) arm provide access to cutting-edge **technologies that drive sustainability** and industrial transformation

creates mutual value: for CSN and its subsidiaries, it unlocks access to cutting-edge technologies that improve competitiveness, sustainability, and support industrial transformation; for partner startups, it presents a unique opportunity to validate and scale their solutions in a demanding, high-visibility environment.

Israeli startups will gain access to the CSN Group's business units, where they can test their technologies under real-world operational conditions and tackle strategic industrial challenges in Brazil. The pilot projects will focus on key sectors such as steel, cement, mining, energy, and logistics, enabling partner startups to validate their innovations and scale them in one of Latin America's largest industrial markets. For the most successful projects, there will be opportunities for scaling within the CSN Group, with potential investments through CSN Inova and SOSA Ventures.



→ A CSN Cimentos employee  
– Barroso (MG)



## Venture Builder

CSN Inova is also actively involved in identifying and developing new partnerships, products, and revenue streams. Its mission is to foster innovation across CSN's businesses and operations, while also delivering market-ready solutions—all with a focus on building a sustainable future and creating shared value.

As part of this mission, CSN Inova launched new ventures in partnership with strategic allies, contributing technical know-how, scaling strategies, and technology adaptation for new industries, receiving in return a share of the revenue generated by these products. These partnerships have already been established in the areas of procurement and green hydrogen.



## Selene project

In collaboration with the CSN Paraná steelmaking facility, CSN Inova is developing Selene, a project that will integrate a green hydrogen production system into the facility through water electrolysis powered by renewable energy sources. The hydrogen generated will be used either in the facility's industrial processes or marketed as a clean fuel, supporting the transition to a low-carbon economy.

Phase 1 of the project received funding from FINEP, Brazil's public agency for science, technology, and innovation.





→ Team members at the ESG Champions Meetup – São Paulo (SP)

## CSN Inova Bridge

CSN Inova Bridge is the pillar that integrates and manages the CSN Group's ESG innovation strategy, serving as a critical link between senior leadership, business units, and the ESG Committee, which advises the Board of Directors. It actively identifies innovative solutions targeting the most material ESG challenges and opportunities, as defined by CSN's material topics. Through this approach, CSN Inova Bridge supports CSN's sustainable business transition using a systemic, experimental, and collaborative model.

A key role of CSN Inova Bridge is to accelerate ESG-focused initiatives and projects, engaging different areas and stakeholders to ensure that solutions are fully aligned with CSN's strategic priorities. This approach turns projects into genuine innovation labs, generating solutions that meet operational needs while creating positive social and environmental impacts, all through a collaborative and innovative approach.

CSN Inova Bridge also leads the Territorial Development area, working alongside CSN's Sustainability team and the CSN Foundation to transform local communities by co-developing innovative, resilient local economies that foster community empowerment, social development, and environmental stewardship. Territorial development strategies focus on local strengths and ongoing engagement with communities to co-create development models that maximize CSN's positive impact across our value chain and within local communities.

As another important mandate, *CSN Inova Bridge* manages strategic communication and ESG culture. Using an integrated stakeholder engagement approach, *CSN Inova Bridge* fosters transparent, constructive, and ongoing dialogue, strengthening CSN Group's sustainability culture. This not only enhances the visibility of CSN's initiatives but also reinforces its commitment to creating shared value.

CSN Inova Bridge identifies and maps **innovation initiatives aligned with the Group material sustainability topics**



# Financial and Nonfinancial **PERFORMANCE**



## IN THIS CHAPTER

- Performance in 2024
- Tax Management



## Performance in 2024

In 2024, CSN navigated a complex business environment marked by volatile international iron ore prices and mounting pressure on domestic steel prices, particularly due to a surge in Chinese steel imports. Despite these external challenges, CSN's adaptability proved critical overcoming these challenges.

The steel segment, for example, showed a strong rebound, with rising production and sales, especially in the Brazilian market. Supported by trade protection measures and renewed demand in key industries—such as automotive manufacturing—CSN achieved a 24% market share.

In mining, CSN Mineração set exceptional production figures while lowering operating costs, the result of continuous investment in efficiency and innovation. The cement segment also performed strongly, reporting robust sales growth supported by infrastructure and civil construction investments. CSN solidified its position as Brazil's second-largest cement producer, with a strategy focused on increasing market share, optimizing production capacity, and expanding our distribution network.

Logistics ensured cost-efficient transport of raw materials and finished goods while expanding transportation capacity. CSN's vertical integration model provided a distinct competitive edge, allowing CSN to operate with lower logistics costs than its peers.

In the energy segment, CSN continued to invest in solutions to make our operations more competitive and sustainable. A key milestone in the year was the transition to the natural gas free market in Rio de Janeiro, generating approximately R\$ 200 million in annual savings and enabling greater energy cost predictability for our operations.

On a consolidated basis, CSN's net revenue grew throughout the quarters, driven by higher sales volumes and an improved product mix, totaling R\$ 43,687 million. Amid a challenging business environment, we maintained our strategy of financial discipline and cost optimization to deliver solid performance. Adjusted EBITDA declined compared to the previous year, reflecting the impact of iron ore price volatility and international steel price fluctuations. However, CSN's operational performance partly offset this impact, ensuring competitive margins.

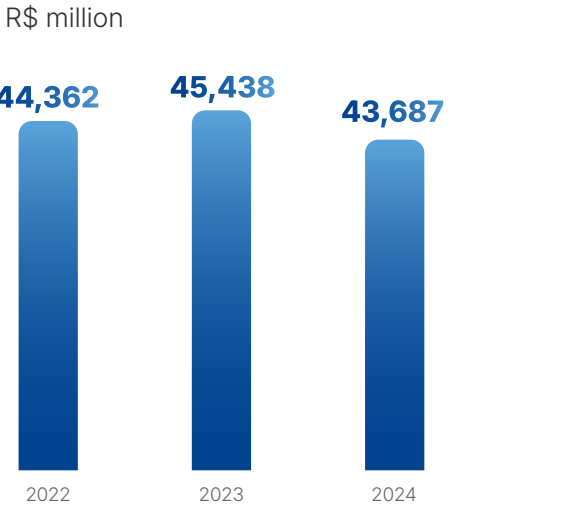
These results reflect CSN's commitment to excellence, innovation, and value creation for stakeholders. Our strategy for the coming years remains focused on modernizing our assets to rebuild production capacity in the steel segment at competitive costs, advance our international expansion, develop higher value-added products, and ensure greater resilience to global market challenges.



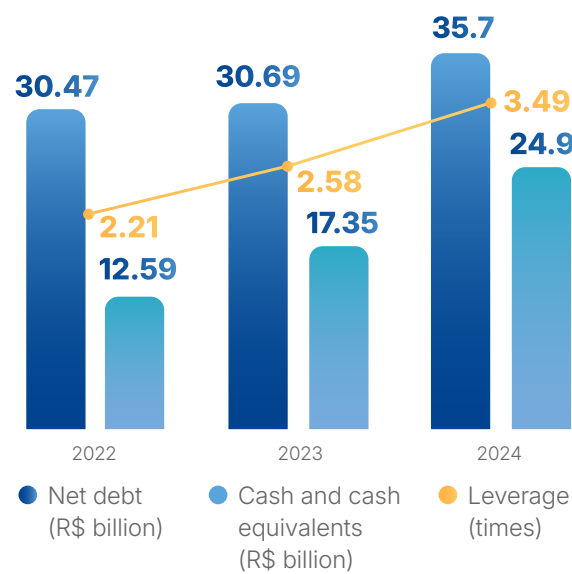
→ A CSN employee at our  
headquarters on Av. Brig.  
Faria Lima – São Paulo (SP)



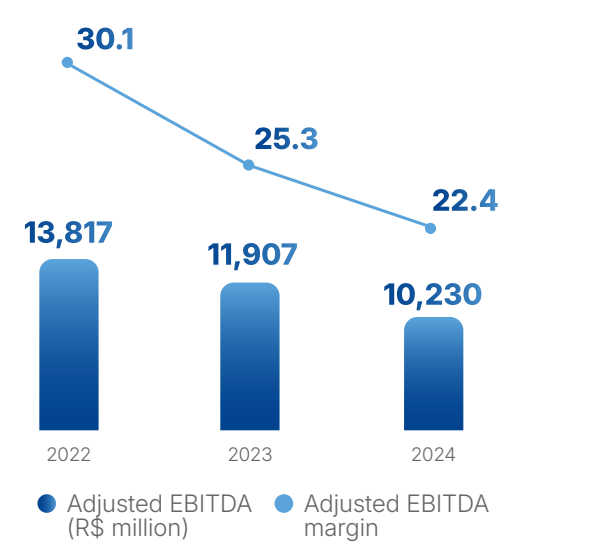
NET REVENUE



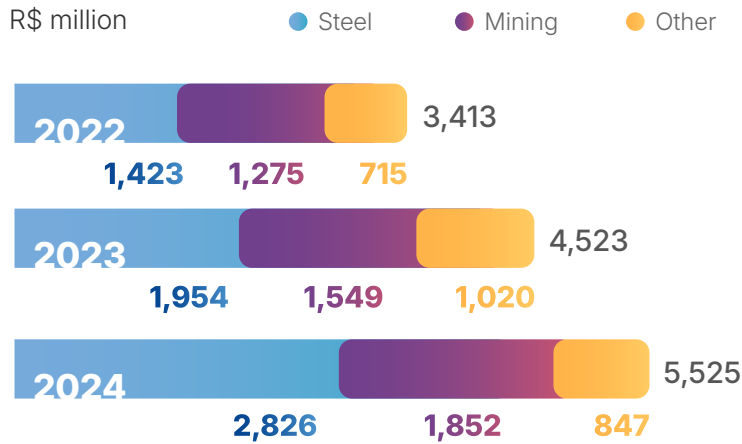
INDEBTEDNESS



ADJUSTED EBITDA



INVESTMENTS



STATEMENT OF ADDED VALUE - MAIN LINE ITEMS

(R\$ million)

	2022	2023	2024
Revenue	51,013.43	51,328.48	50,242.72
Inputs purchased from third parties	(35,174.50)	(31,751,609)	(29,744.88)
Gross added value	15,838.93	19,576,874	20,497.84
Withholdings	(2,870.23)	(3,372.07)	(3,786.05)
Net added value produced	12,968.70	16,204,801	16,711.78
Transferred added value	3,489.31	2,877.42	3,802.22
Added value to be distributed	16,458.01	19,082,219	20,514.01

Distribution of added value

Payroll and related charges	2,862.78	3,576,881	4,158.90
Taxes, charges and contributions	4,655.50	8,406,503	8,702.24
Interest on third-party capital	6,772.03	6,696.19	9,191.01
Interest on equity	2,167.70	402.65	(1,538.14)
Total added value distributed	16,458.01	19,082,219	20,514.01





→ A SWT employee –  
Germany

## Steel

In 2024, the global steel industry landscape was marked by fluctuations in production and demand, influenced by shifting domestic and international economic conditions. While the first half of the year recorded a significant increase in global steel production—driven by stronger output in the Middle East and parts of Europe—the third quarter brought a slowdown, with declines in North America, Asia, and Oceania. In China, the world's largest producer, domestic demand remained weakened, despite modest support from the automotive and select manufacturing sectors.

In contrast, Brazil's steel sector showed greater resilience, supported by normalized industrial activity and rising demand from core sectors such as automotive, agricultural machinery, and infrastructure. Brazilian producers also benefited from trade defense measures, including a provisional 40% anti-dumping duty on Chinese metal sheet imports, which helped alleviate import pressures and improve competitiveness for local manufacturers.

In this context, CSN delivered a solid recovery throughout the year. We expanded our market share in Brazil to 24%, despite increased import volumes. The normalization of our operations led to a 9.2% year-over-year growth in sales, while slab and flat steel production increased due to both stabilized production flows and ongoing improvements in operational efficiency. These results were supported by process improvements and targeted modernization investments at the Presidente Vargas Steelworks. As of year-end, steel output reached its highest level since 2022, and flat-rolled production surpassed record highs previously set in 2021. Total CSN steel sales rose to 4.5 million metric tons in 2024, with the domestic market serving as the main growth driver on the back of strong local industrial demand.

Despite fluctuations in slab production costs, influenced by scheduled maintenances and exchange rate variations, CSN managed to reduce these costs compared to the previous year, reaching R\$ 3,457 per ton, with a projection to drop below R\$ 3,000 per ton by 2030 as investments in operational efficiency progress. This cost reduction reflects greater fixed-cost dilution and easing pressures on raw material prices.



## Mining

CSN Mineração had a historic year with exceptional results across operations. The company once again delivered strong operational efficiency, posting robust figures across production, sales, port throughput, and dividend distribution. In a relatively stable global market for iron ore—with average Platts prices hovering around US\$103.4 per dry metric ton and solid demand—CSN Mineração capitalized on favorable market conditions to build competitiveness and grow our market presence.

Regarding our production, the company initially forecasted an increase of 2.5 million metric tons but exceeded expectations, achieving a 3.78 million metric ton increase—bringing total output (production + third-party-sourced ore) to 42 million metric tons. A well-executed commercial strategy enabled CSN Mineração to optimize revenues by prioritizing the sale of lower-grade ores at more competitive prices, capturing market opportunities and increasing profitability.

C1 costs—a standard metric of mining efficiency—also showed a notable improvement. CSN Mineração not only met but outperformed its cost guidance, significantly reducing direct costs across mining, haulage, and processing from US\$21.0 per metric ton in 2023 to US\$20.4 per metric ton in 2024—the lowest level recorded in recent years. These results were supported by robust continuous improvement initiatives, improved

operational asset performance, and strategic deployment of artificial intelligence (AI) tools for process optimization and prediction.

The TECAR Port terminal also performed strongly with record ore handling volumes, further establishing its position as one of the most efficient ports in the industry. On the sustainability front, CSN Mineração disposed of 100% of its tailings as filtered dry-stacked tailings, minimizing environmental impact.

Strong cash flow sustained a consistently high dividend payout, maintaining CSN Mineração's position as one of the mining sector's leading dividend distributors. Since its IPO, the company has distributed approximately R\$17.1 billion in dividends—representing around 45% of its market value—evidencing its long-term commitment to shareholder value.

# 42 million

**metric tons**  
(produced + sourced)

→ An off-road truck from CSN Mineração's fleet – Congonhas (MG)







## Cement

2024 was a pivotal year for CSN Cimentos, solidifying its position with one of the strongest performances in the company's history. Domestic cement demand remained stable, with growth prospects fueled by government programs such as the *Minha Casa Minha Vida* housing program and the new Growth Acceleration Program (PAC), both expected to further stimulate the sector in the years ahead. While cement prices have gradually recovered since the pandemic, they remain below construction sector inflation, with upward trends anticipated as demand continues to rise.

CSN Cimentos outpaced the market's 3.4% overall growth at 5.9%, reflecting its successful strategy to expand market share. This performance was driven by an effective commercial strategy, with notable expansion in the bagged cement segment—focused on a more dispersed sales model (selling smaller volumes to more customers)—and in bulk cement, where logistics infrastructure and high service levels provided a competitive edge. Bulk cement now accounts for 38% of CSN Cimentos' total sales, up from 15% just a few years ago.

Operational efficiency and cost management were also crucial to this success, with continued cost reductions year on year. CSN Cimentos exceeded its cost savings guidance, achieving a 7.1% reduction in cost per product sold through continued process optimization. With an installed capacity of 17 million tons/year and a robust strategic investment pipeline, CSN Cimentos has the potential to reach 26 Mtpy in the coming years.

Its seamless integration with CSN's other businesses—including steel, ports, logistics, and renewable energy—is a distinct competitive advantage that is difficult to replicate in the industry. These synergies have consistently supported sector-leading EBITDA margins and superior competitiveness. In 2024, adjusted EBITDA totaled R\$ 1.361 billion, a 39.5% increase year on year, with an EBITDA margin of 28.5%.

# R\$ 1.361 billion

Adjusted EBITDA

→ Bagged cement from  
CSN Cimentos Brazil  
– Arcos (MG)



## Logistics

In 2024, our logistics solidified its role as a core strategic pillar of CSN's business model, highlighting its growing importance across CSN Group operations. Despite external challenges—including shifts in demand and global economic volatility—CSN delivered strong performance, anchored in a strategy of market expansion and continuous operational improvement.

In rail logistics, CSN reported solid net revenue, fueled by the operational growth of MRS Logística and Ferrovia Transnordestina Logística (FTL). MRS played a key role in the efficient transport of iron ore and steelmaking inputs, strengthening the Group's integrated logistics. Improved operational efficiency in this segment led to an adjusted EBITDA of R\$ 1.4 billion, reflecting sound strategic asset management.

In the port logistics segment, CSN also achieved outstanding results, with Sepetiba Tecon posting strong cargo handling performance across steel products, containers, general cargo, and bulk commodities. This operational momentum drove net revenue of R\$ 353 million, a 35.4% increase over the previous year that strengthened CSN's strategic position in integrated logistics. The terminal has continued to receive modernization investments, enhancing both cargo diversification and the vertical integration of operations.

The TECAR terminal, operated by CSN Mineração, achieved record throughput and unprecedented logistical efficiency, providing a strategic competitive advantage. Shipping capacity hit historic levels, enabling more streamlined operations and reduced export costs.

CSN's focus on cost optimization, multimodal diversification, and operational synergy continues to enhance our competitive edge in logistics. Through ongoing investments and strategic projects, we are expanding our transportation capacity and connectivity, driving greater efficiency for our own businesses and Brazil's broader economy.

# R\$ 3,245 million

total net revenue in logistics

→ Container yard – Sepetiba  
Tecon terminal, Itaguaí (RJ)







→ The Itá hydroelectric  
facility – Itá (SC)

## Energy

In 2024, energy self-sufficiency remained a key competitive differentiator for CSN, supporting efficient industrial operations and robust margins driven by strong synergies across businesses. The energy segment reported net revenue of R\$ 521 million and an adjusted EBITDA of R\$ 143 million, with an EBITDA margin of 27.4%, reflecting the Group's resilience and ability to convert operational challenges into opportunities.

In the second quarter, an extreme weather event in the state of Rio Grande do Sul had a direct impact on CSN's hydroelectric operations. The region experienced its heaviest rainfall in 60 years, with precipitation levels reaching 507% above the historical average, affecting the Jacuí and Canastra hydro plants. Although this led to a temporary dip in net revenue, CSN responded swiftly to ensure the safety of both the dam and downstream communities. We immediately activated our emergency response plans (ERP), maintained open communication with Civil Defense authorities, and ensured the safe relocation of residents in high-risk areas. Beyond the emergency response, CSN launched a thorough assessment of structural impacts and developed a plan for retrofitting and modernizing the affected assets—bolstering long-term climate resilience.

In the third quarter, segment performance rebounded as operations resumed and electricity rates increased during Brazil's dry season. The combination of operational recovery and favorable pricing led to a significant improvement in both revenue and EBITDA margins.

Another highlight from the year was CSN's entry into the natural gas free market, a move that delivered an incremental EBITDA of R\$ 100 million. The migration enhanced flexibility in managing our energy supply portfolio and significantly reduced energy costs, improving the competitiveness of our industrial operations.

CSN also progressed on several industrial energy efficiency initiatives, including fossil fuel replacement projects and optimization of natural gas and electricity use. Through the CTE2 modernization project, CSN is set to increase internal power generation capacity, further enhancing operational resilience and efficiencies.

**R\$ 521 million**  
net revenue



## Tax Management

CSN maintains a responsible and transparent tax management strategy, fully aligned with applicable legislation in all jurisdictions where we operate. We follow a tax management model based on accuracy, timeliness, and strategic use of tax incentives to strengthen competitiveness. Our tax strategy is publicly disclosed and reviewed by the Oversight Board, and governed by our Code of Conduct to ensure compliance with applicable legislation.

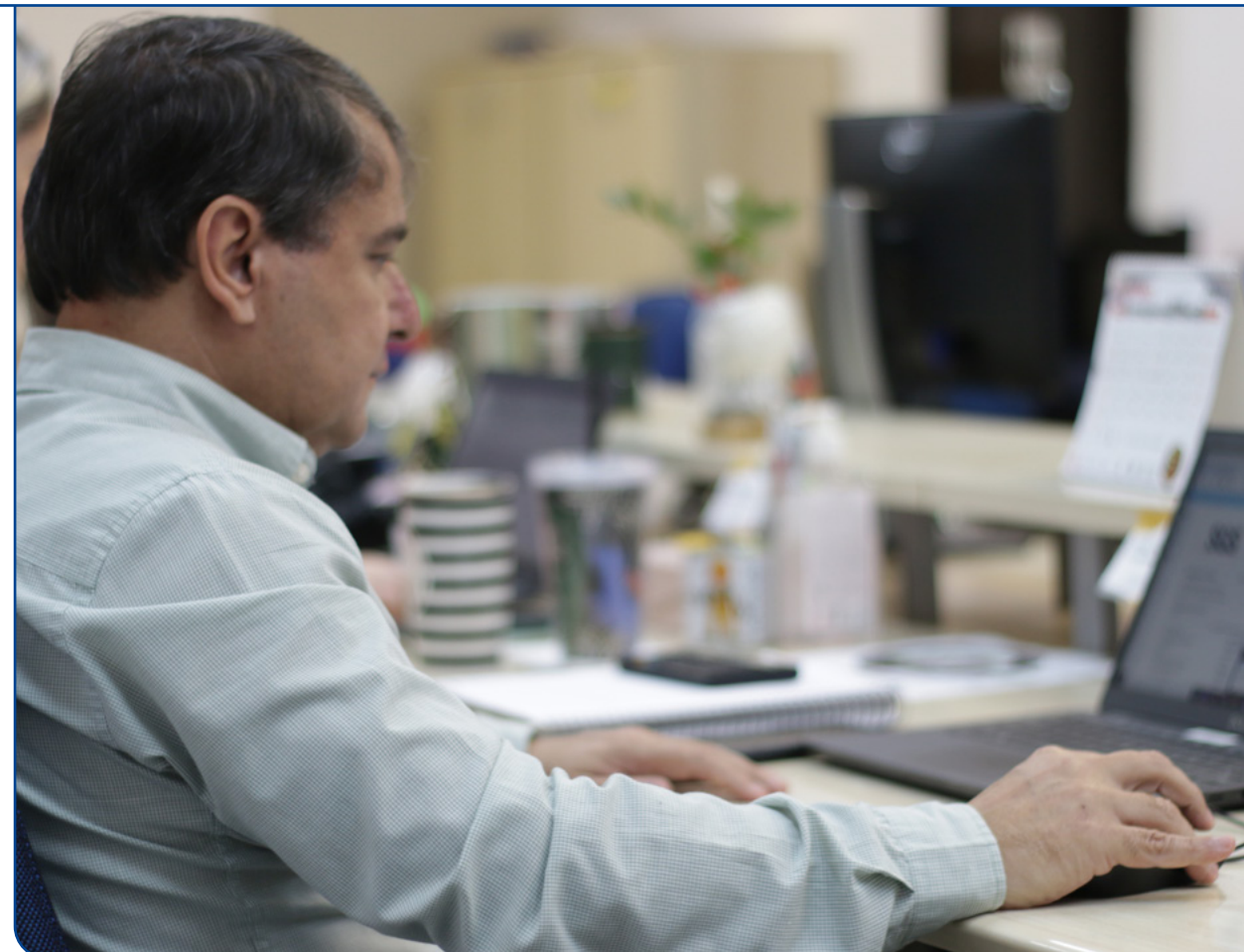
CSN is subject to both local and international tax legislation, including transfer pricing regulations, Country-by-Country Reporting to Brazil's Federal Revenue Service, Controlled Foreign Corporation (CFC) rules, and debt limitation regulations under Brazilian law. All tax impacts are duly disclosed in the financial statements available in our financial reports and on CSN's [Investor Relations website](#).

CSN's Tax Planning Department is responsible for the daily management of these activities, under the supervision of the Chief Financial Officer and with support from the Legal Department. The Board of Directors and the Chief Financial Officer oversee strategic tax matters. Alignment between governance and tax control is ensured through clear definitions of responsibilities, periodic reviews of governance policies, and rigorous tax control practices. In addition, CSN's tax strategy is aligned with the Group's business and sustainable development guidelines regarding common goals, financial impact analysis, risk and opportunity assessment, and structured internal communication.

The Tax and Fiscal departments constantly monitor developments in international, federal, state, and municipal tax laws, including tax compliance rules across jurisdictions where CSN operates, ensuring ethical and transparent practices. Tax risk monitoring is supported by an internal tax compliance policy, internal control processes, monitoring systems, and active communication with tax authorities. CSN also engages specialized consultants to ensure compliance with current regulations.

CSN's tax strategy is integrated into the Group's business plans, supporting initiatives such as corporate reorganizations, strategic partnerships, and tax incentives. The overarching goal is to strengthen CSN's ability to mitigate tax risks and reduce potential financial impacts, ensuring sustainable and competitive operations. Our tax strategy also factors broader social and economic considerations, including community development, reducing inequality, and contributing to public services, job creation, and professional training.

We also invest in social and cultural initiatives through the CSN Foundation and via tax incentive laws, supporting projects spanning culture, sports, and the protection of children, adolescents, and the elderly. CSN sponsors projects across Brazil, with a focus on regions where we operate and new host municipalities following the expansion of CSN Cimentos through recent acquisitions. This strategic approach enables us to direct a portion of our tax payments toward initiatives that deliver positive social impact, delivering on our long-term commitment to sustainable development.



→ A team member at Prada Embalagens – São Paulo, Brazil

CSN also actively engages with the industry and society through our membership of trade associations such as the Minas Gerais State Industry Federation (FIEMG), National Industry Federation (CNI), and the Brazilian Association of Wholesale and Free-Market Power Consumers (ABRACE), and the Brazilian Mining Institute (IBRAM). Supporting greater transparency and stakeholder engagement, CSN offers a dedicated email address ([tributariocsn@csn.com.br](mailto:tributariocsn@csn.com.br)) as a direct channel for tax-related inquiries and feedback. All input received helps inform the ongoing review and refinement of our tax strategy.



# Corporate GOVERNANCE



## IN THIS CHAPTER

- Governance Structure
- Ethics and Compliance
- Risk Management and Auditing
- ESG Management



# Governance Structure

CSN is listed on the São Paulo Stock Exchange (B3: CSNA3) and the New York Stock Exchange (NYSE: SID), positioning the Group in both the national and international capital markets. To ensure full compliance with the stringent regulatory standards set by the Brazilian and US securities commissions, CSN applies internationally recognized best practices in corporate governance.

In addition to ensuring regulatory compliance, our governance structure is designed to integrate our operational assets to leverage competitive advantages, capture strategic opportunities, and drive sustainable growth.

The **Board of Directors (BoD)** is our highest governance body and plays a central role in establishing strategic guidelines. Key responsibilities include overseeing Executive Board activities and decisions on business matters. The Board of Directors also oversees processes to identify economic, environmental and social impacts, and assesses the effectiveness of measures to manage those impacts. In addition, the Board is responsible for appointing and removing Executive Board members as needed. Board members are elected by the Annual Stockholders' Meeting, with the majority appointed by the controlling shareholder, for two-year terms and with the possibility of re-election. Critical concerns are communicated to the Board through a wide array of channels, including periodic reports and presentations, governance committee

discussions, internal and external audit reports, regular updates from senior management, risk and compliance reports, earnings presentations, strategic and business planning analyses, legal and regulatory reviews, sustainability and CSR reports, crisis communications, and formal Executive Board meetings.

Board meetings follow a pre-established annual calendar and may also be held on an extraordinary basis when necessary. In 2024, the Board was composed of five members, including three independent directors (60%) and one employee representative, as mandated by the Company's Bylaws—reflecting CSN's policy of drawing diverse perspectives to inform strategic management. The Board convened 23 times during the year to deliberate on key policies, capital market transactions, and strategic business matters.

The Board of Directors has the authority to create special committees, responsible for in-depth assessments and analysis in their respective areas, supporting more robust and well-informed strategic decisions. Among CSN active committees is the **Audit Committee**—composed entirely of independent Board members. Its duties encompass oversight of the financial statements, internal controls, risk management, and our Compliance Program, in addition to following investigations and responses to reports submitted through the Whistleblower Channel.

→ A CSN employee at our headquarters on Av. Brig. Faria Lima – São Paulo (SP)



## COMPOSITION OF THE BOARD OF DIRECTORS AS OF DECEMBER 31, 2024<sup>1</sup>

Benjamin Steinbruch	Member
Fabiam Franklin	Board member serving as employee representative
Yoshiaki Nakano	Independent member
Antônio Bernardo Vieira Maia	Independent member
Miguel Ethel Sobrinho	Independent member

<sup>1</sup> All members of the CSN Group's Board of Directors are men over 50 years old.



Another key advisory body is the **ESG Committee**, a non-statutory body tasked with supporting the management of environmental, social, and corporate governance risks, impacts, and opportunities. Made up of 19 members—including executives and leaders from CSN’s operations and corporate functions—the Committee provides strategic guidance to the Board of Directors on setting ESG targets, shaping strategy, and tracking performance in these areas. It also implements a multidisciplinary approach to evaluating ESG initiatives and assessing risks and opportunities tied to material topics, with the flexibility to consult external experts when needed.



BOARD MEMBERS’ COMPETENCIES AND SKILLS

	Finances	Risk management	ESG and innovation	Economics and politics	Industrial/mining operations
Benjamin Steinbruch	X	X	X	X	X
Fabiam Franklin	X				X
Yoshiaki Nakano	X	X		X	
Antônio Bernardo Vieira Maia	X	X	X	X	
Miguel Ethel Sobrinho	X	X	X	X	X

COMPOSITION OF THE AUDIT COMMITTEE AS OF DECEMBER 31, 2024¹

Yoshiaki Nakano	Independent member and chair
Antônio Bernardo Vieira Maia	Independent member
Miguel Ethel Sobrinho	Independent member

¹ All members of the Audit Committee are men over 50 years old.

→ A CSN team member at our corporate headquarters on Av. Brig. Faria Lima – São Paulo (SP)



COMPOSITION OF THE ESG COMMITTEE AS OF DECEMBER 31, 2024<sup>1</sup>

Victoria Steinbruch	Deputy CEO – Chair of the ESG Committee
Felipe Steinbruch	Head of Innovation – Vice-Chair of the ESG Committee
Alberto de Senna Santos	Advisor to the CEO – Member
Alexandre de Campos Lyra	Head of Steelmaking – Member
Antônio Marco Campos Rabello	Chief Financial Officer – Member
Claudia Maria Sarti	Manager of Corporate Legal, Governance, and Capital Markets – Member
Edvaldo Araújo Rabelo	Head of Cement – Member
Enéas Garcia Diniz	Executive director – Member
Felipe Spiri	General Manager of Innovation – Member
Harry Morgenstern	Chief Procurement and Investment Officer – Member
Helena Brennand Guerra	Head of Sustainability, HSE & Assets – Member
Igor Estrada Gouvea	Head of Audit, Risk, and Compliance – Member
Leonardo de Abreu	Head of People and Management – Member
Marcelo Cunha Ribeiro	Executive director – Member
Monica Garcia Fogazza Rego	Chair of the CSN Foundation – Member
Nuno Francisco Bruno Saramago	Head of Logistics Planning and Special Sales – Member
Pedro Barros Mercadante Oliva	Chief Financial & Investor Relations Officer, CSN Mineração, and Advisor to the CEO – Member
Rogério Gonçalves Pizeta	Head of Energy– Member
Ubaldo Marques Silva Filho	Head of Procurement – Member

<sup>1</sup> The ESG Committee is composed of 19 members, of whom 21.1% are women and 78.9% are men. By age group, 47.4% are aged between 30 and 50, and 52.6% are over 50.

The **Executive Board** is tasked with the day-to-day management of CSN's operations, in line with policies and strategies established by the Board of Directors. The Executive Board meets as needed, upon request by the CEO or any two executives, and each executive oversees activities within their respective areas of responsibility. Executives are appointed for two-year terms, with the option for re-election. The Executive Board is currently composed of nine members, including the CEO. CSN's leadership team brings together executives with complementary expertise, supporting strategic planning and identification of growth opportunities.

EXECUTIVE BOARD MEMBERS AT 12/31/2024<sup>1</sup>

Benjamin Steinbruch	CEO
Antonio Marco Campos Rabello	Chief Financial and Investor Relations Officer
Marcelo Cunha Ribeiro	Executive officer
Enéas Garcia Diniz	Executive officer
Alexandre de Campos Lyra	Chief Operating Officer, Steelmaking
Stephan Heinz Josef Victor Weber	Chief Investment Officer
Luis Fernando Barbosa Martinez	Chief Commercial Officer
Rogério Bautista da Nova Moreira	Chief Legal Officer
David Moise Salama	Head Insurance and Credit

<sup>1</sup> All Executive Board members are men. By age group, 22% are aged between 30 and 50, and 78% are over 50.



Decision-making on the Executive Board is supported by various non-statutory executive committees, which help assess action plans and define risk mitigation strategies. These include the Crisis Committee; Occupational Health and Safety Committee; Internal Environmental Management Committee; Investment Committee; People, Management, Career & Succession Committee; Portfolio Committee; Dam Safety Committee; and Community Committee. These committees play a central role in supporting the leadership team, helping ensure informed, responsible decision-making and effective management of risks and opportunities.

## Executive committees support the Executive Board in assessing action plans and defining risk mitigation strategies

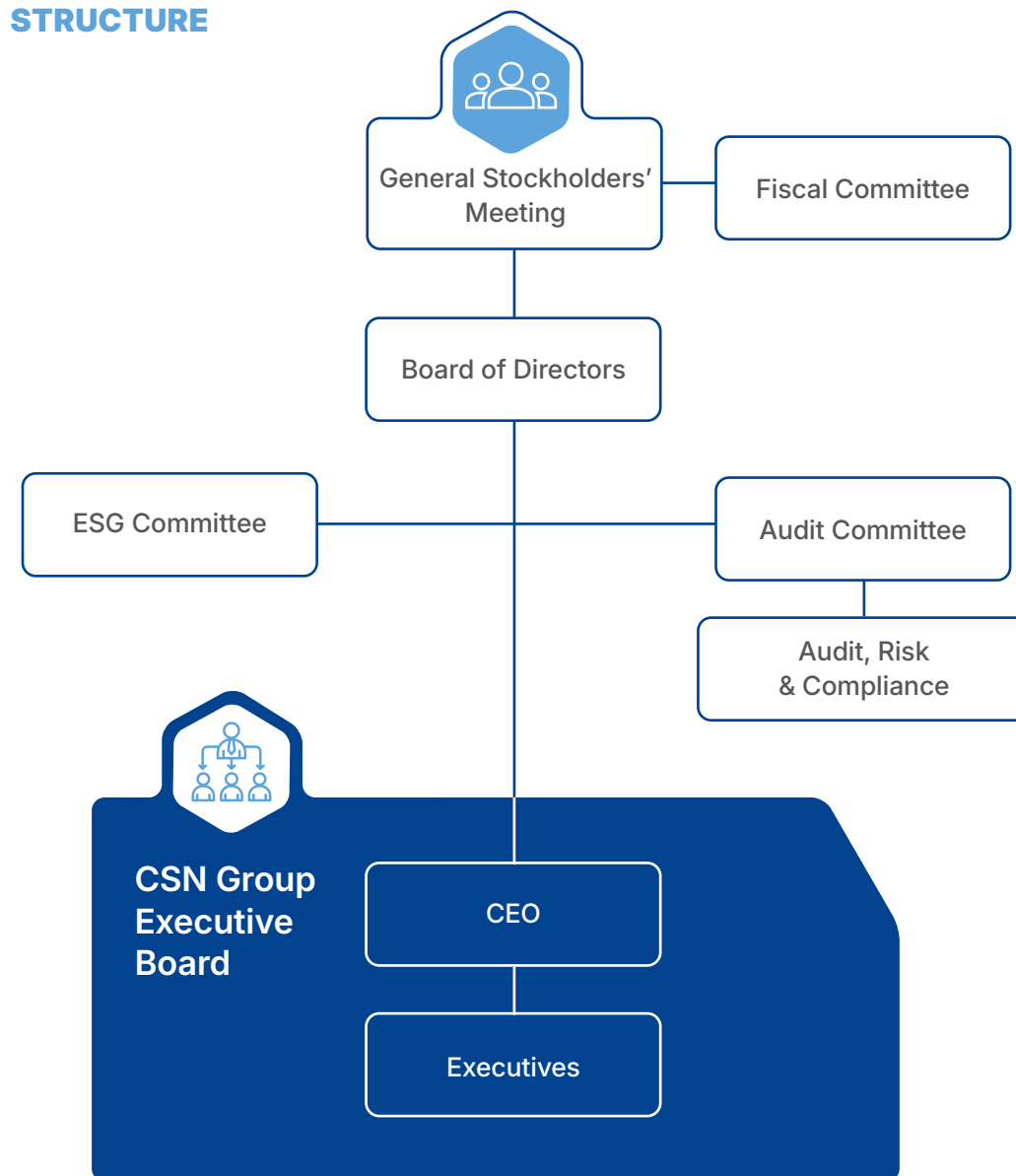
CSN's governance structure also includes a non-permanent Fiscal Committee, which is convened upon request by shareholders during the General Stockholders' Meeting, in line with applicable regulations. The Fiscal Committee's structure and operation are governed by CSN's Bylaws, requiring three full members and three alternates, elected at the General Meeting for a term that lasts until the next Annual Meeting. The Fiscal Committee is responsible for exercising oversight of the Board of Directors' and Executive Board's performance of its duties under applicable law and our bylaws. Its members may act independently to oversee management practices, ensuring greater transparency and accountability in our operations.

### OVERSIGHT BOARD MEMBERS AS OF DECEMBER 31, 2024<sup>1</sup>

Angélica Maria de Queiroz	Chair
Beatriz Santos Martini	Alternate
André Coji	Member
Nilton Maia Sampaio	Alternate
Wilfredo João Vicente Gomes	Member
Paulo Roberto Evangelista de Lima	Alternate

<sup>1</sup> The Fiscal Committee is composed of 6 members, of whom 33.3% are women and 66.7% are men. By age group, 100% are over 50.

### GOVERNANCE STRUCTURE

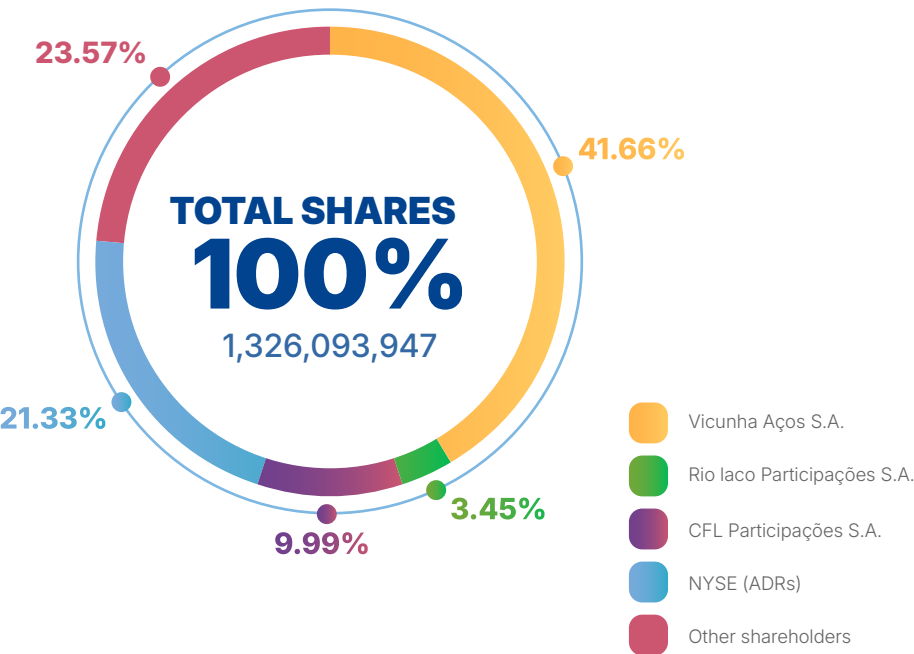




## Ownership Structure

CSN's entire share capital is subscribed and fully paid-in, consisting exclusively of common, book-entry shares with no par value. Each common share entitles the holder to one vote at General Shareholders' Meetings, in line with CSN's approach to transparent and participatory governance.

CSN Mineração S.A. (CMIN), a owned subsidiary of CSN, is listed on the Level 2 corporate governance segment of B3 (Brazilian stockmarket). Its share capital—entirely composed of book-entry common shares with full voting rights—is fully subscribed and paid in, mirroring that of the parent company, CSN.



## Business Governance

CMIN operates under its own corporate governance structure, even as a subsidiary—CSN holds 69.01% of its common shares. Its governance and management practices align with the CSN Group's stringent standards, while maintaining its operational and financial autonomy. Following the sale of 10.74% of its shares to Itochu Corporation, the Japanese group now owns a 20% equity stake in CMIN, both directly and via its majority ownership of Japão Brasil Minério de Ferro, which previously held 9.26% of the company's shares.

### COMPOSITION OF CSN MINERAÇÃO'S BOARD OF DIRECTORS AS OF DECEMBER 31, 2024<sup>1</sup>

Benjamin Steinbruch	Chair
Marcelo Cunha Ribeiro	Member
Enéas Garcia Diniz	Member
Helena Brennand Guerra	Member
Hisakazu Yamaguchi	Member
Miguel Ethel Sobrinho	Independent member
Yoshiaki Nakano	Independent member
Daisuke Hori	Alternate

<sup>1</sup> Among the eight members of CSN Mineração's Board of Directors, 12.5% are women, and 87.5% are men. By age group, 25% are aged between 30 and 50, and 75% are over 50.

### COMPOSITION OF CSN MINERAÇÃO'S AUDIT COMMITTEE AS OF DECEMBER 31, 2024<sup>1</sup>

Yoshiaki Nakano	Independent member and chair
Angélica Maria de Queiroz	Independent member
Beatriz Santos Martini	Independent member

<sup>1</sup> All members of CSN Mineração's Audit Committee are over 50 years old. By gender composition, 66.7% are men and 33.3% are women.

### COMPOSITION OF CSN MINERAÇÃO'S EXECUTIVE BOARD AS OF DECEMBER 31, 2024<sup>1</sup>

Carlos Rodrigues de Campos Mello Júnior	Superintendent Director
Pedro Barros Mercadante Oliva	CFO and Investor Relations Officer
Kan Bito	Chief Strategic Planning Officer
Otto Alexandre Levy Reis	Chief Investment Officer
Claudio Musso Velloso	Chief Operating Officer

<sup>1</sup> The Executive Board is entirely composed of male members. By age group, 20% are between 30 and 50 years old, and 80% are over 50 years old.



CSN Cimentos, a wholly-owned and privately held subsidiary of CSN, also has its own dedicated governance structure. This vertical governance model reflects the Group's evolution toward a growth-focused strategy that integrates our portfolio, strengthens our market position, and ensures effective operational management.

### COMPOSITION OF CSN CIMENTOS' BOARD OF DIRECTORS AS OF DECEMBER 31, 2024<sup>1</sup>

Benjamin Steinbruch	Chair
Helena Brennand Guerra	Member
Victoria Steinbruch	Member

<sup>1</sup> Among the three members of CSN Cimentos' Board of Directors, 66.6% are women aged 30 to 50, while 34.4% are men over 50 years old.

### COMPOSITION OF CSN CIMENTOS' EXECUTIVE BOARD AS OF DECEMBER 31, 2024<sup>1</sup>

Marcelo Cunha Ribeiro	Chief Financial Officer
Luis Fernando Barbosa Martinez	Chief Commercial Officer
Thiago Ferro Teixeira	Chief Logistics Officer
Juliana Cassilha Andrigueto Sitta	Chief Human Resources and Communications Officer
Eduardo Sales Ferreira	Officer

<sup>1</sup> Men make up 75% of CSN Cimentos' Executive Board, while women represent 25%. By age group, 80% are aged between 30 and 50, and 20% are over 50.



→ A CSN team member at the our corporate headquarters on Av. Brig. Faria Lima – São Paulo (SP)





→ A Transnordestina Railway employee – Fortaleza (CE)

## Executive Assessment and Compensation

Executive officers are regularly assessed against both financial and non-financial targets, including ESG aspects. Executives' performance against targets determines their variable compensation, fostering a results-oriented ownership culture. The People & Management team monitors individual and team performance and advises on the continuity or promotion of executives in line with corporate strategy.

CSN's executive compensation practices—applicable to both statutory and non-statutory officers—are designed to strike a balance between internal equity and external market competitiveness, ensuring we attract, retain, and motivate talent to achieve our organizational goals. Our compensation structure includes fixed pay, performance-based incentives, and a benefits package, consistent with each role's responsibilities and market benchmarks. To ensure ongoing alignment with market trends, compensation benchmarks are reviewed every two to three years with support from specialized consultants and compensation surveys.

While the Board of Directors does not yet undergo formal performance reviews, criteria such as meeting attendance and strategic contributions are considered when evaluating members for re-election. Board members also empowered to engage in discussions about peers' individual and collective performance, and to propose improvements during their tenure. The Audit Committee conducts an annual performance self-assessment using

Our compensation strategy aims to balance internal equity and external market competitiveness, ensuring we attract, retain, and **motivate talent to achieve our organizational goals**

an individual questionnaire, which is formally recorded in the committee's meeting minutes. Responses are reviewed collectively, and when necessary, lead to improvement measures. The most recent Audit Committee evaluation was held on July 29, 2024.

Remuneration for members of the Board of Directors and Audit Committee is fixed and determined based on market benchmarks and role complexity. Compensation for Audit Committee members is dependent on their responsibilities and scope of work, while Executive Board members receive compensation aligned with their roles and the extent to which strategic goals are met. Compensation for the Oversight Board is set by the General Stockholders' Meeting, currently at 10% of the average fixed compensation for executive officers, as stipulated by law. There are no share-based compensation plans for the Board of Directors or for Statutory Officers.



# Ethics and Compliance

CSN's Compliance Program is a core pillar of our governance structure, ensuring that both employees and external partners act ethically, responsibly, and in strict compliance with applicable laws and our policies. Serving as the first line of defense against bribery and corruption, this program comprises robust prevention, detection, and remediation mechanisms along with corruption risk assessments on all operations. The program's structure is guided by internationally recognized frameworks and best practices, such as the Organization for Economic Cooperation and Development (OECD) Guidelines, the International Chamber of Commerce (ICC) Rules of Conduct and Recommendations to Combat Extortion and Bribery, Transparency International's (TI) Business Principles for Countering Briber (10<sup>th</sup> Principle), and the World Economic Forum's Partnering Against Corruption Initiative (PACI). It is also compliant with the Brazilian Anti-Corruption Act (Law No. 12.846/13) and the U.S. Foreign Corrupt Practices Act (FCPA).

The CSN's Group Code of Conduct is the centerpiece of our Compliance Program, articulating our commitment to human rights, zero tolerance for human rights violations, and upholding ethics, transparency, and integrity. The Code outlines the daily conduct expected from employees, executives, and business partners across CSN

Group's operations. New hires must formally accept the Code of Conduct within their first 30 days of employment, and annual recertification is mandatory following dedicated training.

CSN takes a proactive and preventive approach, with regular operational reviews to identify and mitigate corruption risks. We also organize ongoing engagement and capacity-building efforts to strengthen our culture of ethics and integrity in the workplace. Annual mandatory training is provided to all employees on the Code of Conduct, Anti-Corruption Policy, and other components of the Compliance Program. These training programs, available on CSN's Corporate University platform, address essential topics including harassment, discrimination, diversity, conflicts of interest, human rights, and data protection, promoting a safe, inclusive, and ethical workplace aligned with international best practices.

In 2024, all CSN employees in Brazil<sup>1</sup> completed mandatory compliance training. Throughout the year, we also provided additional training covering topics such as harassment, discrimination, diversity, conflicts of interest, human rights, and the Brazilian General Data Protection Regulation (BR GDPR). Leadership teams in CSN's international operations also received targeted training during the period.



→ A team member at CSN Cimentos – Pedro Leopoldo (MG)

## EMPLOYEES TRAINED IN ETHICS AND COMPLIANCE

2022	2023	2024
21,751	27,347	28,383

<sup>1</sup> In 2024, we revised our method of calculating the percentage of employees trained in compliance for greater consistency and standardization. The new approach is based on the proportion of employees trained relative to the headcount of direct employees, Apprentice Program employees, and Capacitar program employees as of October 30. For this reason, the number of employees trained differs from the Company's total headcount reported on December 31. [GRI 2-4](#)



One of our key initiatives to promote ethical behavior is our Compliance Ambassadors program, which engages representatives from diverse departments to champion ethical principles in daily operations. Compliance Ambassadors participate in regular training to disseminate compliance guidelines within their teams and business units. In 2024, a total of 376 people took part in the initiative, including the first cohort of Compliance Ambassadors representing CSN operations and offices in Germany, Portugal, the United States, Switzerland, Spain, Luxembourg, and Hong Kong. All champions receive ongoing training and participate in an interactive Teams group, where they share compliance principles across the CSN Group.

**In 2024, employees received training on topics such as harassment, discrimination, diversity, conflicts of interest, human rights, and data protection (GDPR)**

CSN reinforces its message through initiatives such as Compliance Day, internal campaigns, and dedicated content on corporate portals and an ESG website. The ninth edition of Compliance Day, held in 2024 as part of CSN's ESG Week, centered on the theme of discrimination. The event featured a guest speaker and active participation from employees across multiple departments. It also featured a booth and live streams to encourage broad engagement.

Our Whistleblower Channel is a key element of the Compliance Program, providing a secure and accessible platform for employees and third parties to report misconduct and concerns. Available 24/7, the channel can be accessed via phone, email, website, or mail, ensuring complete confidentiality and anonymous reporting on request. The channel is managed by an external and independent firm, which ensures data security and impartial handling of reports. Reports are carefully organized and forwarded to the CSN Group for reviews, investigation, and appropriate action when necessary, in line with our commitment to transparency and ethics. Beyond formal reporting channels, we also address inquiries and requests for guidance sent via email, on a range of compliance-related issues.

## How to Access the Whistleblower Channel



### By phone:

0800 884 2006 (Brazil)  
0800 1824363 (Germany)  
0800 345 1708 (Argentina)  
0800 068740 (Austria)  
900 751 076 (Spain)  
1 800 252 3605 (United States/Canada)

800 902 002 (Hong Kong)  
1 345 769 1854 (Cayman Islands)  
1809 467 310 (Israel)  
800 220870 (Luxembourg)  
800 005 168 (Poland)  
800 180 354 (Portugal)  
800 492 2758 (Singapore)

### By Email:

[canal\\_denuncia@csn.com.br](mailto:canal_denuncia@csn.com.br)

### Via Website:

[www.canalconfidencial.com.br/csn](http://www.canalconfidencial.com.br/csn)  
(available in Portuguese, English, German, and Spanish)

### By Mail:

Attn: Risk and Compliance Department  
Rua Engenheiro Francisco Pitta Brito, 138 – Jardim Promissão,  
São Paulo (SP) – Brazil CEP 04753-900

For questions or additional compliance information:  
[compliance@csn.com.br](mailto:compliance@csn.com.br)



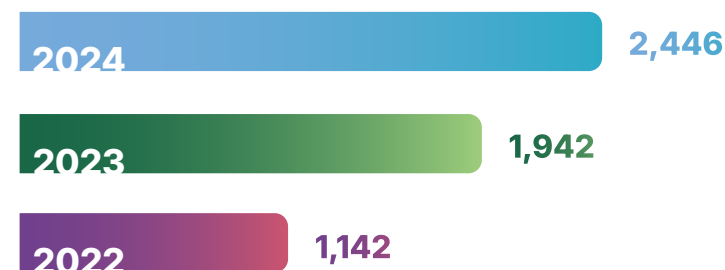
The Chief Audit, Risk & Compliance Officer, via the Investigation and Compliance team, is responsible for reviewing reports and conducting internal investigations. Case resolution timelines depend on complexity, and serious cases, including sexual harassment, are given top priority. For reports involving sensitive issues submitted via the hotline (0800), psychologists are available to offer professional, compassionate support to those affected. CSN also offers psychological support to victims, as part of our commitment to safety, well-being, and a compassionate response to sensitive situations.

All reports submitted to the **Whistleblower Channel** are handled by the Audit, Risk and Compliance team, under the oversight of the Audit and Ethics Committee

In 2024, CSN received 2,446 reports, of which 2,280 were resolved with corrective actions—or dismissed—and 166 remained under investigation. In addition, CSN and our management were not party to any lawsuits or legal proceedings regarding these issues throughout the year. Regarding discrimination specifically, 86 reports were submitted across multiple sites, most related to personal traits, gender, sexual orientation, disability, religion, and race. All cases were investigated, with 13 substantiated, 23 partially substantiated, 14 unsubstantiated, 2 under ongoing investigation, and 34 considered inconclusive. Corrective actions included 15 counseling sessions, five formal warnings, six suspensions, eight terminations with cause, and two cases still under Ethics Committee review—demonstrating CSN’s firm commitment to an inclusive and ethical workplace.

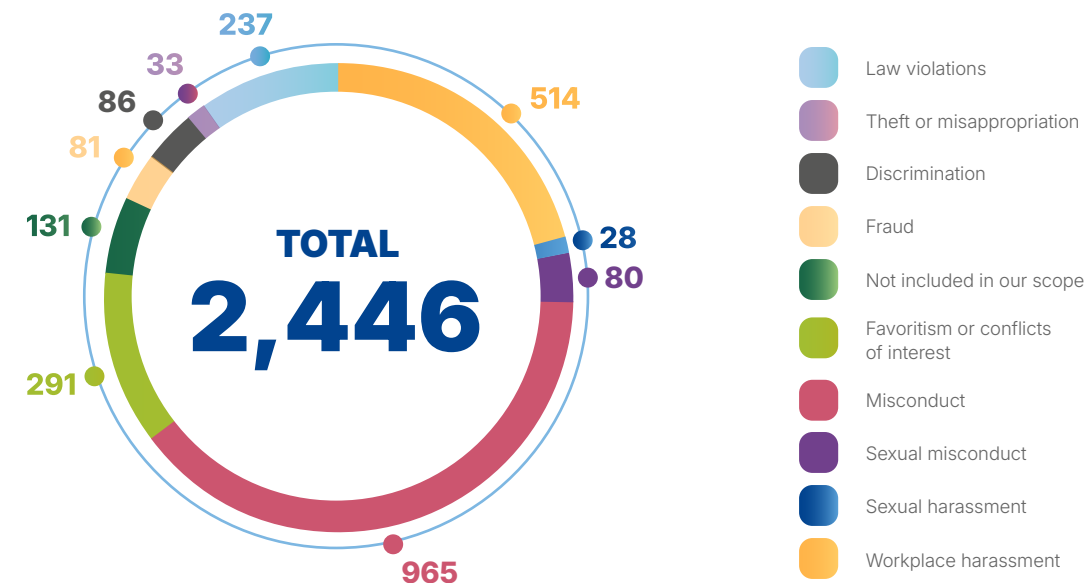
Throughout the year, CSN strengthened oversight by the Audit Committee and Ethics Committee of corrective and preventive measures, ensuring all concerns are addressed with appropriate rigor. This structure supports a high integrity corporate environment aligned with best practices.

## REPORTS RECEIVED VIA THE WHISTLEBLOWER CHANNEL



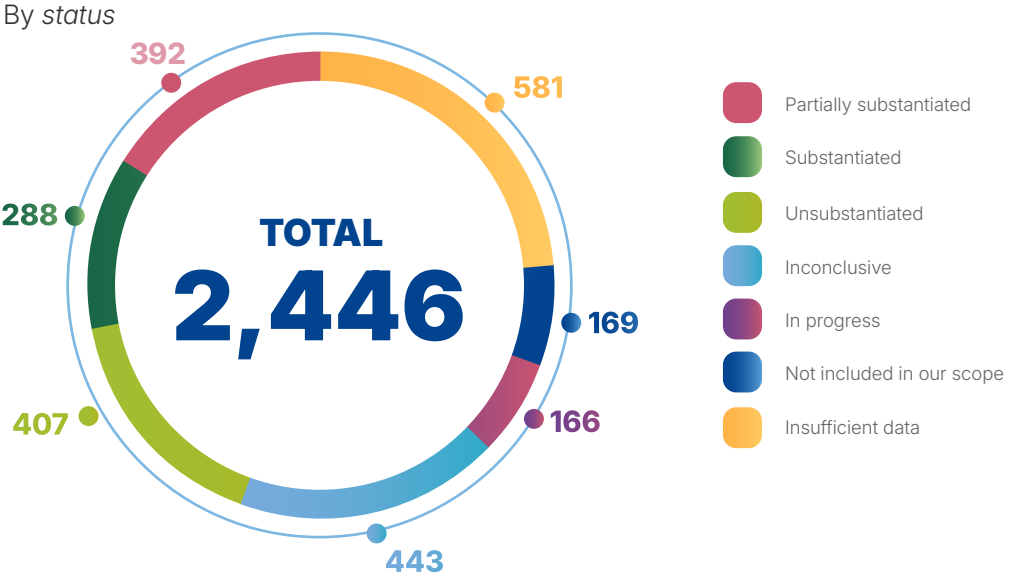
## REPORTS RECEIVED VIA THE WHISTLEBLOWER CHANNEL IN 2024

By category

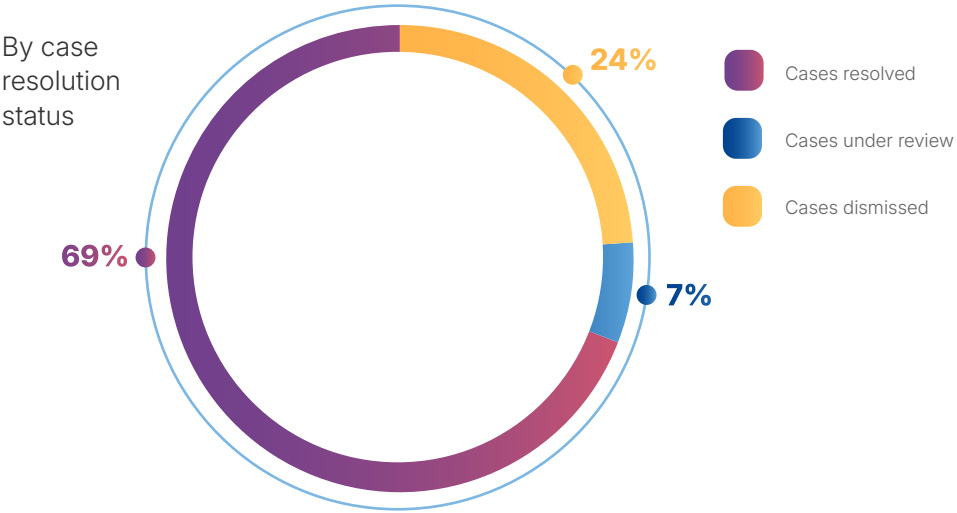




### REPORTS RECEIVED VIA THE WHISTLEBLOWING CHANNEL IN 2024



### % OF REPORTS RECEIVED VIA THE WHISTLEBLOWING CHANNEL



### ACTIONS TAKEN IN RESPONSE TO WHISTLEBLOWER REPORTS INVESTIGATED BY THE AUDIT, RISK AND COMPLIANCE TEAM

	2022	2023	2024
Written warning	10	39	37
Verbal warning	4	32	15
Termination	54	96	27
Termination for cause	30	34	64
Referred to responsible department	na	136	400
Guidance	25	170	151
Suspension	11	22	51
Department transfer <sup>1</sup>	7	68	18
Training	-	42	10
Other	na	64	20
TOTAL	149	703	793

<sup>1</sup> Term updated; in previous cycles, it was "Job transfer." [GRI 2-4](#)

### REQUESTS FOR CLARIFICATION VIA EMAIL

	2022	2023	2024
Business partner due diligence response	936	3,394	1,614
Contract clause review	70	241	211
Conflict of interests	250	814	989
Compliance-related concerns	14	40	98
Policy compliance	9	2	0 <sup>1</sup>
Requests for documentation	27	14	54
Information leak	0	1	2
Gifts/presents	205	30	55
Donation	5	6	69
Other	495	0	0
TOTAL	2,011	4,542	3,092
Percentage of reports responded to	100%	100%	100%

<sup>1</sup> In 2024, the category "Policy compliant" was discontinued. Request for clarification previously recorded under this category were reassigned to three others: conflict of interest, gifts/presents, donations, and miscellaneous.



All CSN businesses undergo corruption risk assessments as part of our corporate Compliance Program, which currently covers all domestic operations. The assessment process is aligned with Decree No. 11.129/2022 and addresses several criteria, including senior management commitment, codes of conduct, integrity policies, regular training, risk management, internal controls, whistleblower channels, and disciplinary actions. Key risks identified include fraud in public procurement and government contracts, dealings with government agencies (such as taxes, inspections, and licensing), and failure to detect and correct irregularities. While no critical weaknesses were found, improvement opportunities were identified and began to be implemented in 2024, with further action scheduled for 2025 and 2026.

CBS Previdência—CSN's pension fund—is excluded from this evaluation as it has its own compliance program. Corruption risk assessments for CSN's international operations are planned for 2025. However, these operations are already subject to CSN Group's Code of Conduct and policies, as well as relevant regulations—such as the Sarbanes-Oxley Act (SOX) and Germany's statutory accounting principles in the case of SWT. Executive officers in these operations are responsible for maintaining internal controls to ensure financial statements are free from material misstatement, whether by fraud or error.



→ An employee at  
Metalgráfica Iguaçu –  
Ponta Grossa (PR)



## Managing Conflicts of Interest

CSN takes a rigorous approach to preventing and managing conflicts of interest, ensuring that all decisions are made ethically and transparently. This approach is essential to preserve the integrity of operations and strengthen stakeholder trust.

The CSN Group Code of Conduct sets forth clear guidelines for all employees, Board members, and Executive Officers. Upon taking office, executives and board members sign an acknowledgment of the Code of Conduct and a Conflict of Interest Declaration, committing to promptly disclose any situation that could compromise the impartiality of their decisions.

If a conflict is identified, the individual must recuse themselves from related discussions and decisions. Within the Board of Directors, such recusal is formally recorded in meeting minutes, ensuring traceability and compliance with best governance practices.

In addition, CSN enables any person—whether internal or external—to report suspected conflicts of interest through our established reporting channels. This mechanism reinforces our commitment to fairness and transparency in business conduct.



## Data Protection

In 2024, CSN took important steps to enhance data security and privacy management. A Data Protection Officer (DPO) and an alternate were officially appointed in accordance with Brazilian National Data Protection Authority (ANPD) requirements, ensuring a better-structured privacy program. As a result, CSN's practices are now fully aligned with the Brazilian General Data Protection Regulation (BR GDPR) and ANPD guidelines.

We also strengthened transparency by publishing Privacy Policies readily accessible to all stakeholders. Our internal privacy policy is available on the corporate intranet for employees, while the external version is publicly accessible on CSN's official website. This enables customers, employees, and partners to better understand our data protection guidelines. This helps to build trust in the way information is handled and demonstrate CSN's ongoing commitment to privacy and digital security.

→ A cement mill control center – Barroso (MG)

# Risk Management and Audit

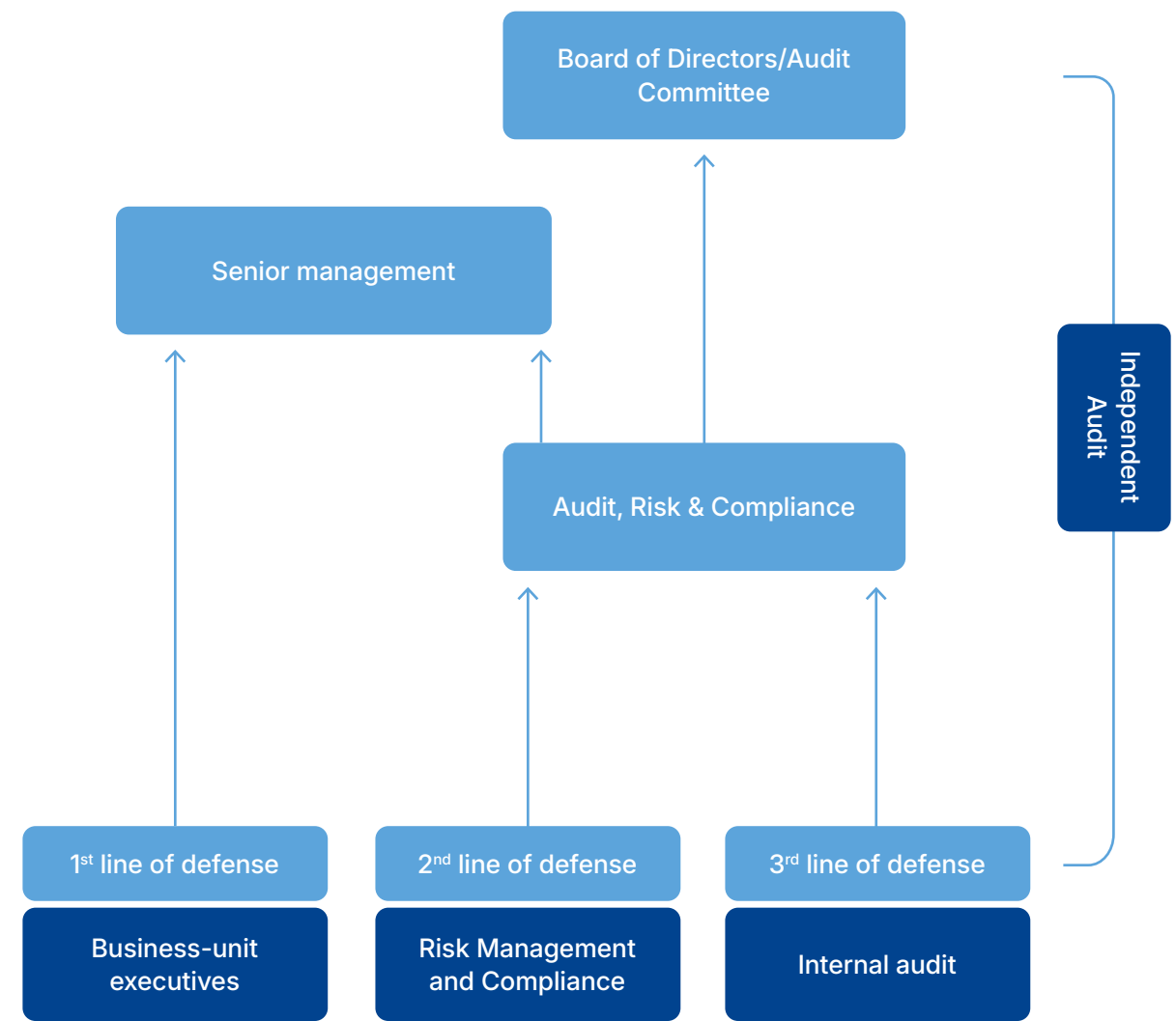
CSN uses a structured risk management approach that plays an important role in safeguarding business continuity and ensuring sustainable growth. Our risk management practices are governed by a Risk Management Manual aligned with leading global standards such as COSO (Committee of Sponsoring Organizations of the Treadway Commission) and ISO 31000. CSN's risk management practices are structured around the three lines of defense model, ensuring a comprehensive and coordinated approach to identifying and mitigating risks and opportunities.

The first line of defense, composed of business units, is responsible for managing risks inherent to their processes, including the implementation of mitigation actions. The second line of defense, led by the Risk and Internal Controls team, supports business units in risk identification and assessment and oversees the design and execution of risk mitigation plans. The Risk and Internal Controls team is also responsible for safeguarding the integrity of the financial statements, in compliance with Sarbanes-Oxley (SOx) requirements, and for ensuring operational transparency through regular assessments, subject to independent external audits conducted annually. The findings from these assessments are submitted to the Audit Committee, strengthening corporate governance and operational transparency.

Strategic, operational, climate-related, ESG, financial, and regulatory risks are identified and documented in a risk matrix. Each risk is assessed on likelihood and potential impact. Based on this assessment, business units and departments develop specific plans to mitigate or control risks. The Audit, Risk, and Compliance team oversees the entire process, ensuring efficient and transparent risk governance.

Internal Audit enhances the risk management structure by functioning independently as the third line of defense. Under an annual work plan, the Internal Audit team conducts audits to assess process efficiency and the organization's capabilities to prevent financial and non-financial impacts, such as losses and fraud. Internal Audit reports are regularly shared with the Audit Committee, providing a robust basis for strategic decision-making and building trust in business operations.

## RISK MANAGEMENT FRAMEWORK







## Strengthening a Culture of Internal Controls

In 2024, CSN's Risk and Internal Controls team provided training on "Navigating Internal Controls," with a goal to build a robust organizational culture, promote compliance-oriented practices, and mitigate daily operational risks to which the CSN Group and its subsidiaries are exposed. The program also emphasized the critical importance of maintaining a robust and effective internal control environment. Employees from Logistics, the Integrated Management Center (CIG), Human Resources, Accounts Payable/Treasury, Accounts Receivable/Billing, Tax, and Controllershship participated in the sessions, which reaffirmed CSN's commitment to integrity and transparency and equipped employees to identify and manage risks more effectively. These training initiatives are essential to strengthen our organizational culture and implement practices to ensure compliance, mitigate day-to-day risks, and maintain a robust internal control framework.



# Strategic Risks

## DIGITAL SECURITY AND CYBER ATTACKS

CSN's operations are highly reliant on information technology systems, telecommunications, and automated equipment. Any system failures or disruptions resulting from cyberattacks could jeopardize operational continuity, damage our reputation, and weaken stakeholder relationships. To mitigate these risks, we continuously invest in strengthening our digital infrastructure and cybersecurity defenses.



## CLIMATE CHANGE AND ENERGY TRANSITION

Climate Change and Energy Transition Increasingly frequent extreme weather events and the urgent need to adapt to a low-carbon economy pose significant challenges for CSN. These shifts can affect CSN's operations, supply chain, and the broader industry. In response, CSN is proactively reducing greenhouse gas emissions, making its assets more resilient to climate change, and implementing solutions to mitigate environmental impacts, helping to build more sustainable operations.



## MARKET VOLATILITY

CSN Group companies are exposed to economic volatility that may directly affect our financial performance and results of operation. Changes in interest rates, foreign exchange rates, and commodity prices can significantly impact our financial assets and liabilities, cash flow, and results of operation. To mitigate these risks, CSN employs risk management strategies to reduce exposure and ensure financial stability.



## IMPACTS ON THE SUPPLY CHAIN

The CSN Group's supply chain could be affected by external factors such as geopolitical tensions, health crises, and global economic instability. These factors may jeopardize logistics operations, restrict access to critical inputs, and impact demand for our products. To mitigate these risks, we work to diversify our supplier network, strengthen logistics operations, and implement operational resilience strategies.





## Climate and Nature-Related Risks

CSN has embedded climate and nature-related risks into our corporate risk management processes, recognizing the increasing importance of these issues for our business. Since 2021, we have been bolstering these efforts as part of our broader ESG (Environmental, Social, and Governance) Strategy. That same year, the CSN Group established a dedicated Climate Risk and Opportunity Working Group as part of its ESG governance structure to enhance Group-wide identification and management of climate-related risks and opportunities.

In 2022, CSN completed climate scenario assessments following the guidelines of the Task Force on Climate-Related Financial Disclosures (TCFD). The assessments addressed two key risk categories: transition risks, related to market dynamics, technological shifts, regulatory changes, and reputational factors; and physical risks, arising from acute and chronic climate-related events. The assessments used three different Shared Socioeconomic Pathways (SSP) and different NGFS (Network of Central Banks and Supervisors for Greening the Financial System) scenarios, covering a range of global warming projections. The scenarios considered were: 4°C warming (High Vulnerability Society – SSP3), 2.5°C warming (Stay on the Fence – SSP2), and 1.5°C warming (Low-carbon Economy – SSP1). More than 7,000 climate model simulations, consistent with those used by the Intergovernmental Panel on Climate Change (IPCC), were carried out to identify and prioritize physical risks across short, medium, and long-term horizons.

In 2023, CSN consolidated these risk assessments into a comprehensive Climate and Nature Risk Matrix, applying the Locate, Evaluate, Assess, Prepare (LEAP) methodology in line with TNFD (Taskforce on Nature-related Financial Disclosures) guidelines. We also began developing a governance framework for nature-related action plans, creating robust capabilities to oversee and continuously improve environmental strategies. Both climate and nature-related risks are now integrated into CSN's enterprise-wide risk matrix, ensuring a holistic and consistent approach to corporate risk management.

CSN also carries out in-depth assessments of climate-related risks and opportunities, identifying significant potential impacts on its operations, revenues, and expenses. Risks are categorized using the TCFD framework, divided into physical and transition risks. Transition risks include regulatory developments such as maritime carbon pricing, the introduction of Brazil's Emissions Trading System (SBCE), the expansion of carbon-intensive assets, and the indirect effects of the EU's Carbon Border Adjustment Mechanism (CBAM).

These developments could increase operational costs and demand decarbonization strategies, greater supply chain integration, and collaborations with suppliers. Another transition risk is the projected reduction in demand for construction materials due to more resource-efficient building practices—challenging us to deliver products that are more efficient in use. Physical risks include shifts in wind patterns and increased frequency and

## Adaptation Plan

In 2024, we completed a Climate Vulnerability Assessment for each of our assets individually, and set a target to develop a Climate and Nature Adaptation Plan by 2025. Aligned with ISO 14090, this plan will guide CSN's main operations in implementing measures to strengthen resilience to climate change and its impacts. The plan will outline priority actions, assign clear responsibilities, and establish leadership oversight to ensure that CSN companies are well-prepared for future climate and environmental challenges.



severity of extreme rainfall events, both of which can disrupt our operations. To mitigate these impacts, CSN's climate adaptation plans include measures such as wind monitoring systems, dust suppression measures such as polymer application, and rainfall contingency plans to reduce operational disruptions.

The CSN Group Climate Action Report, first published in 2023 and updated biennially, provides a detailed account of identified risks and opportunities, modeled climate scenarios, and governance structures supporting the ongoing evolution of climate risk management. The next edition of the report is scheduled for publication in 2025.

## RISKS

Topic	Risk factor	Segment	Time horizon
Climate	Increased intensity and frequency of extreme rainfall events	Energy and mining	Long term
	Reduced demand for construction materials driven by more efficient building practices	Cement	Long term
	Influx of high carbon footprint raw materials into Brazil (an indirect impact of the CBAM)	Steel	Short term
	Development or expansion of emissions-intensive assets	Cement	Short term
	Implementation of the Brazilian Emissions Trading Scheme (SBCE)	Cement and steel	Short term
	Carbon pricing regulation for international maritime transportation	Mining	Medium term
	Shifting wind patterns	Steel and Mining	Long term
Nature (physical)	Occurrence of natural phenomena that may compromise the safety of the dams	Mining	Long term
	Regulation affecting water availability or quality due to third-party activities in the same watershed	Mining and cements	Long term
Nature (reputational and stakeholders)	Conflicts with local communities may lead to operational disruptions and limit the Company's ability to expand its activities in the future.	Mining, cements and logistics	Medium term
Nature (transition)	External stakeholder pressure for low environmental impact production, especially regarding air quality	Steel and cements	Medium term
	Extended timelines for new projects and licensing processes due to stricter regulatory requirements	CSN	Medium term

## OPPORTUNITIES

Topic	Opportunity	Segment	Time horizon
Climate	Use of acidic slag to lower the clinker factor	Cement	Short term
	Construction of a new plant to process iron ore for use in the production of direct-reduced HBI and DRI	Mining	Long term
	Development of low-carbon products and collaborations with customers to reduce product emissions when in use	Steel	Medium term
	Coke oven battery upgrades to improve product quality	Steel	Short term
	Blast furnace upgrades to lower fuel rates	Steel	Medium term
	Development of an integrated rain and wind management plan to reduce exposure during critical periods.	Mining	Short term
Nature	Efficient resource use through circular economy practices and the development of new products from mining tailings or waste rock	Mining	Medium term
	Ecosystem restoration leveraging nature-based solutions (NbS) to lower restoration and maintenance costs	Mining	Long term



# ESG Management

CSN has a robust ESG management framework aligned with the Group's governance structure, ensuring a comprehensive and integrated approach to assessing sustainability risks, opportunities, and impacts. This structure enables CSN to assess the unique needs of each operational segment, while maximizing synergies within the Group's integrated value chain.

CSN's [Sustainability Policy](#), approved by the Board of Directors, formalizes CSN's ESG management guidelines. CSN's ESG Committee serves as a strategic technical forum for ongoing discussion on challenges and opportunities relevant to our sustainable development. This provides the Board of Directors with a robust basis for setting strategic direction and making decisions on key economic, social, and environmental issues impacting the business. The ESG Committee, comprising 19 executives and key leadership from the CSN Group, facilitates multidisciplinary and collaborative evaluations of progress on our material topics. The committee also helps to share good practices, standardize ESG concepts, and leverage cross-functional synergies among the thematic working groups. The ultimate goal is to advance CSN's sustainability commitments and drive innovation to generate positive impact and financial benefits. To implement this governance framework, the ESG Committee relies on eight thematic groups composed of

52 ESG champions—employees recognized by senior leadership as key representatives for each material ESG topic. ESG Ambassadors are tasked with implementing our ESG Strategy and are co-responsible for leading initiatives related to the material topics. Throughout the year, ESG Ambassador participate in continuous training programs, equipping them to apply and disseminate ESG practices directly in their areas of operation.

The ESG Committee's management and the definition of the ESG strategic plan are overseen by the Integrated ESG Management Committee—a collaborative body formed by the Sustainability Department and CSN Inova Bridge. This Committee also leads initiatives to foster ESG culture, communication, employee engagement, and training across the CSN Group's operations.

Within this structure, the CSN Group Sustainability Department is tasked with setting social and environmental targets and monitoring the execution of projects and initiatives to meet those targets. Reporting directly to the CEO, this department also sets the Group's long-term ESG ambitions. CSN Inova Bridge is responsible for managing the Company's ESG innovation strategy, fostering a culture of sustainability, and integrating our strategic ESG vision into business activities.

## ESG GOVERNANCE STRUCTURE



## Management Systems

CSN's Integrated Management System (IMS) ensures processes are standardized and our [Sustainability Policy](#) is applied consistently. Covering our Group-wide operations, the SGI comprises an Environmental Management System (EMS), Quality Management System (QMS), and Occupational Health and Safety Management System (OHSMS), all certified to internationally recognized standards.

The EMS, based on ISO 14001, guides our environmental management practices across all production sites. Roughly 95% of our facilities are certified, including all main production plants and newly integrated CSN Cimentos plants as of 2023—representing 99% of CSN's EBITDA.

**Our Integrated Management System (IMS)** ensures processes are standardized and our Sustainability Policy is applied consistently

The OHSMS outlines detailed procedures to mitigate risks and safeguard employees, contractors, and neighboring communities. OHSMS principles are consolidated in our [Occupational Health and Safety Management Manual](#), applicable to all CSN operations. Non-Brazil operations like Lusosider (Portugal) and SWT (Germany) are already ISO 45001-certified, and our Brazil operations in Porto Real and Araucária (steel segment) initiated certification in 2024. Additional sites are currently undergoing readiness assessments for certification.

CSN pursues excellence in quality across all its operations, ensuring that its products and processes consistently meet the highest national and international standards. All CSN Group operations—both in Brazil and internationally—hold ISO 9001 certification, affirming the effectiveness of our Quality Management Systems. In addition to ISO 9001, CSN maintains several industry-specific certifications:

### Cements and construction

- **Cantagalo Mill: API SPEC 10A** certification for the use of its cement in oil well cementing.
- **Vitória Mill (CSN Cimentos): Falcão Bauer Eco-Label for CPM 40 and CPM 32 cement products**, recognizing their low CO<sub>2</sub> emissions and sustainable attributes.
- **EPD:** Environmental Product Declaration issued for CP ARI PLUS cement from the Montes Claros facility in Minas Gerais.

### Automotive industry

- **Facilities in Araucária, Volta Redonda, Porto Real and Pradas locations in Mogi, Canoas, Caxias do Sul, Jacareí, and Contagem: IATF 16949**, a globally recognized quality standard required by OEMs and automotive suppliers.

### Food industry















- **Prada Resende and Prada Uberlândia: ISO 22000** certification for food-grade safety of metal packaging.

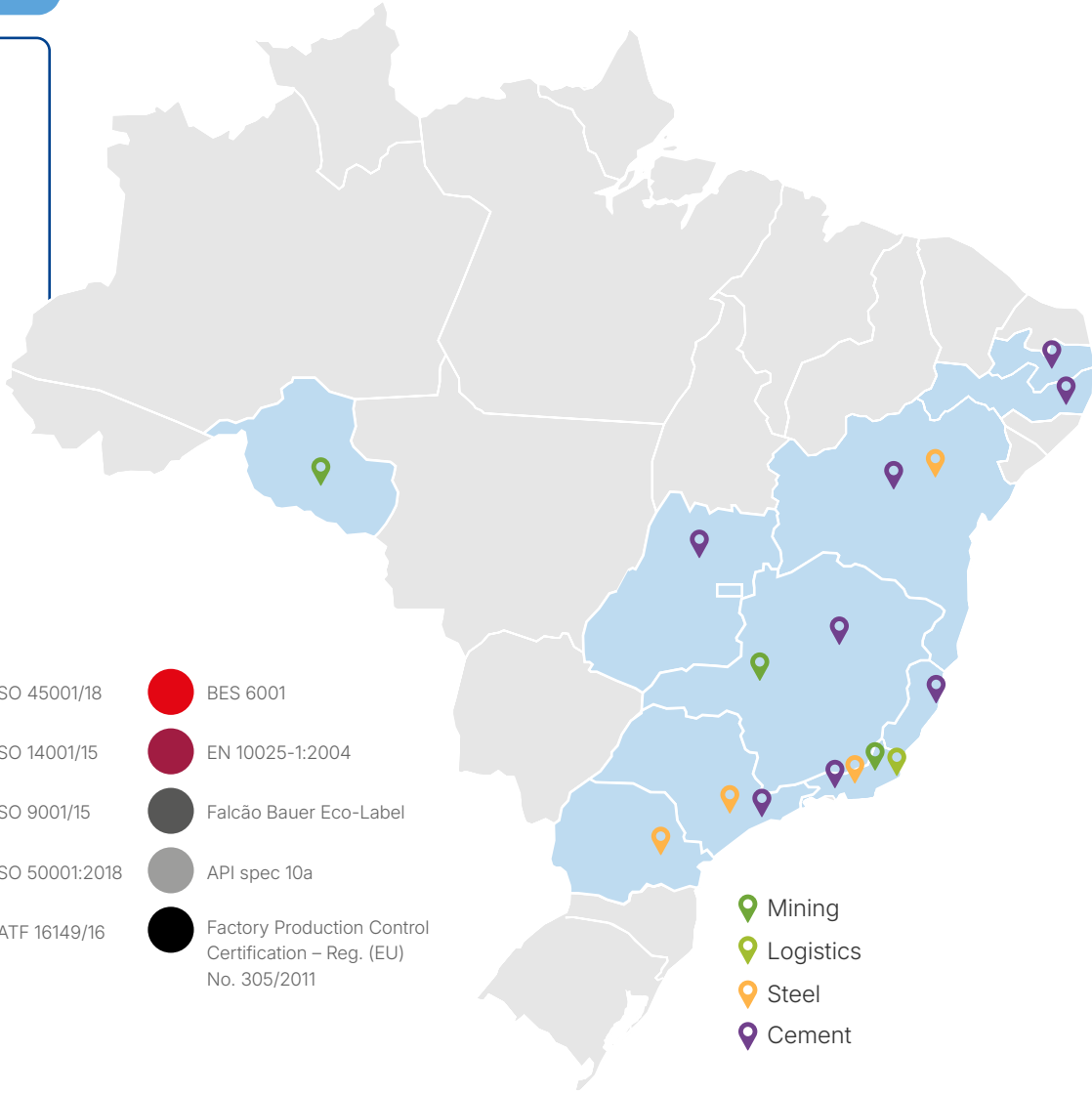









# SGI – Certified Sites





-  ISO 45001/18
-  ISO 14001/15
-  ISO 9001/15
-  ISO 50001:2018
-  IATF 16149/16
-  BES 6001
-  EN 10025-1:2004
-  Falcão Bauer Eco-Label
-  API spec 10a
-  Factory Production Control Certification – Reg. (EU) No. 305/2011
-  Mining
-  Logistics
-  Steel
-  Cement



Steel								
CSN UPV	✓	✓	✓					
CSN Porto Real	✓	✓	✓					
CSN Paraná	✓	✓	✓					
Lusosider	✓	✓		✓		✓		✓
SWT	✓	✓		✓	✓		✓	

Mining		
CSN Mineração	✓	✓
MIPE - M.Nacional	✓	✓
ERSA	✓	

Logistics		
TECAR	✓	✓
TECON	✓	✓

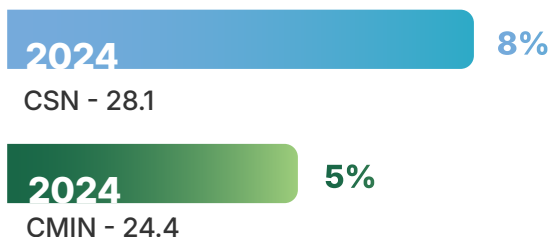
Cement				
Arcos	✓	✓		
Alhandra	✓	✓		
Barroso	✓	✓		
Caaporã	✓	✓		
Cantagalo	✓	✓		✓
Montes Claros	✓	✓		
Pedro Leopoldo	✓	✓		
Candeias	✓	✓		
Cocalzinho	✓	✓		
Sorocaba	✓			
Vitória	✓	✓	✓	
Volta Redonda	✓	✓		

## ESG Ratings Performance

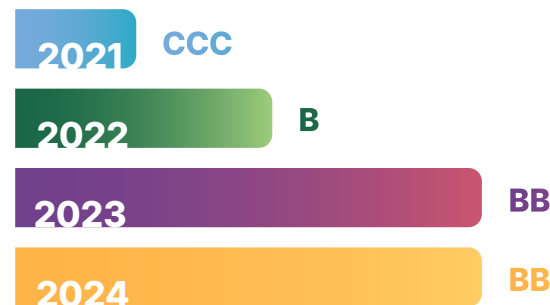
CSN maintained strong performance across key global ESG ratings in 2024. A major highlight was our recognition by Sustainalytics with an Industry Top Rated badge, with CSN 13<sup>th</sup> out of 158 companies in its sector. CSN Mineração ranked even higher, securing 8<sup>th</sup> place among global ESG leaders. In the S&P Global sector assessment, CSN ranked in the top 10% worldwide, while CSN Mineração stood among the top 8%, reflecting consistent progress in environmental and social practices. In the MSCI ESG Ratings, CSN retained its BB rating. The company also secured a Bronze medal in the 2023/24 EcoVadis assessment, one of the most prestigious international accolades for supply chain sustainability. CSN reaffirmed its commitment to reducing emissions and transitioning to a low environmental footprint economy with its continued reporting to the CDP. In climate scoring, CSN Group, CSN Mineração, and CSN Cimentos all received a B rating—this being the first reporting year for CSN Cimentos. CSN Group earned an A– rating in CDP's Water Security assessment, while CSN Mineração received a B. Both CSN and CSN Mineração are also listed in the FTSE4Good Index Series<sup>1</sup>, reinforcing their positioning among companies with strong global ESG credentials.



CSN earned the Industry Top Rated badge, ranking 13<sup>th</sup> among 158 companies in its sector, while CSN Mineração (CMIN) secured the 8<sup>th</sup> position globally.



Sustained progress on ESG performance — upgrading from a CCC to a BB rating in just two years



## S&P Global

In its sector evaluation, CSN ranks among the top 10% globally, with CMIN positioned among the leading 8%.



## GHG Protocol



since 2014

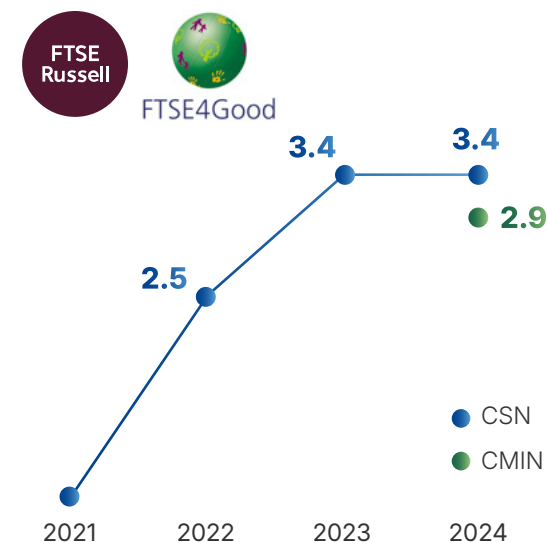
## ESG Track-record



Industry Mover 2023  
ESG Yearbook 2023



EcoVadis  
Bronze Medal 2023/24



<sup>1</sup> The CSN Group has been included in the FTSE4Good Index Series, which tracks corporate performance in ESG areas such as governance, health and safety, anti-corruption, and climate change. This index is maintained by FTSE Russell, a leading UK-based provider of market indices.



# People and **HUMAN RIGHTS**



## IN THIS CHAPTER

- Employees
- Health, Safety and Well-Being
- Human Rights
- Value chain
- Local communities



# Employees

As of 2024, CSN had a workforce of 29,695 people—all covered by formal employment contracts and union-negotiated collective agreements. Combining technical expertise with vast operational experience, CSN's workforce is equipped to address the complex challenges of mining operations, both domestically and internationally. We are also supported by 24,115 contractors, including 6% in administrative roles and 94% in operations, all of whom are covered under collective labor agreements. The engagement and dedication of both internal staff and contractors are crucial to achieving strategic objectives and ensuring operational excellence.

Ongoing professional development is a core pillar of CSN's people management model, with its focus on professional development and skills enhancement for all employees. Through the CSN Corporate University, employees benefit from a library of more than 150 on-demand courses and 64 virtual content titles, empowering them to shape their own learning journeys. These courses are supplemented by in-person training supporting employee development and engagement around CSN's values and strategic goals.

In 2024, the CSN Corporate University remained a centerpiece of CSN Group's people development strategy, providing targeted learning aligned with the Company's strategic priorities. Consisting of five training schools—the School of Excellence, Innovation School, Business



→ Team members from Prada Packaging – São Paulo, Brazil

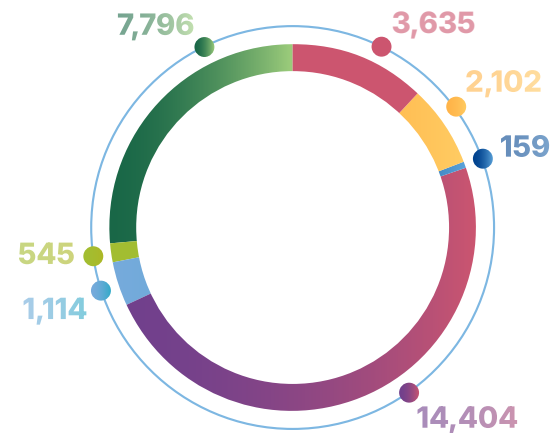
## TOTAL CSN GROUP WORKFORCE



## EMPLOYEES IN 2024

By business segment

- Cement
- Logistics
- Energy
- Steel Brazil
- Steel global
- Other mining
- CSN Mineração S.A.





School, ESG School, and Leadership School—the CSN Corporate University delivers high-quality learning programs, ranging from mandatory training on corporate values to customized, team-specific content, including regulatory safety training courses for operational staff.

In 2024, the University completed significant milestones, including the formal launch of its ESG School and the development of a mandatory training track, including training on material sustainability topics. One of the highlights from the year was the rollout of the ESG Fundamentals course, a required training module for all CSN Group employees. This mandatory training aligns directly with our strategic sustainability priorities, equipping employees with a core understanding of ESG concepts. These initiatives have driven improved operational efficiency, greater employee engagement, and stronger talent retention across the Company.

## CSN's Internationalization Journey aims to boost value creation through cross-border collaboration

The Leadership and Business Schools play a key role in developing future leaders at CSN. Business Schools offer personalized learning tracks that combine hard and soft skills, providing comprehensive training to prepare future leaders. These tracks prepare high-potential employees to step into greater responsibilities with confidence, leading strategic and enabling projects and teams.

Across all operations in Brazil and abroad, CSN Group delivered 824,900 hours of training in 2024—averaging 27.9 hours per employee. In Brazil alone, investments in training and development reached R\$ 9.1 million.

Another highlight from the year was the continued rollout of our Internationalization Journey, which began in the previous year. In 2024, 38 employees took secondments in the U.S. and Switzerland, in two groups, to advance strategic projects for CSN. The initiative will port cross-border collaboration, knowledge-sharing, and implementation of innovative practices to boost operational performance.



→ Participants in CSN's 2024 Internationalization Journey – São Paulo, Brazil

### AVERAGE HOURS OF TRAINING PER EMPLOYEE

2022			2023			2024		
Men	Women	TOTAL	Men	Women	TOTAL	Men	Women	TOTAL
17.3	14.8	16.8	21.3	19.4	20.9	28.5	26.2	27.9



→ A CSN team  
member at the  
Santo Amaro office  
– São Paulo, Brazil

## People Cycle

Developing talent and identifying future leaders are strategic priorities for the CSN Group, which has established the “People Cycle” as a structured and recurring program to support these goals. This initiative organizes transparent and growth-oriented performance reviews that help guide career progression across the organization.

The People Cycle covers 100% of our workforce—excluding those hired after September of the previous year, as well as interns and apprentices. Reviews are conducted through a *digital* platform and follow a comprehensive methodology that includes performance assessments, evaluator discussion forums, and structured feedback sessions. People Cycle Reviews offer a comprehensive view of employee performance and informed the joint development of Individual Development Plans (IDPs).

Besides fostering a culture of continuous learning, the People Cycle enables us to recognize and reward high performers based on objective criteria—supporting decisions related to promotions, pay raises, and other forms of recognition.

CSN used the 9-box model to map talents and identify potential successors. This approach ensures that top performers are prepared to take on new challenges and lead strategic projects across CSN's various businesses.

## Our People Cycle covers 100% of employees

## Attracting and Selecting Talents

CSN invests continuously in attracting and selecting talents who align with our organizational values and culture. Through well-structured programs, we open doors for young professionals eager to begin their careers in a dynamic setting that fosters personal and technical growth.

Flagship initiatives such as the Young Apprentice, Internship, and *Trainee* programs play a central role in bringing new talent into the CSN Group. CSN's Apprentice Program is aimed at young individuals between 14 and 24 years old seeking their first employment. Blending practical experience with structured learning, CSN's training programs prepare young talent for the workforce in collaboration with leading institutions such as Fundação CSN, SENAI, and CIEE. Participants gain essential skills while immersing themselves in a real-world corporate environment.



Adding an inclusion layer, our *Mentoria Cidadã* program—developed jointly with the CSN Foundation—connects CSN leaders to youth from vulnerable communities supported by our *Garoto Cidadão* initiative, providing practical exposure to the job market. Through personalized mentoring sessions, CSN volunteers guide these young individuals on career development, contributing to workforce diversity and social inclusion. The program also supports employability, with many participants transitioning into apprentice roles.

In 2024, 52 young people took part in the program, each mentored by a CSN leader. Participants engaged in four in-person training sessions led by Corporate University specialists, covering self-awareness, communication, career development, and recruiting practices. The program was rolled out in Alhandra, Araucária, Arcos, Barroso, Congonhas, Itaguaí, Volta Redonda, and São Paulo, concluding with graduation ceremonies across CSN's facilities.

CSN's Internship Program offers students in trade schools and undergraduate programs the opportunity to apply academic knowledge in real-world projects and challenges across different areas, while following a structured development track throughout the year. This experience provides a valuable boost to their professional development and acquisition of practical skills.

Our Trainee Program, aimed at recent graduates, provides 18 months of intensive training. During this period, participants receive technical and behavioral training and lead strategic projects that prepare them for future challenges—including leadership positions. Upon completing the 2022 class, trainees were matched with experienced, accomplished senior executives as mentors, providing personalized career guidance. Spanning approximately 12 months, the trainee program also includes mentoring for 48 alumni, each guided by CSN managers and senior leaders.

All of CSN's talent programs are governed by the principles of inclusion and equity, providing equal opportunity for all regardless of gender, ethnicity, or any other individual characteristic. In 2024, CSN counted with of 914 apprentices (with 28%—or 260—hired permanently), 698 interns (32% or 227 hired), and 60 *trainees* (18% or 11 hired as of December, with the program continuing into April 2025), illustrating our strong commitment to developing talent and nurturing long-term careers.

Beyond our programs for young professionals, CSN also employs targeted strategies to attract experienced talent. Opportunities are advertised through our official website and internal channels, with priority given to internal mobility—recognizing top performers and offering them new pathways for growth, in line with CSN's values and culture.

→ An employee at CSN  
Porto Real – Porto Real (RJ)





## Compensation and Benefits

CSN Group's compensation and benefits policy is designed to attract, retain, and reward talent, while promoting employee well-being and quality of life. The total compensation package consists of a base monthly salary, vacation pay and 13<sup>th</sup> salary, and an annual performance bonus linked to global business targets. This structure reflects CSN's commitment to recognizing and rewarding employee performance with fairness and transparency.

The benefits we offered to employees reflect best market practices and are available to all employees—regardless of contract type—in line with union agreements. Core benefits include health and dental insurance (extended to immediate dependents), life insurance, meal allowances, and childcare allowance. CSN also provides extended parental leave as part of the Brazilian government's *Empresa Cidadã* corporate responsibility program, supporting employees and their families in such an important moment in their life. These benefits are available to full-time, part-time, and temporary workers across all CSN Group sites.

In addition, we provide a private pension plan managed by CBS, a nonprofit private pension entity. These plans benefit both active and former employees, supporting long-term financial security into retirement. All permanent employees are eligible to join the pension plan.

To define our compensation policy, we conduct regular benchmarking assessments to compare our pay practices with peers, ensuring compensation packages are both competitive and equitable. CSN takes a zero-tolerance approach to discrimination and ensures that compensation decisions are based solely on performance and seniority, with no regard for gender, ethnicity, or other unrelated factors. Our employment practices are compliant with International Labour Organization (ILO) conventions and all applicable labor laws, including the requirement for employees never to exceed a regular 48-hour work week, with a total limit of 60 hours including overtime.

**CSN takes a no-tolerance approach to discrimination and ensures there is no pay disparity based on gender, ethnicity, or any other criteria.**



→ An employee at a Prada distribution center – Mogi das Cruzes (SP)



## Diversity, Equity and Inclusion

CSN is committed to increasing the representation of women, black employees, people with disabilities (PwDs), and other minority groups across our operations, ensuring that all employees have equal opportunities for professional growth and access to leadership positions. The goal is to foster an inclusive workplace where every employee—regardless of background, identity, or personal traits—has equal access to the same career development opportunities and can contribute to strategic business objectives.

CSN has established a dedicated Diversity, Equity, and Inclusion (DE&I) management team responsible for coordinating engagement and training programs and driving action plans throughout all business units. Supplementing the DE&I team's work are awareness programs, internal campaigns, and training designed to foster a more inclusive and diverse workplace culture. Other initiatives include our DE&I Champions Program, which equips professionals from strategic departments to champion inclusion in their day-to-day work, and masterclasses hosted by the CSN Corporate University on topics like unconscious bias and inclusive leadership. In 2024, the DE&I Champions Program focused its training on teams from Corporate Security, Occupational Health, and Talent Acquisition, reinforcing inclusive practices across the organization.

One of our strategic priorities is to increase female representation in our workforce. In 2024, women made up 25% of the workforce, a 78.6% increase compared to 2020. Increase comes as a result of initiatives such as our *Capacitar Mulheres* program, which offers free vocational training courses for women in municipalities neighboring CSN's operations. Through partnerships with trade schools such as the National Industrial Training Service (SENAI) and the CSN Foundation, we provide training opportunities for women to join operational roles in mining, steel, cement, and logistics.

One standout initiative in 2024 was SupplyTec, a program designed to support the ongoing development and capacity building of individuals from underrepresented groups, through partnerships with CSN's network of suppliers. Participants received hands-on instruction in equipment operation—including hydraulic excavators, motor graders, and wheel loaders—helping expand the representation of women across a variety of industrial positions. Similarly, the *Capacitar* Program offers training opportunities for people with disabilities (PwDs), expanding employment prospects for this group and ensuring they can hold meaningful positions within the Company.

## First Leadership Program



In 2024, CSN introduced a program, called "First Leadership," designed to support the development of nearly 590 employees identified as future supervisory talent. Over the course of ten months, participants received targeted training to develop key leadership competencies and prepare for upcoming challenges. Among the program's highlights is *EMPODERA*—a dedicated development track for women—created to accelerate female career advancement and increase gender diversity in leadership roles. Another initiative, *Mulheres que Transformam a Indústria*, spotlighted the stories of trailblazing women in industry to inspire future female leaders, while reaffirming CSN's commitment to gender equity.

→ A team member at Prada Distribuição – Mogi das Cruzes (SP)







→ Team member at Presidente Vargas plant – Volta Redonda (RJ)

Through the *Talentos da Comunidade* program, FTL and TLSA are building a pipeline of female talent to support the inclusion of women in the workforce. In 2024, 23 women from São Luís (MA) took part in a rail industry immersion course, including a visit to the Port of Itaqui, preparing them for future roles at CSN. Similar initiatives have been rolled out in other cities, such as Salgueiro (PE), Teresina (PI), and Sobral (CE).

Beyond gender equity, CSN's DE&I strategy also emphasizes racial inclusion as a key priority. CSN Group is a founding member of *MOVER* – "Movement for Racial Equity," and has a strong commitment to fostering racial inclusion throughout its operations. In 2024, in partnership with *MOVER*, we launched free short courses, English language scholarships, leadership development programs for black employees in management positions, and MBA scholarships in areas such as Business Intelligence, Project Management, Agile Methodologies, Leadership, and People Management. Initiatives like these are designed to support career advancement and increase the representation of black leaders within the Company. One example is our partnership with Education First (EF), offering English course scholarships through the *Mover Hello* program, focused on supporting the career development of employees self-identifying as black. Our goal with this initiative is to broaden career opportunities for these professionals by strengthening their language proficiency. With over 260 participants enrolled, the course is fully online, free of charge, and runs for one year, open to all proficiency levels and with no age limitations. The *Mover Hello* program aims to foster continuous development and accelerate career progression for these employees.

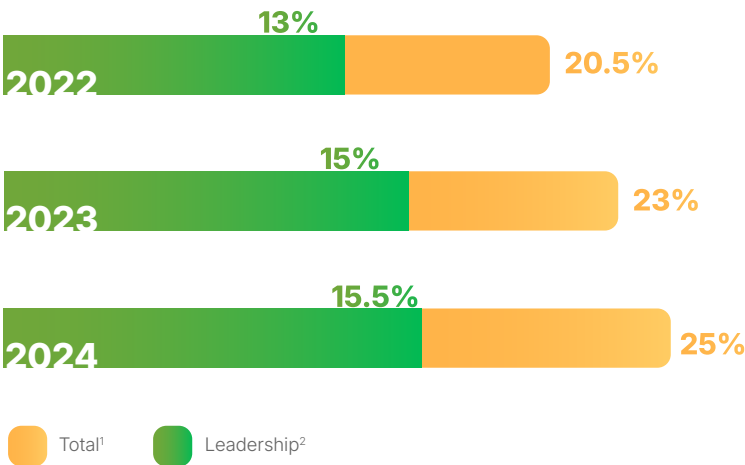
In 2024, CSN paid tribute to 31 team members for their outstanding contributions to equity and inclusion in the workplace. Employees received awards in categories like advancing gender and disability representation, driving innovation, and championing diversity.

CSN Cimentos also partnered with *Somar Diversidade* to conduct an Inclusion Census, aimed at mapping out team members with disabilities or reduced mobility. With a strong participation rate of approximately 80%, the initiative supported our commitment to fostering an inclusive culture and meeting legal inclusion targets.

Using a structured and coordinated approach, the CSN Group continues to cultivate an increasingly diverse, equitable and inclusive work environment, as part of our commitment to best practices in ESG and helping to build a more just society. Oversight of these initiatives is led by our ESG Committee and People Working Group, which track key indicators such as diversity metrics, training engagement, and employee feedback. This data-driven approach ensures that CSN's DE&I strategies remain responsive to both business goals and stakeholders' expectations.



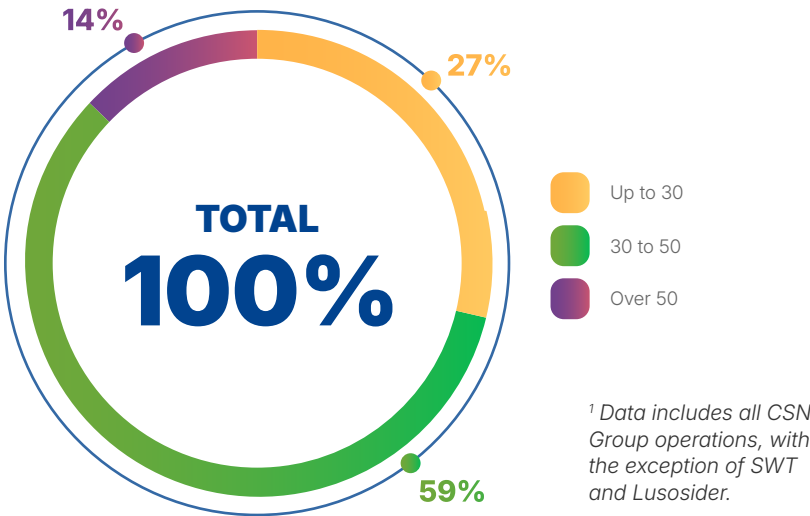
### WOMEN IN THE WORKFORCE (%)



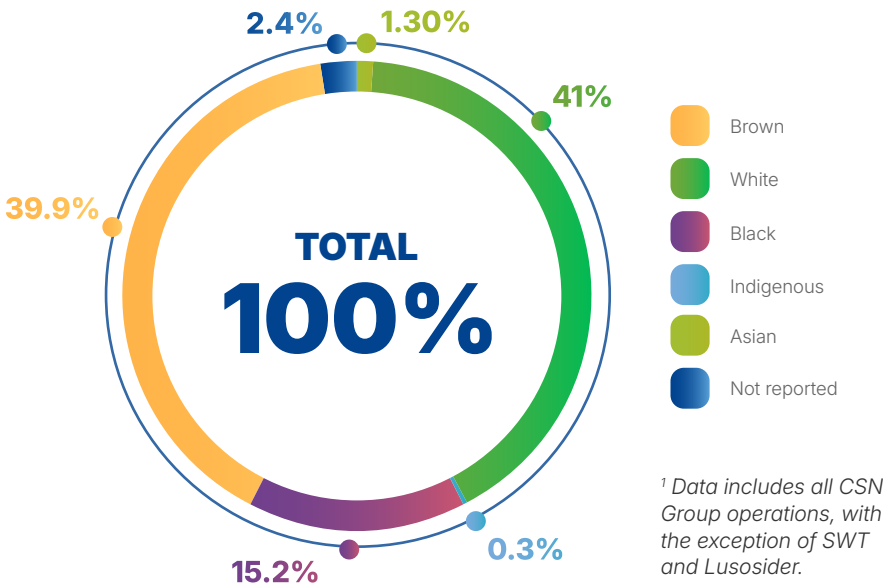
<sup>1</sup> Includes direct employees in Brazil as well as participants in the Apprentice, Internship, and Capacitar programs. These figures differ from GRI disclosures, as the GRI data does not cover the Internship Program and includes operations outside Brazil. The data excludes businesses acquired after the target was set, such as Services and Energy, as well as roles brought in through insourcing initiatives from 2024 onward, as part of CSN's commitment to preserving the jobs of employees already occupying those roles.

<sup>2</sup> Includes supervisory, coordination, managerial, general managerial and executive-level positions.

### WORKFORCE BY AGE GROUP IN 2024<sup>1</sup>



### WORKFORCE BY RACE IN 2024<sup>1</sup>



### FEMALE REPRESENTATION IN THE CSN GROUP'S MOST FINANCIALLY MATERIAL BUSINESSES<sup>1</sup>



<sup>1</sup> Includes employees located in Brazil within the Mining and Steel segments, each representing over 15% of the Group's total assets.

# Health, Safety and Well-being

Occupational safety is a non-negotiable value at CSN, and is a number one priority at all levels of the organization. We have a robust management system in place to safeguard the health, well-being, and safety of both employees and contractors, and to minimize impacts on local communities. This system is governed by strict policies and procedures designed to minimize hazards and ensure that all activities are conducted safely and responsibly.

An [Occupational Health and Safety Management Manual](#) in conjunction with a [Supplier Health and Safety Manual](#), outlines requirements and procedures for employees and suppliers to follow. Safety is monitored via the Occupational Health and Safety Management System (OHSMS), which covers 100% of employees and contractors and tracks progress on action plans and key performance indicators. The OHSMS is compliant with ISO 45001:2018, Brazil's Regulatory Safety Standards (NRs) from the Ministry of Labor, the National Occupational Health and Safety Policy (PNSST), and World Health Organization (WHO) standards. The system is built around ten core elements.

→ A member of the CSN Health team – Porto Real (RJ)





The OHSMS Core Elements are:

## COMMITMENT AND LEADERSHIP

Leaders play a central role in the OHSMS, acting proactively to foster a safe working environment. Active engagement at all levels is encouraged, with a commitment to making safety part of daily routines.

## STANDARDS AND PROCEDURES

Clear standards and procedures ensure that all tasks—whether routine or non-routine—are conducted in a clean, safe, and healthy manner, both in operational and office environments.

## COMMUNICATION

Effective communication is crucial to ensure that all stakeholders, including employees and suppliers, have the information they need to mitigate risks and prevent accidents. The CSN Group maintains a variety of internal channels to disseminate information about health and safety, including the CHAMA platform, CSN News, and regular meetings of Internal Accident Prevention Committees (CIPAs), Mining CIPAs (CIPAMINs), toolbox talks, and internal management committees.

## CHANGE MANAGEMENT

Change Management ensures that any modifications to processes or work environments are managed in a controlled manner, keeping risks within acceptable levels.

## COMPETENCIES AND SKILLS MANAGEMENT

An ongoing process of training, qualification, certification, and onboarding, ensuring that employees and contractors are fully prepared to perform their duties under organized, safe and healthy workplace conditions.

## LEGAL COMPLIANCE

We ensure strict compliance with all occupational health and safety regulations, supported by thorough planning to minimize risks and hazards. Internal and external audits further reinforce compliance with labor laws and certification requirements.

## CONTRACTOR MANAGEMENT

This element ensures that suppliers and contractors conform to CSN's safety policies, including contractual obligations on compliance with the Supplier Health and Safety Management Manual. Our supplier management practices include strict compliance control through safety meetings with suppliers and compliance audits.

## PLANNING

Our planning process uses a structured approach to ensure that strategic, operational, and day-to-day actions are properly planned to minimize impacts and ensure process risks and hazards are controlled.

## BEHAVIORAL DEVELOPMENT

Ongoing training and hazard prevention are core priorities, helping to drive continuous improvement in safety practices.

## RISK MANAGEMENT

Risk management involves detailed assessments of risks associated with processes, activities, and facilities, with a goal of controlling or eliminating potential health and safety impacts on people. CSN has a dedicated risk management function. CSN Group has a structured risk management process in place, aligned with ISO 31000 and Brazilian Regulation NR1. At CMIN, a newly implemented software system, RISKEX, tracks risks across all phases of its projects.





→ An augmented reality system used for training simulations focused on process safety – Volta Redonda (RJ)

**Risks are mapped by business segment, and each has an assigned risk owner**

CSN applies internationally recognized methodologies to identify hazards, assess risks, and investigate incidents, fostering a safer and more secure work environment. This process, which follows ISO 31000 and internal corporate policies, helps to prevent accidents in the workplace. In addition, a specialized team receives regular training on assessing risks and implementing preventive measures. The critical risks currently listed in CSN's Occupational Health and Safety Management Manual include: vehicles and mobile equipment, lock-out-tagout, electrical work, material handling, working at heights, hot work, contact with moving parts, hazardous chemicals, confined spaces, and flammable liquid gases. Each of these risks has been mapped by business segment, and has a designated risk owner. Risks are classified according to Regulatory Safety Standard No. 1 (NR-1), which addresses general provisions and occupational risk management, prioritizing solutions that eliminate or mitigate hazards, such as material substitution, structural improvements, safety rules, and the use of personal protective equipment (PPE).

In 2024, we bolstered our approach to occupational safety by redesigning processes and targeting our strategy to preventing serious incidents, with a strong focus on eliminating fatalities and high-potential incidents through the rollout of our AGIR Program (see page 116 for more details). The new approach shifted the focus from merely tracking the number of incidents to proactively preventing high-risk events. This strategy proved effective, with CSN closing the year with zero fatal injuries and a 55.3% decrease in potential serious injury and fatality (PSIF) incidents, demonstrating the impact of the new safety guidelines.

CSN is also leveraging advanced technology to support safety management. Our Safety 6.0 program, currently being implemented in our steel operations, will integrate data sources into a centralized data lake, searchable via a natural language processing (NLP) search tool. The system will also connect to a business intelligence (BI) platform for automated, real-time reporting of key safety indicators. Together, these tools will improve data consolidation, accuracy, visibility, and accessibility, enhancing our ability to mitigate safety risks for team members. In addition, a virtual platform featuring gamification elements, a virtual assistant, and 3D simulation goggles allows employees to engage in interactive and immersive training, enhancing their learning experience in a dynamic and effective way. A smart lockout system is also in place to ensure safety during maintenance, automatically disabling electrical power in hazardous areas when required. Lastly, a daily online readiness check assesses workers' fitness for duty before engaging in critical tasks. This ensures that no employee begins work under conditions that could compromise focus or safety. As of yearend, 3,700 employees were using the system daily—a 164% increase over 2023.

We encourage active employee participation in activities like toolbox talks, Internal Accident Prevention and Environmental Awareness Week (SIPATMA), regular safety meetings, and Internal Accident and Harassment Prevention Committee (CIPAs) sessions, which provide an open forum for discussion and continuous improvement of workplace safety. Our 2024 SIPATMA edition adopted a new format that featured CSN's own employees as guest speakers. This enhanced employee engagement with the topics discussed and built confidence in the safety team's technical expertise.



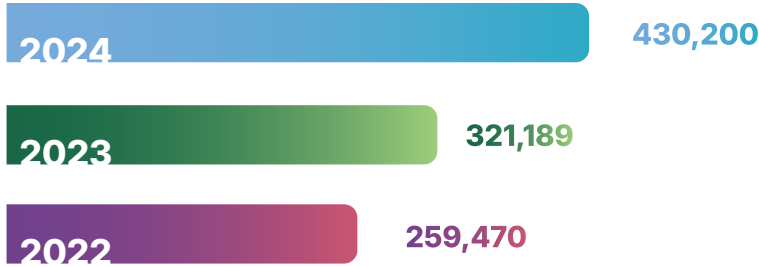
Formal health and safety committees include the Executive OHS Committee, which meets quarterly to track targets and performance indicators and review incidents, as well as local operational committees, which convene monthly to plan incident reduction strategies. These committees are vested with decision-making authority, as outlined in corporate procedures, ensuring that all resolutions are effectively implemented. In 2024, CSN also strengthened leadership engagement in workplace safety by organizing regular meetings among operations managers from various sites to exchange best practices and align on prevention strategies.

Health and safety committees **track performance indicators and develop strategies** to reduce incidents

Internationally, CSN Lusosider maintains a structured occupational health and safety management system certified to ISO 45001. Risk identification and assessment practices follow internal procedures that include task analysis, document review, and active participation of employees. CSN Lusosider also provides comprehensive on-site occupational health services, including regular appointments with an occupational physician and continuous support through its onsite medical center—ensuring a safe and healthy work environment. All incidents are thoroughly investigated to ensure corrective and preventive actions are implemented.

At SWT, workplace safety is insured through a robust risk identification and auditing program, also certified to ISO 45001. The site's safety management system covers 100% of the workforce, with ongoing tracking of safety data and active employee involvement through formal channels that guarantee non-retaliation. Both sites conduct continuous training and awareness initiatives focused on occupational hazards, with a focus on prevention and employee well-being.

HEALTH AND SAFETY TRAINING FOR DIRECT EMPLOYEES (IN HOURS)



HEALTH AND SAFETY TRAINING FOR DIRECT EMPLOYEES BY BUSINESS SEGMENT (IN HOURS)

CSN Group	430,200
CSN Siderurgia	257,904
CSN Mineração	89,899
CSN Cimentos	33,444
CSN Logística	25,531
CSN Energia	12,577
Other mining operations	9,110
Corporate	1,735



## AGIR Program

Launched in December 2023, the *AGIR* program is a strategic initiative designed to reduce high-potential risks, prevent fatalities, and strengthen our Company-wide safety culture. The program aims to foster active leadership engagement in accident prevention, firmly establishing safety as a non-negotiable value. The results are already visible, with a significant improvement in all safety indicators. Implemented across all CSN Group sites, the *AGIR* Program is based on three core pillars: Occupational Health and Safety Culture, Critical Risk Management, and Process Safety. These pillars integrate and strengthen existing safety practices, with the goal of enhancing our prevention culture and driving continuous improvement in occupational safety.

Among the key developments in 2024, CSN established a dedicated Process Safety function to enhance the management of risks related to leaks, fires, and operational failures, apart from traditional occupational safety. This newly created function is tasked with standardizing the identification and mitigation of operational risks and aligning process safety practices with organizational objectives. Concurrently, CSN rolled out a new Critical Risk Management Program covering high-impact areas such as lockout-tagout, electrical work, and vehicle and mobile equipment operation. We also updated our Health and Safety Consequence Management Program, with a greater emphasis on training and awareness raising for employees and contractors. A new “Leadership in the Field” initiative is helping to bring managers closer to operations to strengthen our culture of safety and drive stronger engagement across teams. In addition, CSN has refined existing programs to ensure the continuous improvement of corrective and preventive measures.

Reflecting these efforts, we reported zero workplace fatalities in 2024 and achieved a 67% year-over-year reduction in our injury severity rate.

# Zero fatalities



## 67% reduction

in injury severity rates compared to 2023, the lowest rate in the last 10 years

## 63% reduction

in the number of lost days (direct employees and contractors) compared to the previous year, the lowest in the past five years

## Over 430,000

hours of health and safety training



## Health Programs

CSN is firmly committed to safeguarding the health and well-being of our workforce through programs that support both occupational health and overall quality of life. At the core of this commitment is our Occupational Health Surveillance Program (PCMSO), which outlines guidelines for regular health screenings based on each employee's role and associated risks. Ongoing health monitoring ensures that employee health is top of mind at all times. In addition to routine check-ups, the program includes monitoring for exposure to harmful agents, risk mitigation measures, and awareness campaigns on health-related topics. To provide continuous health support for employees, CSN has 23 on-site medical clinics, each with at least one health professional dedicated to care. These clinics play a key role in prevention and care, offering medical consultations, first aid, occupational exams, and well-being advice.

Beyond preventive care, CSN also runs CSN 10+, a comprehensive suite of initiatives aimed at improving employees' quality of life. Among these is our *Despertar* rest and recovery program. By addressing fatigue and minimizing the effects of tiredness, this program helps maintain key capabilities such as concentration, memory, and nimbleness, while also reducing the risk of incidents caused by physical and mental fatigue. In 2024, CSN expanded the program's reach, nearly tripling the use of readiness tests before critical tasks and enhancing training on fatigue management.

GRI 3-3 (Health, safety and well-being), 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9

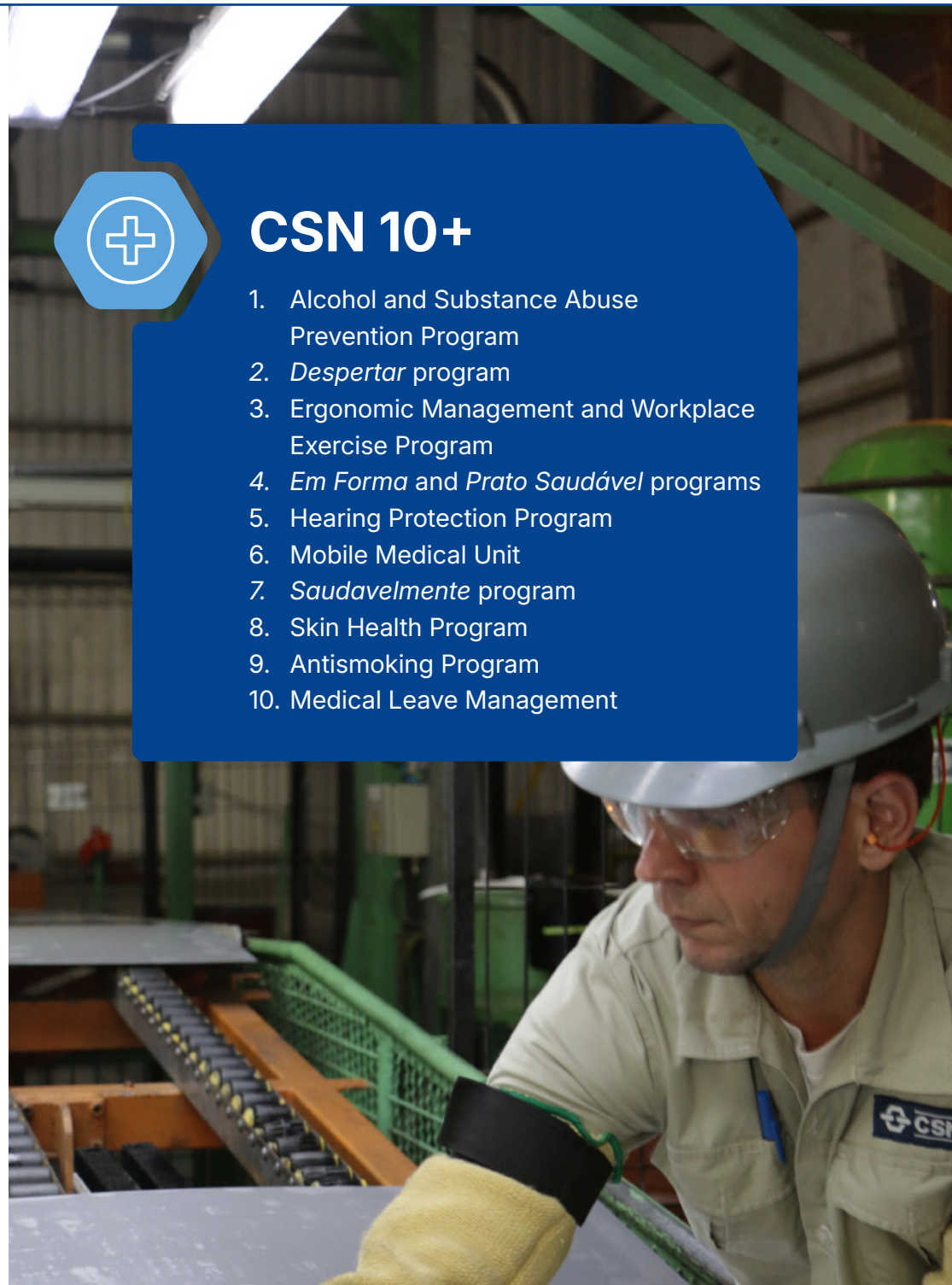


### CSN 10+

1. Alcohol and Substance Abuse Prevention Program
2. *Despertar* program
3. Ergonomic Management and Workplace Exercise Program
4. *Em Forma* and *Prato Saudável* programs
5. Hearing Protection Program
6. Mobile Medical Unit
7. *Saudavelmente* program
8. Skin Health Program
9. Antismoking Program
10. Medical Leave Management

Another flagship initiative as part of CSN 10+ is our Alcohol and Drug Prevention Program (PPAE), which works preventively to promote a safer and healthier workplace. The program takes a compassionate and supportive approach, focusing on awareness, early detection, and support for employees. Through lectures, toolbox talks, and educational materials, we inform workers about the risks of substance abuse, both for health and workplace safety. We also conduct periodic and as-needed testing, having performed more than 1.1 million tests in 2024 to identify and intervene early in cases that could compromise workers' physical and mental integrity. Unlike punitive approaches, the program provides support, including referrals for specialized treatment, psychological counseling, and support groups, ensuring that workers facing these challenges can recover and fully reintegrate.

→ A CSN employee at the Porto Real site – Porto Real (RJ)



## Health promotion campaigns in 2024 placed a stronger focus on mental health

One standout initiative is TotalPass, a partnership with a nationwide fitness network to encourage exercise and promote physical, mental, and social well-being. Program benefits are extended to employees' family, underscoring CSN's commitment to comprehensive care. Beyond fitness, the initiative now includes nutritional support and access to specialists in preventive healthcare.

Recognizing the importance of mental health in the workplace, we broadened our emotional and psychological support measures in 2024, intensifying emotional well-being campaigns and introducing topics such as anxiety, stress management, and digital wellness into our health initiatives.

We also continue to offer free annual vaccination campaigns, including flu shots with the tetravalent vaccine (covering H1N1) and immunizations against other diseases.

→ CSN Health  
Team Employees –  
Porto Real (RJ)





# Human Rights

CSN is committed to upholding human rights, recognizing them as a core pillar of our risk management and community engagement practices. As a signatory of the UN Global Compact, we also uphold the UN Guiding Principles on Business and Human Rights, the Sustainable Development Goals (SDGs), and International Labor Organization (ILO) conventions, and have embedded these principles into our policies and operational practices.

Our approach to human rights management spans multiple fronts, with the first being identification and mitigation of potential risks related to our operations. In 2023, CSN completed its Human Rights Due Diligence (HRDD) in Congonhas (MG), in line with the United Nations Guiding Principles on Business and Human Rights. The assessment evaluated aspects such as women, children, traditional communities, and migrant workers, identifying 37 potential adverse impacts, of which 14 were prioritized. These were addressed by 49 action plans and 95 mitigation initiatives. The due diligence, and the relevant action plans, aim to mitigate human

rights-related risks and improve corporate practices. As of 2024, 56% of these action plans had been completed or were underway, strengthening our commitment to human rights protection. A mitigation plan is currently in progress, led by a multidisciplinary team. Due diligence is conducted not only on direct operations but also on contractors, subcontractors, and suppliers, ensuring comprehensive monitoring across the value chain. CSN has no operations in conflict-affected regions, which simplifies the management and mitigation of human rights risks in our operations.

Human rights compliance is also embedded in internal training practices. In 2024, CSN delivered more than 36,000 hours of human rights training to employees. This training covered topics such as preventing discrimination, harassment, and labor violations, as well as ethical dealings with suppliers and partners. For our security team, we have developed a human rights-focused training program to ensure that security operations respect human dignity and fundamental rights.

→ A participant in a CSN Foundation program – Volta Redonda (RJ)



## HUMAN RIGHTS TRAINING<sup>1</sup>

	2022	2023	2024
Hours of training provided	28,644	20,571	36,853
Number of employees trained	20,150	29,313	31,252
Percentage trained out of total headcount	76.7%	99.7%	106%

<sup>1</sup> The figure includes all employees—both direct and other employees—who received training in human rights during the year, including those terminated prior to December 31, 2024. As a result, the total number and percentage of trained employees exceed the year-end workforce count.



→ An employee training session held at the CSN Paraná auditorium – Araucária (PR)

Suppliers play a vital role in upholding human rights across CSN's value chain. To ensure alignment with our standards, CSN has a rigorous supplier qualification process that mandates compliance with our [Code of Conduct](#) and [Anti-Corruption Policy](#), as well as supplier acceptance of our [General Terms and Conditions for the Provision of Services and Materials](#). According to CSN's ESG Supply Chain Risk Matrix, there are potential risks of child and forced labor in certain supply chain segments, particularly those involving hazardous and non-hazardous waste management, biomass and wood products, construction materials, ores and minerals, scrap, engineering services, and civil construction.

To mitigate these risks, CSN carries out continuous integrity assessments through methodologies such as Compliance and Anticorruption Background Checks and Know Your Customer (KYC), ensuring that suppliers comply with established ethical, legal, and operational standards. In 2024, we restructured our supplier monitoring process with a newly implemented U-Qualify platform, which enables quarterly evaluations. As part of the onboarding process, all selected suppliers undergo thorough background checks on compliance with labor laws, environmental regulations, tax obligations, human rights principles, and corporate integrity. These checks also include screenings against national and international watchlists, including lists of companies penalized for conditions analogous to slavery.

All partners and suppliers undergo structured due diligence on human rights compliance and prevention of degrading labor practices. They must sign legally binding declarations affirming that they do not and will not use child labor or any form of forced labor, committing to actively combat such violations. CSN upholds human rights in all business practices and takes proactive steps to prevent adverse impacts, including exposure of communities to risk, harm to vulnerable groups, or any direct or indirect association with child or forced labor. In our own operations, CSN fully complies with Brazil's Consolidated Labor Regulations (CLT), with minor employment permitted only as part of our Young Apprentice program.

In 2024, ERSA received Responsible Minerals Initiative (RMI) certification for conformity to international standards on responsible supply chains, including efforts to prevent human rights violations and illicit financing.

## All partners and suppliers are subject to ongoing **integrity assessments**



CSN takes a preventative and risk-based approach, using a dedicated matrix to identify and prioritize the most critical suppliers for monitoring and assessment. We also recognize that there may be potential risks to freedom of association and collective bargaining among suppliers and contractors in our operations. To address these risks, CSN has a range of control measures in place, such as:

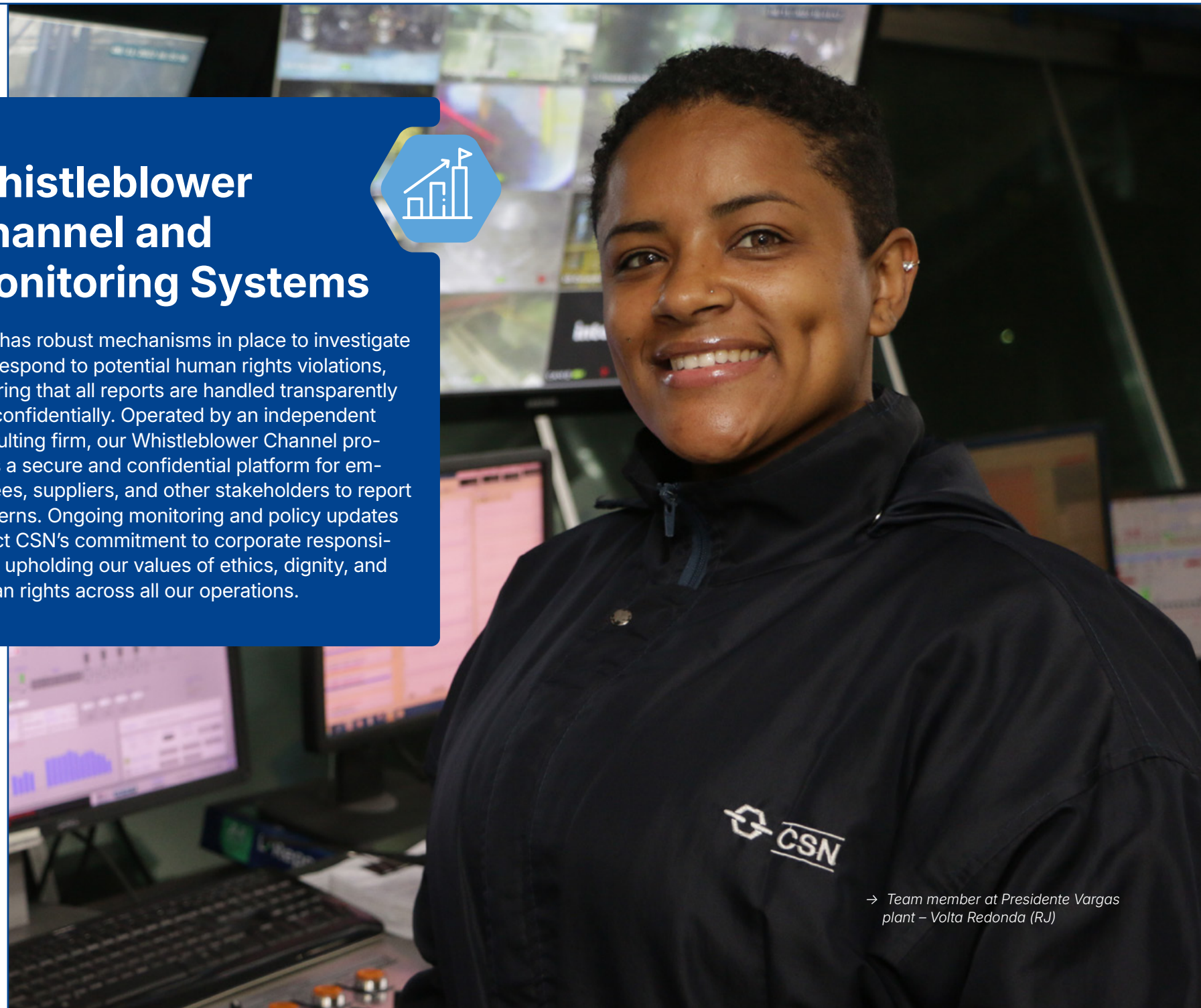
- A formal declaration of zero tolerance for labor rights violations;
- Dedicated human rights and labor relations policies;
- Ongoing documentation checks and regular audits;
- Oversight by our Third-Party Management Center (NGT), which reports to the Integrated Management Center (CIG);
- Accessible and confidential whistleblower channels for reporting concerns.

In 2025, CSN will strengthen its due diligence practices with the launch of a Sustainable Procurement Policy and a Supplier Code of Conduct—clearly outlining expectations around human rights compliance and ethical standards throughout the supply chain.

## Whistleblower Channel and Monitoring Systems



CSN has robust mechanisms in place to investigate and respond to potential human rights violations, ensuring that all reports are handled transparently and confidentially. Operated by an independent consulting firm, our Whistleblower Channel provides a secure and confidential platform for employees, suppliers, and other stakeholders to report concerns. Ongoing monitoring and policy updates reflect CSN's commitment to corporate responsibility, upholding our values of ethics, dignity, and human rights across all our operations.



→ Team member at Presidente Vargas plant – Volta Redonda (RJ)



→ A reception area at the  
Presidente Vargas plant  
– Volta Redonda (RJ)

## Asset Security

CSN's Asset Security department is tasked with mitigating risks and ensuring that personal and property security operations are compliant with applicable laws and respect human rights requirements. Our approach to security is based on three pillars. The first is Organic Security Management: ensuring compliance with private security regulations and establishing procedures to protect company property. The second pillar, Access Control and Monitoring, entails deploying a company-wide digital access control system ensuring full traceability of people, vehicles, and materials on-site. CSN operates a 24/7 security monitoring center, equipped with state-of-the-art technology for intelligent tracking and a fully integrated surveillance platform. The third pillar, Security Risk Management, involves applying a standardized methodology for risk mapping and assessment, adapted to the particularities of each operational unit, to mitigate vulnerabilities while ensuring operational continuity.

Our Corporate Asset Security Committee plays an important governance role by developing corporate security policies, overseeing risk management practices at all business units, and defining standardized key performance indicators (KPIs). It also shares best practices and fosters operational alignment across sites, enhancing collaboration and synergy among security teams.

Continuous training for security personnel is another important lever of our security approach, ensuring that all security guards are professionally certified through specialized courses covering human rights, preventing

## Our 24-hour monitoring centers features **cutting-edge technology** advanced technology

sexual harassment, public and private security principles, forensics, self-defense, regulatory compliance, first aid, fire safety and response, crisis management, and electronic security systems, among others. This certification process qualifies security staff for personal and property security duty, with mandatory recertification every two years via accredited training organizations.

The human rights module is a central component of CSN's training program, covering key principles such as dignity, equity, and respect for diversity. Throughout the course, participants receive practical guidance on compliance with both national and international human rights standards, promoting an ethical, humanized approach to security operations. Real-life scenarios and case studies are discussed to illustrate the importance of non-discrimination and equal treatment, and participants are trained on conflict mediation strategies. This continuous training program helps to reinforce a culture of respect, integrity, and ethical conduct within CSN's security team.



CSN also makes significant investments to continuously upgrade our physical security infrastructure. In 2024, a new monitoring and access control system was implemented at the Presidente Vargas plant (UPV), enhancing security and efficiency for all individuals accessing the facility. Powered by artificial intelligence, the system incorporates cutting-edge technology that enables access through facial recognition or vehicle license plate reading, covering employees, contractors, and visitors entering the unit daily, whether by vehicle or on foot. At Sepetiba TECON, one of Brazil's most important port terminals, we have invested over R\$ 20 million in recent years to modernize the closed-circuit television (CCTV) monitoring system and upgrade physical security arrangements. Improvements include fencing improvements, concertina wire installations, and updated signage. These measures ensure compliance with the International Ship and Port Facility Security (ISPS) Code and requirements for certification by the National Commission for Public Security in Ports, Terminals, and Waterways (CONPORTOS), the regulatory authority for port terminal security in Brazil. Furthermore, CSN Mineração is investing over R\$ 36 million in modernizing its monitoring system and enhancing physical security measures, aligning with ISPS Code requirements.

→ A member of the Asset Security team





# Value Chain

In 2024, CSN transacted R\$ 36.23 billion in spending on 6,299 suppliers of different sizes and sectors. Our supplier network comprises local, national, and international suppliers that provide products, services, raw materials, and a wide range of inputs, in addition to logistics partners, subcontractors, and third-party service providers. Overall, 52% of our supplier spend went to material suppliers, while 48% went to service providers. Significant procurement categories in 2024 included reductants, transportation services, metallurgy, fuels, and various ores and minerals. Supplier agreements are formalized through contracts governed by CSN's "General Terms and Conditions for the Supply of Materials" and "General Terms and Conditions for the Provision of Services," which include formal clauses

mandating compliance with environmental, labor, and ethical standards. There were no major changes in our supply chain structure during the year. However, the Procurement team conducted an assessment of current practices to align operations with ISO 20400 guidelines on Sustainable Procurement, deepening partnerships with strategic suppliers as part of CSN's commitment to responsible, transparent, and ESG-focused sourcing. We prioritize local suppliers to the extent possible, developing regional economies where we operate. In 2024, local procurement represented 41.1% of total purchases across the CSN Group—an increase of 19% over the previous year. However, in some cases, highly specialized or proprietary suppliers may be needed for items that are not available locally. Nevertheless, we are committed to expanding the share of regional suppliers whenever feasible.

Throughout the year, CSN's Procurement team continued to implement a dedicated supplier management function that centralizes documentation and operational information and ranks partners based on their performance and sustainability practices. Among its key activities, this function ranks suppliers to support identification

→ CSN employees –  
São Paulo (SP)

In 2024, our total local supplier spend was **41.1%**







## Supply Chain ESG Risk Matrix

CSN has developed an ESG Risk Matrix for our supply chain, as part of our approach to strategic and sustainable supply chain management. Developed by the Procurement team in collaboration with the Sustainability team, *Inova Bridge*, and a specialized consultancy, the matrix is used to identify and assess ESG-related risks across CSN's procurement categories. It classifies the supply chain into 48 high level categories—split between goods and services—enabling a more targeted analysis of impacts and opportunities. The matrix was built based on recognized standards and frameworks, including ISO 20400, ISO 37301, SASB, IFC, MapBiomass, Global Witness, Brazil's Higher Labor Court databases, the TIP List (Worst Forms of Child Labor), the Brazilian Ministry of Labor's Blacklist (Forced Labor), and the Statistical Yearbook of Occupational Accidents (AEAT).

For "Very High" risk categories, such as Ores and Minerals, the assessment covers key potential impacts such as greenhouse gas emissions, high energy consumption, air and water pollution, raw material traceability, biodiversity loss, and social concerns including forced labor, fair wages, and business integrity.

To mitigate these risks, CSN employs structured procurement practices, robust supplier assessments, and contract clauses with strict compliance requirements. Standard agreements feature provisions on *force majeure*, sanctions, anti-corruption, and compliance, strengthening legal security and environmental compliance.



of consistently underperforming partners and disqualification of those failing to meet defined requirements. A system, called Ariba, was integrated into this process to automatically alert suppliers when their environmental documentation is about to expire, prompting timely updates and ensuring ongoing compliance.

In 2024, CSN further aligned its supplier management practices with ISO 20400 (Sustainable Procurement), reaching 84% alignment. This ensures that stringent environmental requirements are embedded throughout the

Our supplier management practices are aligned with ISO 20440, **achieving 84% conformity**. This ensures that environmental requirements are embedded throughout the supplier lifecycle

supplier lifecycle—from initial selection to continuous oversight. As a first milestone, 33% of the active supplier base underwent environmental assessments, with a total of 2,101 suppliers monitored.

Compliance controls have also been reinforced through audits and detailed assessments of critical suppliers, ensuring full alignment with ESG standards and enabling timely corrective actions. In 2024, CSN conducted 69 supplier audits—12 on-site and 57 remote audits and introduced a new key performance indicator to improve supply chain governance.

Governance was also enhanced through continuous oversight of contractors via our Third-Party Management Center (NGT), operating under our Integrated Management Center (CIG). This center monitors tax payments, employee wages, and compliance with collective labor agreements, ensuring that all labor and social security obligations are met. If a supplier fails to meet any requirements, CSN may withhold payments until the situation is resolved.

The Company also maintains a structured risk assessment process for its supply chain, with 99.03% of new contracts signed in 2024 incorporating formal social and anti-corruption provisions. Suppliers undergo a thorough onboarding process that includes filling out compliance forms, accepting anti-corruption clauses, and undergoing screening using our ESG Risk Matrix for Suppliers. Suppliers classified as posing a high correction risk undergo due diligence by the Compliance team prior to contract approval.



→ Transnordestina Railway  
(FTL) employees –  
Fortaleza (CE)



## Compliance Assessments during Supplier Boarding

CSN has a rigorous compliance assessment process to ensure that partners and suppliers meet the highest ethical and regulatory standards. This structured process is designed to ensure that all parties within the company's value chain comply with CSN's operating principles—especially regarding human rights and the prevention of degrading labor practices, including child labor, forced labor, and modern slavery.

As part of the procurement process, we conduct thorough ethics risk due diligence on prospective partners, addressing factors such as the suppliers' industry, country of operation, ownership structure, ultimate beneficiaries, litigation and sanction history, and media exposure related to human rights and labor violations.



→ An Iguazu Metalgráfica employee – Ponta Grossa (PR)

## In 2024, the CSN Group conducted assessments of 1,616 suppliers

This due diligence uses a risk matrix to identify suppliers at the highest risk for non-compliance. Suppliers are also classified within Brazil's National Classification of Economic Activities (CNAE) to identify critical suppliers.

Critical suppliers undergo a more in-depth background check, led by the Investigation and Compliance team, to identify any potential misconduct. CSN requires that all contracts with suppliers and partners include anti-corruption clauses, as part of our commitment to ethics and integrity in business relationships.

In 2024, the CSN Group conducted due diligence on a total of 1,616 suppliers. This due diligence effort covered over 5,000 individuals and legal entities, reinforcing

CSN's commitment to maintaining a value chain that operates to high ethical and legal standards. Our commitment to compliance is essential to maintaining our position as an industry leader for responsible procurement aligned with ESG values.

In addition, CSN requires all partners to formally commit to our Code of Conduct and Anti-Corruption Policy, as well as the General Terms and Conditions for the Provision of Services and Procurement of Materials. Depending on the supplier's area of activity, additional certifications such as ISO 9001 (Quality Management) and ISO 14001 (Environmental Management) may be required, ensuring alignment with CSN's technical and sustainability standards.



## Green Line

Phone: 0800 282 4440  
Email: [meio.ambiente@csn.com.br](mailto:meio.ambiente@csn.com.br)



→ A cultural initiative supported by the CSN Foundation

## Local communities

As part of our commitment to the responsible management of social and environmental impacts, we carry out thorough assessments to identify and understand the potential adverse effects of our operations on surrounding communities. These assessments consider the intensity, duration, and reversibility of impacts, and inform the development of appropriate mitigation plans. They are supported by detailed stakeholder mapping to ensure that local community needs are meaningfully incorporated into the planning and execution of operational activities.

A centerpiece of our engagement strategy is the Green Line—an open and accessible communication channel for all stakeholders near CSN's industrial operations. In 2024, the channel received 102 submissions, all of which were addressed by specialized teams with responses guaranteed within 15 business days. These records and their resolutions are reviewed regularly by CSN's senior management as part of dedicated meetings focused on operational, environmental, and social performance indicators.

Alongside its "Green Line," CSN Mineração operates a Community Support Center near the Casa de Pedra Mine, managed by the CSN Foundation. This space operates as an open and accessible channel for receiving community concerns, providing information to residents, raising awareness about dam safety, and hosting initiatives aligned with local needs. In 2024, the Community

Support Center handled 1,098 community inquiries, with most inquiries focused on employment opportunities. This initiative supports jobs, livelihoods and local hiring.

At CSN Mineração, community engagement is amplified through our Community Committee, which includes 23 local representatives—such as community leaders and NGOs—and meets bi-monthly. This committee plays a key role in advancing sustainable development and mitigating adverse impacts. As part of our social and environmental governance framework, we conduct environmental and social impact assessments before launching greenfield projects or expanding existing operations, in addition to continuously monitoring related aspects and impacts to ensure consistent mitigation.

CSN's Environmental Education Program (EAP) is another important tool we use to engage with neighboring communities, raise environmental awareness, and foster sustainable development. In 2024, the EAP at CSN Cimentos in Arcos (MG) was reformulated to focus on disseminating sustainable practices and capitalizing on local strengths. The program reached 2,147 participants through 91 activities conducted over the year, successfully meeting its annual target. Our Casa de Pedra (MG) operation carried out a variety of initiatives, including internal environmental awareness campaigns like *Atitude Ambiental – Ambiental* ("Environmental Mindset") and *Fauna em Foco* ("Wildlife and Focus"), as well as community-focused projects such as *Se Essa Rua Fosse Minha* ("If This Street Were Mine") and *Pensar Eco é Lógico* ("Thinking Eco Is Logical"), as part of CSN's continued commitment to environmental education and sustainability.





## Social Initiatives Linked to the Expansion of the P15 Itabirite Plant in Casa de Pedra

In 2024, CSN Mineração launched a series of social initiatives in connection with the expansion of the P15 Itabirite Plant as part of a strategic plan designed to support the project's growth. The company completed the second cycle of our Socioeconomic Monitoring Program (PMS), which monitors the living conditions and well-being of the communities of Congonhas and Belo Vale (MG) over time. Carried out annually, the PMS generates valuable data to support informed decision-making with a goal of mitigating negative impacts and enhancing positive contributions in the project's area of influence.

An environmental and social risk and impact assessment of the P15 project and its associated facilities was also conducted, following the guidelines of Performance Standards 1 and 4 from the International Finance Corporation (IFC). This assessment, which combined prior studies with stakeholder interviews, aims to improve risk management and community safety, enhancing the efficiency of the management system and informing continuous improvement.

These initiatives are integral to CSN's systemic plan to drive long-term social transformation and strengthen local communities, ensuring that the facility's growth is both responsible and sustainable.

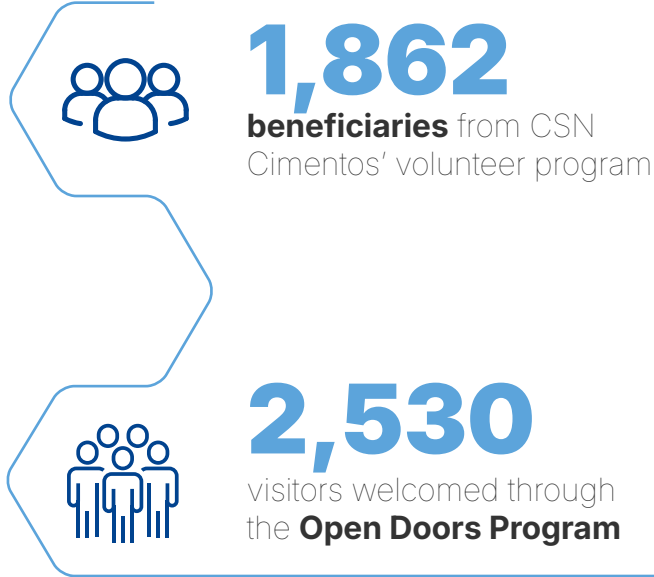


In the cement segment, each site develops a Stakeholder Engagement Plan (SEP) which is regularly updated to identify and manage potential local impacts. These plans encompass initiatives such as guided plant tours (Open Doors), community engagement committees, and dedicated communication channels. In 2024, the SEP was implemented for the first time at the Arcos and Alhandra sites, alongside a triennial assessment conducted across 14 cement sites, engaging 844 people throughout the process. Our Open Doors program welcomed 2,530 visitors to our operational sites across 73 visits throughout the year. The cement business also ran a structured volunteer program aimed at encouraging employee engagement in community initiatives and supporting local development. In 2024, the program had the participation of 327 volunteers who contributed 1,155 hours positively impacting 1,862 community members. Three additional campaigns collected over 2,400 items of clothing and toys, along with 2,213 kg of food, benefiting 61 organizations.

In logistics, the TLSA and FTL railway lines traverse 54 and 42 municipalities respectively, across states such as Ceará, Piauí, Pernambuco, and Maranhão. Key identified impacts include noise and environmental pollution linked to train operations and mandatory alerts at level crossings. To address these impacts, CSN has enhanced communication with rail-side communities and improved incident response times. As part of social and environmental initiatives related to the Transnordestina Railway, CSN launched a program, called PINAPS, in Piauí to promote sustainable agroforestry development among rural families. With approximately R\$ 15 million

in funding, the program aims to transform the lives of at least 100 farming families through their inclusion in agroforestry activities.

In May 2024, extreme rainfall in Rio Grande do Sul—507% above the historical average in the last 60 years—resulted in severe flooding. Despite the intensity of the event, CSN reported no structural failures or major environmental damage. Two hydroelectric plants, Jacuí and Canastra, were impacted. Emergency Action Plans were immediately activated, ensuring the safety of self-rescue zones and securing timely evacuations in collaboration with Civil Defense and local communities. Strong community relationships were instrumental in ensuring effective communication and the safe relocation of affected families.



A volunteering initiative in Marechal Hermes (RJ)





→ Employees from SWT  
– Germany

At SWT, the CSN Group's German operation, social investments are directed primarily toward **educational initiatives and youth sports programs**

In parallel, CSN launched a solidarity campaign to support flood victims, with employees delivering 50,000 blankets to six affected cities in Rio Grande do Sul: Canela, Canoas, Pelotas, Porto Alegre, São Francisco de Paula, and Três Coroas. CSN also donated 2,850 pallets, which were repurposed into beds and used to support the logistics of distributing aid. This initiative underscored the solidarity and empathy of CSN's employees, who united to deliver immediate support to those impacted by the disaster.

CSN's international operations also follow structured approaches and conduct ongoing evaluations to ensure their activities are carried out responsibly, minimizing negative impacts while leveraging opportunities to build

more transparent and sustainable relationships with stakeholders. At Lusosider, risks and opportunities are identified through internal procedures that assess both internal and external factors. As part of this process, the company maps the needs and expectations of neighboring communities, assessing their relevance and the need for additional actions. So far, no issues have been identified that require further intervention.

At SWT, a more in-depth strategy is in place, with SWOT analyses conducted across all departments to map risks and opportunities. SWT supports community development through investments in both educational and athletic programs. A particularly noteworthy initiative is its sponsorship

of the SV Stahl Unterwellenborn e.V. sports club, with a special focus on youth sports. The club's archery division has earned significant national and international accolades. SWT also supports ten local sports clubs, fostering community engagement and social inclusion through sports. The company also invests in programs for schools and daycare centers, providing children and youth with access to opportunities that support learning and personal growth. SWT also offers professional training programs for apprentices and recognizes top-performing individuals in these programs. In 2024, SWT invested a total of €116,259.57 in social initiatives, funding a variety of projects ranging from one-off events like sports tournaments to recurring community support programs.



## CSN Foundation

The CSN Foundation serves as a bridge between CSN and local communities, with a mission to promote social, educational, and cultural transformation. Present in 37 cities, it has made a meaningful difference in the lives of thousands—with 1,612 young individuals gaining employment through Foundation-led programs in the past year. In 2024, the CSN Group invested R\$ 66 million in corporate social responsibility initiatives. Directly managed by the CSN Foundation, these projects reached and positively impacted 6,033 people across the Company's areas of operation. Through a territorial approach, the CSN Foundation takes local dynamics into account to develop more inclusive and targeted initiatives that drive lasting social transformation. Aligned with ESG principles and the Sustainable Development Goals (SDGs)—especially SDGs 4 (Quality education), 8 (Decent work) and 10 (Reducing inequalities)—the Foundation promotes sustainable practices in the areas where we operate, reaffirming CSN's commitment to socioeconomic development and building community trust.

Fundação CSN has received several awards for its work transforming lives and communities through education, culture, engagement, and curation, promoting social development and reducing inequality. Among these recognitions, it received the Racial Equality Seal from the São Paulo Municipal Office for Human Rights and Civics. It also received a Human Rights and Diversity Badge awarded by the same municipal government for its *Garoto Cidadão* and the *Bolsa de Teatro* programs. Meanwhile, the Foundation's Environmental Education Program (PEA) earned the 2024 SESI SDG Badge in recognition of its contribution to sustainable development.



## Education

Education is a cornerstone of the CSN Foundation's mission, which supports the development of young people and adults through a range of educational and professional training programs.

### Key educational institutions include:

- **The Pandiá Calógeras Technical School (ETPC)**, in Volta Redonda (RJ), offering middle and high school education, technical programs, open-enrollment courses, and corporate training services. In 2024, ETPC hosted its 6<sup>th</sup> Education Seminar under the theme "Artificial Intelligence (AI): challenges and opportunities in education and business," sparking discussion around reconciling technology with human values to promote critical thinking and responsible innovation. As part of its commitment to diversity and gender equity, ETPC provided training to 381 women in 2024, preparing them to join the CSN workforce.
- **The Technological Education Center (CET)**, in Congonhas (MG), serving students from middle school through technical education, also offers market-driven vocational training.

Both schools provide scholarships to individuals in need identified in social and economic assessments. In 2024, 377 students received scholarships—representing 55% of total enrollments.

→ Students from the Pandiá Calógeras Trade School, a flagship educational institution in Volta Redonda supported by the CSN Foundation – Volta Redonda (RJ)







## University Scholarships:

- This initiative targets standout participants in the *Garoto Cidadão* program's theater track. In partnership with the Célia Helena Higher School of Arts in São Paulo and CSN Prada, the program offers full scholarships for Theater degrees alongside placement in Prada's Apprenticeship Program. In 2024, two additional scholarships were granted at Célia Helena, expanding higher education access for promising young talents. At present, five young people are enrolled in the program.
- In 2024, the CSN Foundation partnered with Centro Universitário de Barra Mansa (Nova UBM) to provide academic scholarships. In the program's inaugural year, seven musicians from Fundação CSN's Tambores de Aço ensemble were granted full scholarships to pursue a Bachelor's Degree in Music, supporting both their academic development and artistic careers.

## Capacitar Hotelaria & Serviços

- This initiative delivers professional training to socially vulnerable youth aged 16 to 29 in the southern region of Rio de Janeiro state. Training is conducted at Hotel-Escola Bela Vista and Vila Business Hotel—both managed by Fundação CSN.
- Participants receive hands-on instruction in various areas of hospitality and service, including front desk operations, event coordination, food service, waitstaff roles, maintenance, and customer care. The program

prioritizes young individuals referred by institutions such as DEGASE, CREAS, Centro de Cidadania LGBTQIA+, CEAM, and PETI. In 2024, the CSN Foundation also entered into a partnership with the Agulhas Negras Military Academy (AMAN). That year, 92 students completed training, with 53% successfully entering the workforce.

## Capacitar para Crescer

- This initiative supports the development of socially vulnerable youth, preparing them for entry into young apprentice programs. In 2024, the project supported 199 participants in the cities of Congonhas (MG) and Volta Redonda (RJ), fostering social inclusion through training and development.

## Conexão Aprendizagem

This program prepares youth to join the job market, offering hands-on experience within companies, paired with online theoretical instruction in selected fields. In 2024, the program reached 1,514 young people across 53 cities, equipping them with the skills needed to enter the job market.

## Mentoria Cidadã

This project connects CSN volunteers in leadership positions with young people from the *Garoto Cidadão* program. The program's primary goal is to provide these young participants with a broad understanding of the

workplace environment, combining support from CSN's volunteer mentors with specialized training conducted by subject-matter experts from diverse fields. At the beginning of 2024 (end of the 3<sup>rd</sup> *Mentoria Cidadã* cycle), 96% of those who entered as Young Apprentices were retained. In the 4<sup>th</sup> cycle, 52 young people began receiving mentoring, expanding the program's reach to the cities of Alhandra (PB) and Barroso (MG).

## Resgatando Saberes

Aimed at improving quality of life for elderly people, this fosters knowledge sharing about family farming, productive kitchen gardens, and healthy eating. The program has the capacity to serve up to 100 elderly individuals.

## Environmental Education Program (EAP)

The CSN Foundation's Environmental Education Program (PEA) drives community-based social and environmental initiatives aimed at fostering environmental awareness and encouraging sustainable practices. The program is currently present across CSN Cimentos, CSN Mineração, Minérios Nacional, and CSN Siderurgia. Throughout the year, 30,260 individuals took part in 983 activities across the cities of Arcos, Belo Vale, Congonhas, Ouro Preto, Pains, and Rio Acima in the state of Minas Gerais, and in Pinheiral and Volta Redonda in the state of Rio de Janeiro.





## Culture

The CSN Foundation views art as a powerful driver of social development. Through a wide range of cultural initiatives, the Foundation delivers meaningful artistic experiences that positively impact children, youth, and adults.

### **Garoto Cidadão**

Children and teenagers supported by Social Assistance Reference Centers (CRAS) in partner cities participate in music, theater, dance, and visual arts activities outside regular school hours through the CSN Foundation's *Garoto Cidadão* program. This social and cultural initiative supports the personal and social development of youth aged 9 to 18 who are living in vulnerable conditions.

In 2024, the program reached 3,989 children and teenagers across multiple regions: Arcos, Barroso, Belo Vale, Congonhas, Moeda, and Rio Acima in Minas Gerais; Volta Redonda and Itaguaí in Rio de Janeiro; Araucária in Paraná; the Heliópolis neighborhood in São Paulo; Bonito, Coxim, and Porto Murtinho in Mato Grosso do Sul; and Alhandra in Paraíba. A total of 337 performances were staged, engaging an audience of 70,403 people.

### **Tambores de Aço**

A musical group that tours Brazil aboard a mobile stage truck, bringing their cultural performances to wider audiences and participating in renowned artistic events. Composed of 20 scholarship musicians aged 15 to 20,

*Tambores de Aço* delivers an eclectic blend of Brazilian, Caribbean, and Latin American music. In 2024, their 63 performances reached an audience of 186,885 people. Notable performances included appearances in Curitiba (PR), at *Museu de Imagem e Som* and *Museu Oscar Niemeyer*, and in Belo Horizonte (MG), at the Palácio das Artes, as part of the opening of the 35<sup>th</sup> São Paulo Biennial (SP).

### **CSN Foundation Cultural Center**

This center helps bring culture to a larger and more diverse audience. In 2024, it hosted 256 activities attended by 93,712 people. It promoted artists and creative businesses via the Polo Street Art initiative—designed to position Volta Redonda as the graffiti capital of the state—and supported LGBTQIAPN+ visibility through partnerships with the local LGBTQIAPN+ Rights Council and the *Orgulhe-se* Awards awards. The center also hosted open-air film screenings at Cine Escada, followed by discussions on themes of identity and art.

### **Histórias que Ficam**

This program supports Brazilian documentary filmmaking through mentoring, grants, and outreach—nurturing the country's audiovisual sector. In 2024, four selected documentaries advanced through the 4<sup>th</sup> edition's editing residency. Each project presented its initial cut and received personalized mentoring from industry professionals.



→ Young artists from the Garoto Cidadão program during a performance at the CSN Foundation Cultural Center – Volta Redonda (RJ)

### **Os Bailes da Vida**

Launched in 2024, this initiative promotes digital inclusion among the elderly, while celebrating personal memory and encouraging active aging through ballroom dancing. A total of 155 individuals took part in the program.





## Institutional Support

The CSN Foundation sees institutional support as an essential tool to foster strong, collaborative cross-sector relationships (between public authorities, the CSN Group and other organizations), as part of its commitment to sustainable and inclusive local development. The Foundation's approach to institutional support focuses on addressing challenges and solutions systemically and engaging in active dialogue with communities to co-create development processes aligned with local strengths and opportunities.

### Capacity Building for Local Organizations

- In 2024, as part of its efforts to strengthen community-based organizations and expand their capacity for community transformation, the Foundation's institutional support arm organized four training workshops on "Project Development Based on the Legal Framework for Civil Society Organizations (OSCs)." The workshops were delivered to organizations in Montes Claros (MG), Cantagalo and Volta Redonda (RJ), and São Paulo (SP), engaging 127 participants from 51 organizations.

### Program for Investment in Rural and Sustainable Productive Inclusion (PINAPS)

This initiative, developed by the CSN Group and TLSA with technical oversight from CSN Inova and Fundação CSN, promotes sustainable rural economic inclusion as a driver for local development. With approximately R\$ 15 million in funding, the program aims to transform the

lives of at least 100 farming families through their inclusion in agroforestry activities.

## Curation

The CSN Foundation supports CSN in the selection and management of projects awarded tax-deductible funding under tax incentive laws, expanding our social impact.

### Curation Process

The Foundation receives and analyzes projects from partner institutions that are aligned with the Company's objectives and guidelines. Categories eligible for funding include culture, sports, childhood and adolescence, elderly people, and health.

### Impact in 2024

In 2024, 117 projects were sponsored with tax-deductible funding, covering social, cultural, and health initiatives in 46 municipalities across ten Brazilian states. Sponsored and already implemented projects impacted 413,810 people and reached an audience of 1,336,822 people. Supported initiatives were aligned with the needs of communities where CSN operates and with the Sustainable Development Goals (SDGs)—especially SDGs 3 (Good health and well-being), 4 (Quality education), 10 (Reduced inequalities), and 16 (Peace, justice, and strong institutions). Among the initiatives sponsored by the company are: *Projeto Chute Certo* (AM); 28<sup>th</sup>



→ A performance by Coral dos Profetas, a CSN-sponsored choir – Congonhas (MG)

Tiradentes Film Festival (MG); *Esporte pela Vida* (GO); Hospital Pequeno Príncipe (PR); *Vida e Saúde Proteção Integral aos Idosos* (RS); Holocaust and Jewish Immigration Memorial (SP); OncoHPV: *Tempo é Vida* (GO); *Brincar é Coisa Séria* (SP); *Nadando com Thiago Pereira* (RJ); Hospital Angelina Caron (PR); *Projeto Show de Bola* (MG and PB); *Favela no Passe: Diversidade na área* (SP); *Craque Cidadão* (MG, PB, and RJ); Hospital Einstein (SP), etc.



## CSN Foundation – 2024 Highlights

# 37 cities

directly benefited by Foundation programs

# 6,033 people

benefited by Foundation programs

# 389 students

awarded scholarships

# 656 cultural

initiatives

# 382,355

people reached

# 1,612 young people

employed through the Foundation programs



→ Young artists from the Tambores de Aço program during a performance at the CSN Foundation Cultural Center – Volta Redonda (RJ)





PRIVATE INCENTIVE-BACKED SOCIAL INVESTMENT AND SUPPORT FOR THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Projects	Locations	Benefits	1 ERRADICAÇÃO DA POBREZA	2 FOME ZERO E AGRICULTURA SUSTENTÁVEL	3 SAÚDE E BEM-ESTAR	4 EDUCAÇÃO DE QUALIDADE	8 TRABALHO DECENTE E CRESCIMENTO ECONÔMICO	10 REDUÇÃO DAS DESIGUALDADES	12 CONSUMO E PRODUÇÃO RESPONSÁVEIS	13 AÇÃO CONTRA A MUDANÇA GLOBAL DO CLIMA	17 PARCERIAS EM DESENVOLVIMENTO
Garoto Cidadão	MG   MS   PB   PR   RJ   SP	3,989 children and teenagers and 70,403 audience members reached	✓			✓		✓			
Scholarships at CSN Foundation schools	MG   RJ	377 children and adolescents				✓					
Environmental Education Program	MG   RJ	30,260 people impacted 3 community spaces revitalized				✓			✓	✓	
Theater Scholarships	SP	5 young people				✓	✓	✓			
Music Scholarships	RJ	7 young people				✓	✓	✓			
Capacitar Hotelaria e Serviços	RJ	92 young people	✓			✓	✓	✓			
Conexão Aprendizagem	MG   RJ   SP	1,514 youth				✓	✓	✓			
Capacitar para Crescer	MG   RJ	199 adolescents				✓		✓			
Mentoria Cidadã	MG   PB   PR   RJ   SP	52 adolescents	✓			✓	✓	✓			
Tambores de Aço	RJ	20 young participants and 186,885 people reached				✓	✓	✓			
Histórias que Ficam		4 documentaries developed				✓					
CSN Foundation Cultural Center	RJ	93,712 people reached by cultural activities				✓	✓				✓
Community Support Center	MG	1,095 beneficiaries									✓
Training sessions	MG   PR   RJ   SP	127 people trained									✓
Local Economic Development	PI   RJ	-	✓	✓		✓	✓	✓	✓		
Os Bailes da Vida	RJ	120 elderly people			✓	✓		✓			
Resgatando Saberes	RJ	100 elderly people									

The complete list of initiatives supported by CSN through the CSN Foundation is available in the 2024 Databook.



# Tailings Dams and **CO-PRODUCTS**



## IN THIS CHAPTER

- Dam Decommissioning



# Tailings Dams and Co-products

Mining activities generate two primary mineral byproducts: waste rock, consisting of overburden with no economic value, and tailings, which result from iron ore beneficiation. To reduce waste generation, CSN has introduced advanced technologies across its operations.

For instance, High-Intensity Magnetic Concentrators (CMAIs) at beneficiation plants enhance iron recovery and substantially reduce the volume of tailings produced. Following this stage, a complete filtration unit enables the removal of almost all water from the tailings. This process has enabled CSN Mineração to employ dry stack tailings storage methods since 2020—eliminating the need for tailings dams and increasing safety.

The company is also conducting research into alternative uses for tailings, such as the potential for reuse by CSN Cimentos as pozzolan, either as an additive or substitute in cementitious materials. Concurrently, CSN Mineração and CSN Inova are developing new methods to further recover iron from tailings, enabling their use in steelmaking and thus reducing overall tailings production.

To continue reclaiming tailings already deposited in dams, the company is investing in reprocessing projects like CMAI B4 and CMAI Casa de Pedra to reprocess the tailings stored in the B4 and Casa de Pedra dams. Beyond supporting the further decommissioning of legacy dams, these initiatives incorporate circular economy principles—transforming waste into value through water recovery and dry stacking.

All CSN dams remain classified at **hazard level zero**.

→ A saddle dike at the Casa de Pedra dam - Congonhas (MG)





# Dam Decommissioning

CSN is also making strong significant advancements towards decommissioning of its tailings dams, following a strict schedule approved by regulatory authorities. Our long-term goal is to eliminate all tailings dams, regardless of their construction method. Specifically for upstream-raised dams, CSN has set a target to achieve full decommissioning by 2030 (see more on page 10).

In 2024, CSN reached an important decommissioning milestone, with the structural stability of all its dams assured through independent external audits.

And we have continued to advance our decommissioning program at a strong pace, having completed the decommissioning of Vigia, Vigia Auxiliary, and B5 (CMIN), B1 and B2 (Água Preta, CSN), and Taboquinha 1 (ERSA) and made significant progress on B4 (CMIN) and B2A (MIPE). An especially notable milestone was the final decommissioning of the Taboquinha 2 Dam, which has now entered the two-year legal monitoring phase mandated by Brazil's National Mining Agency (ANM).

Despite having no record of dam-related incidents, CSN attaches paramount importance to dam safety. All of our dams are classified by the ANM as Hazard Level 0—indicating they are safe and stable. CSN carries out biweekly visual inspections, further supported by aerial monitoring via drones equipped with georeferencing capabilities, ensuring precise, detailed evaluations.

To strengthen its dam safety program, CSN has comprehensive safety plans covering all our facilities as required by regulatory standards, including Mining Dam Emergency Response Plans (PAEBM). In 2024, we conducted compliance and operability assessments on every facility through independent audits. CSN also organized both desktop and practical drills involving stakeholders and local communities to ensure an effective emergency response.

## DAM DECOMMISSIONING SCHEDULE

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031+
Casa de Pedra	B5												
	B4												
	Casa de Pedra												
Pires	Vigia Auxiliary Dam												
	Vigia Dam												
Minérios Nacional	B2												
	B2A												
ERSA	Taboquinha 01 – Crente												
	Taboquinha 02 – Serra Azul												

Note: Dams B1 and B2, located at the Água Preta mine in Conselheiro Lafaiete (MG), were successfully decommissioned in 2020.



# BIODIVERSITY



## IN THIS CHAPTER

- Preservation of Native Vegetation



# Biodiversity

The CSN Group has implemented a robust governance model to identify, assess, and address biodiversity-related risks and opportunities. This framework is governed by our [Biodiversity Policy](#), which outlines guidelines on sustainable management of natural resources and ecosystem services, including terrestrial and aquatic environments. The policy addresses major drivers of biodiversity loss, including land-use change, overexploitation of species, climate change, pollution, and invasive species.

In 2021, this governance structure was supplemented with a Biodiversity and Ecosystem Services Thematic Group, which reports to the ESG Committee. This group is responsible for developing action plans to mitigate adverse impacts and to enhance contributions to biodiversity conservation. In 2022, CSN delivered on its commitment to early adoption of the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations, culminating in its inclusion, in 2024, in the list of early adopters. More information about TNFD is available in the Databook (click [here](#) for further details). In conducting risk assessments, we use frameworks such as IFC Performance Standard 6, the Global Reporting Initiative (GRI 101 – Biodiversity), ISO 31000-based environmental risk analysis, and the Locate Evaluate Assess and Prepare (LEAP) methodology.

## CSN is among the early adopters of the TNFD recommendations

To inform related initiatives, we have mapped out and prioritized our business impacts and dependencies on ecosystem services, consolidating this information into a Climate and Nature Risk Matrix. This assessment was supported by market research and methodologies from the World Resources Institute (WRI). The resulting analysis yielded a roadmap with action plans and innovation goals to improve operational performance and mitigate risks.

One of the key tools developed to enhance biodiversity management is our Biodiversity Index for Operations (BIO), a methodology that consolidates indicators and assessment data to standardize biodiversity monitoring and produce regular tracking reports. Modeled on the Biodiversity Indicator and Reporting System (BIRS) of the International Union for Conservation of Nature (IUCN), BIO assesses biodiversity levels within a given area using a Condition Class ranking system that

ranges from 1 to 10. This classification is based on three main factors: the area of each identified habitat type; the ecological condition of these habitats, including improvements and threats; and the uniqueness and ecological relevance of each habitat within its regional context. These elements are weighted according to the area under analysis, with georeferencing and structured quantitative and qualitative indicators applied from the start to ensure accurate and robust analysis.



→ Areas preserved and/or under recovery by CSN – ARIE Floresta da Cicuta, Volta Redonda (RJ)



BIO offers several benefits, including enhanced measurement of biodiversity conservation progress, standardized numerical metrics for assessing biodiversity adequacy, and the ability to historically compare biodiversity conditions across CSN Group's operational sites. In 2024, CSN achieved full implementation of our BIO methodology across all applicable operations, including our cement operations in Caaporã and Alhandra (Paraíba), reaching this milestone ahead of schedule as part of our commitment to biodiversity management and conservation.

Key recent developments include the exploration of innovative environmental rehabilitation technologies, such as the use of drones for dispersing encapsulated seeds—an approach expected to significantly accelerate reclamation programs, particularly at the CSN Mineração site in Casa de Pedra, where pilot testing is planned for 2025. CSN has also established collaborations with universities and environmental agencies to develop best-in-class monitoring and recovery techniques. Collaborations with academic and regulatory institutions have helped to validate CSN's methodologies, positioning us as an industry leader in managing nature-related risks and opportunities.

→ Areas preserved and/or under recovery by CSN – ARIE Floresta da Cicuta, Volta Redonda (RJ)







## Preservation of Native Vegetation

The CSN Group preserves and maintains more than 90,000 hectares of natural habitat areas across 11 Brazilian states. These areas include native vegetation, sites under ecological restoration, protected areas, legal reserves, and Private Natural Heritage Reserves (RPPN), an important natural capital asset for CSN that provides essential ecosystem services.

Among them, the Cicuta Forest in Volta Redonda (RJ) stands out as a vital remnant of the Atlantic Forest biome. Classified as an Area of Relevant Ecological Interest (ARIE), it is one of the last remaining fragments of its kind in the state of Rio de Janeiro. Beyond its ecological importance, the forest hosts a CSN Foundation Environmental Education Program (EAP) initiative which engages local communities in environmental conservation efforts. CSN also manages two Private Natural Heritage Reserves (RPPNs): one at its cement mill in Arcos and another at its mining operation in Congonhas, both in Minas Gerais.

## Biodiversity Management Programs

- Rescue of Flora;
- Phenological monitoring;
- Seed collection;
- Wildlife dispersal and rescue;
- Environmental offsets;
- Revegetation of exposed soils;
- Flora and fauna monitoring;
- Wildfire prevention;
- Area drainage;
- Installation of sediment containment devices;
- Road signage to prevent roadkill;
- Environmental education programs.





→ Areas preserved and/or under recovery by CSN – ARIE Floresta da Cicuta, Volta Redonda (RJ)

By nature, mining operations can impact natural habitats as vegetation clearing is often required to access mineral deposits. The Casa de Pedra site, located in Congonhas (MG), is our largest operation with significant potential impacts on biodiversity. To mitigate impacts, CSN Mineração follows a strict mitigation hierarchy: avoid encroachment into natural areas whenever possible; minimize effects when avoidance is not feasible; rehabilitate and restore impacted areas; and offset unavoidable damage through specific biodiversity-focused initiatives.

Launched in 2021, CSN Mineração is conducting a comprehensive biodiversity study at the Casa de Pedra mine, aligned with the International Finance Corporation (IFC) Performance Standards on Environmental and Social Sustainability (PS 6), which addresses biodiversity conservation and the sustainable management of living natural resources. Key deliverables from this study include a management plan for the Jurema Private Natural Heritage Reserve (RPPN) and strategic tools such as a Biodiversity Action Plan (BAP) and Biodiversity Monitoring and Evaluation Plan (BMEP).

All mine sites are covered by mine closure and reclamation plans, which are regularly updated to ensure disturbed land is effectively reclaimed. Environmental rehabilitation is carried out progressively, as mining operations or supporting activities—such as overburden and waste rock storage—are completed. This approach embeds environmental restoration in the operational life cycle, supporting our commitment to responsible and sustainable mining.

CSN Mineração also assesses impacts on ecosystem services, such as air quality, climate regulation, water availability, and erosion control. We are committed to achieving No Net Loss of biodiversity and, whenever possible a Net Gain. Progress is tracked using an “area disturbed versus area protected” indicator, which ensures that all disturbed land is offset by at least twice the amount of protected land. In 2024, CSN Mineração developments resulted in 2.50 ha of cleared land, which will be offset within the same biome. CSN Mineração also collaborates with universities and NGOs on conservation-related research.

In 2024, CSN Mineração participated in the 1<sup>st</sup> Meeting on the Municipal Atlantic Forest Master Plan, discussing planned research to assess and identify priority areas for conservation and recovery in the municipality of Congonhas. CSN Mineração was also invited to join the Master Plan Working Group, alongside representatives from academia, the local government, companies in the region, and local community members. In addition, we are active members of the Biodiversity Working Group of the Minas Gerais State Minerals Industry Union (SINDIEXTRA).

CSN Group's logistics and cement businesses also have significant interdependencies with protected and restored areas. In these businesses, we apply a common set of biodiversity preservation standards and guidelines that support our commitment to environmental responsibility and stakeholder engagement.



In 2024, CSN marked a major milestone in the reforestation of the Cicuta Forest in Volta Redonda, Rio de Janeiro. This initiative spans 41.1 hectares within the Cicuta Forest Area of Relevant Ecological Interest (ARIE) and its surrounding buffer zone, supporting habitat restoration and biodiversity conservation. The project is run in cooperation with the Chico Mendes Institute for Biodiversity Conservation (ICMBio), supporting CSN's long-standing commitment to sustainability and ecosystem protection. To date, more than 85,000 native tree seedlings have been planted, contributing to forest recovery and improved ecosystem services in the region. As the project advances, it will expand ecological connectivity—benefiting endangered species like the brown howler monkey (*Alouatta guariba clamitans*)—and position the Cicuta ARIE as a key area for biodiversity in the state of Rio de Janeiro.

→ Areas preserved and/or under recovery by CSN – ARIE Floresta da Cicuta, Volta Redonda (RJ)



## Mitigation Hierarchy

CSN strictly follows the mitigation hierarchy in each of our projects, which begins with preventing impacts on biodiversity. This involves evaluating alternative siting and technologies and even considering not moving forward with the project where necessary. When prevention is not fully practicable, we work to minimize impacts by reducing their duration and intensity. Where it is not possible to avoid or minimize impacts, CSN ensures the rehabilitation of affected ecosystems. Where necessary, impacts are offset by restoring degraded habitats to ensure “no net loss” or, preferably, a “net gain” of biodiversity. This approach reflects our commitment to sustainability and biodiversity conservation.



## AREAS PRESERVED AND UNDER RECOVERY



Areas undergoing restoration:

**1,010 hectares**

Protected Areas:

**5,215 hectares**

Private Natural Heritage Reserve (PNHR):

**530 hectares**

Legal Reserves (LR):

**28,354 hectares**

Other areas with native vegetation:

**55,311 hectares**



# Climate CHANGE



## IN THIS CHAPTER

- Climate Governance

- Climate Strategy





→ The Itá hydroelectric plant reservoir – Itá (SC)

# Climate Change

CSN is committed to addressing climate change and reducing our carbon footprint. As part of this commitment, we have set targets to lower emissions from the production of essential materials such as cement, steel, and iron ore—an effort that supports our broader decarbonization strategy and pursuit of a more sustainable future.

CSN's operations, particularly in the steel, mining, and cement sectors, are currently among our main sources of greenhouse gas (GHG) emissions. However, the technologies required to significantly curb these emissions have yet to achieve commercial scalability for these industries or remain economically unfeasible under current market conditions. Recognizing these challenges, we remain committed to identifying viable pathways for emissions reduction while continuing to support economic and social development.

In line with this goal, the CSN Group will release its second Climate Action Report in 2025—a strategic document updated biennially. The report describes recent progress on our climate strategy, identifies climate change-related risks, and details progress on established action plans to mitigate impacts and adapt our operations to a changing climate. We have also recently published the CSN Group Climate Governance Guidelines, outlining our approach to addressing climate change. Both resources will be made available on the [CSN Group website](#) to all stakeholders.



# Climate Governance

CSN Group has built a robust and integrated climate governance structure to ensure our climate strategy is effectively and comprehensively implemented. This structure spans multiple levels of management and involves coordinated efforts, supporting our commitment to sustainability and decarbonization.

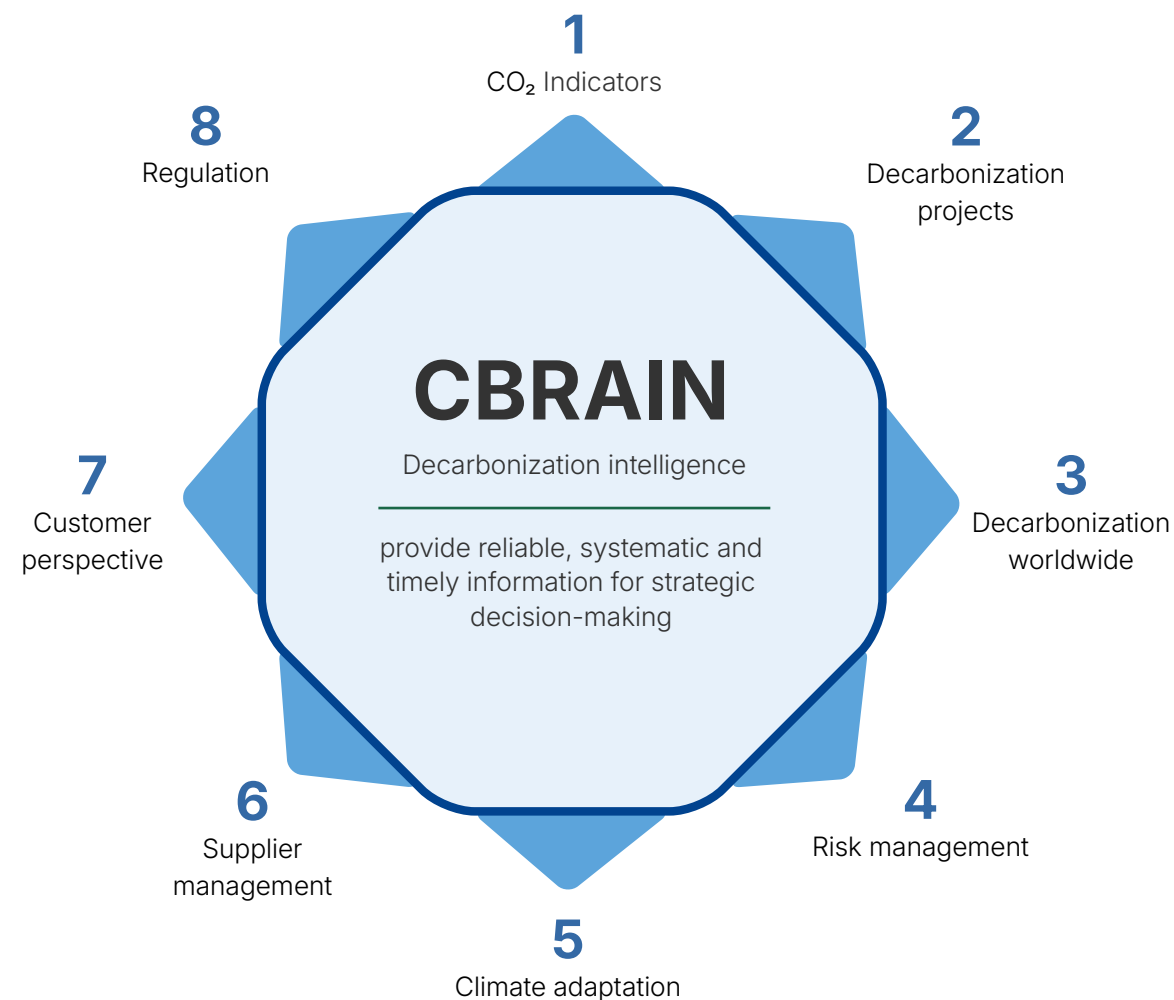
At the top of this structure is the Board of Directors, supported by the ESG Committee. A centerpiece of the committee is the Climate and Air Working Group, which is responsible for setting climate-related guidelines and overseeing all climate initiatives.

Our Decarbonization and Climate Change team, reporting to the Sustainability Officer, is responsible for coordinating and integrating climate-related initiatives Company-wide. It liaises between departments to ensure that implementation is aligned and effective. To further support this governance model, CSN has established four dedicated subgroups: Decarbonization Journey – Mining, Decarbonization Journey – Steel, Decarbonization Journey – Cement, and Risk & Opportunity Management.

These subgroups are connected to the Climate and Air Working Group and play a key role in tracking climate indicators and advancing our decarbonization strategy across daily operations. They also oversee emission reduction projects and ensure the CSN's readiness to comply with evolving climate regulations.

In 2024, the CSN Group developed a strategic management solution called CBRAIN, a suite of eight different tools that are directly linked to the three pillars of our climate strategy. CBRAIN is a groundbreaking tool that consolidates Decarbonization and Climate Change information on a single platform, providing a strategic, systemic vision. This is supported by state-of-the-art process management, database, query and artificial intelligence (IA) tools.

CSN has **set ambitious targets** to reduce GHG emissions





→ Employees working in the seedling nursery for environmental restoration – Itá (SC)

## Climate Strategy

CSN Group's climate strategy is centered on transforming our businesses toward a low-carbon economy, as part of our commitment to sustainability and climate action. The strategy is structured around three key pillars: Mitigation, Adaptation and Stakeholder Engagement.

To bring this vision to life, the CSN Group has developed a Climate Action Plan (PAC) comprising of 30 strategic initiatives, broken down into around 180 specific actions. These initiatives span efforts to reduce environmental impact and enhance preparedness for climate-related impacts, while fostering active engagement with stakeholders.

### Mitigation

The Mitigation pillar encompasses all initiatives related to developing and implementing decarbonization programs across CSN Group's operations. As part of this pillar, we develop sector-specific roadmaps, implement decarbonization programs, and collect high-quality, reliable data to inform action plans supporting our decarbonization commitments.

The CSN Group develops and applies robust tools to measure greenhouse gas (GHG) emissions and to implement emissions reduction programs within

operations. Since 2013, we have tracked our emissions via an annual GHG emissions inventory, prepared based on the guidelines of the Brazilian GHG Protocol Program. Since 2014, this inventory has undergone third-party auditing and has received a Gold Seal badge since 2021, in recognition of excellence. The inventory is published in the Public Emissions Registry, underscoring our commitment to transparency.

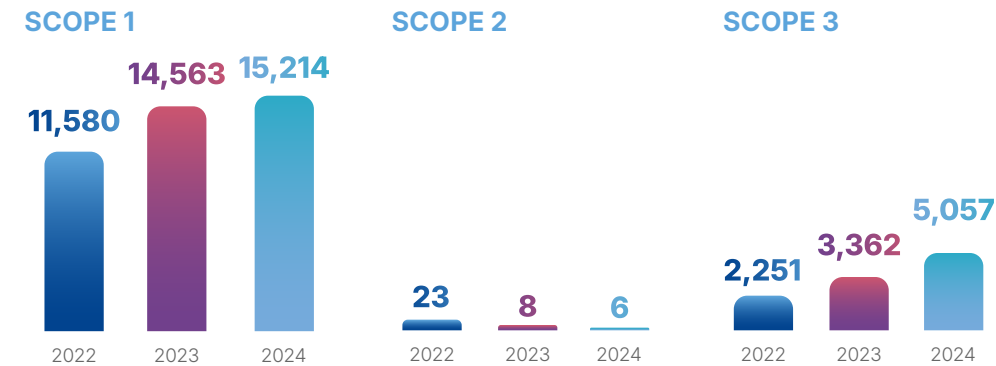
Informed by emissions performance indicators, the CSN Group identifies and deploys new technologies to lower emissions and developed tailored decarbonization roadmaps for its core segments: steel, cement, and mining. Each of these roadmaps is driven by well-defined emissions reduction targets, aligning our operations with the transition to a low-carbon economy.

CSN Group companies' decarbonization roadmaps are regularly updated using an iterative process of planning, development, implementation and improvement. A core tool in this process is the Marginal Abatement Cost (MAC) curve, applied across the steel, cement, and mining segments. These curves support the prioritization of decarbonization projects and technologies by comparing mitigation benefits against implementation costs, enabling us to focus on the most impactful initiatives.



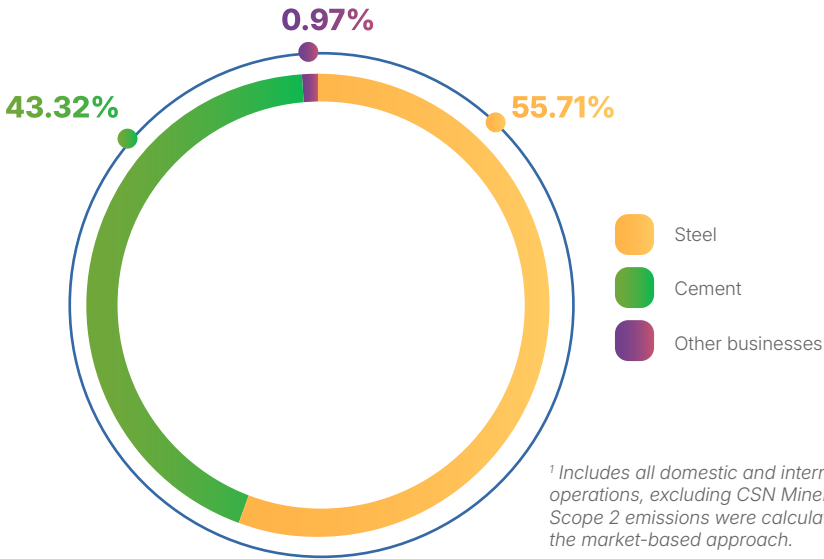
CSN GROUP GHG EMISSIONS INVENTORY<sup>1</sup>

thousand tCO<sub>2</sub>e



<sup>1</sup> Refers to the CSN Group, excluding CSN Mineração. This reporting scope is used to prevent double counting of emissions, as scope 3 emissions from mining overlap with scope 1 emissions from the steel segment.

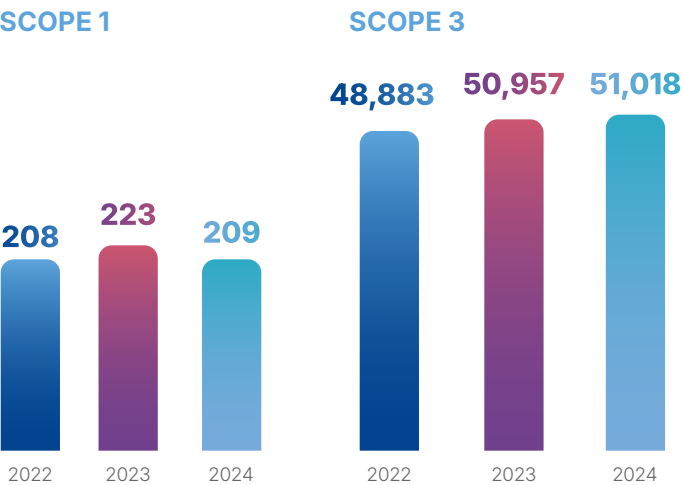
GHG EMISSIONS (SCOPES 1 AND 2) BY BUSINESS SEGMENT IN 2024<sup>1</sup>



<sup>1</sup> Includes all domestic and international operations, excluding CSN Mineração. Scope 2 emissions were calculated using the market-based approach.

CSN MINERAÇÃO EMISSIONS INVENTORY<sup>1</sup>

thousand tCO<sub>2</sub>e



<sup>1</sup> CSN Mineração generates zero Scope 2 emissions as its electricity supply is 100% renewable.

GHG EMISSIONS (SCOPES 1 AND 2) BY BUSINESS SEGMENT IN 2024<sup>1</sup>

Steel (Brazil)	54.94%
Steel (global)	0.77%
Cement	43.32%
Logistics	0.87%
Other mining operations (ERSA and Minérios Nacional)	0.09%
Electricity	0.01%

<sup>1</sup> Includes all domestic and international operations, excluding CSN Mineração. Scope 2 emissions were calculated using the market-based approach.

The CSN Group’s decarbonization strategy is structured into three distinct phases, each aligned with the time horizons and specific goals of our business units. The Blue phase, running through 2030, targets operational efficiency and continuity investments to incrementally optimize processes and reduce environmental impact. The Olive phase, spanning 2030 to 2035, is focused on implementing upgrades and launching projects designed to significantly cut greenhouse gas emissions. Starting in 2035, the Green phase is centered around the adoption of breakthrough technologies that can drive substantial progress toward full decarbonization. Concurrently, one of the Group’s major mitigation efforts is the expansion of our energy portfolio, ensuring that 100% of electricity used in our Brazil operations is sourced from renewables. Furthermore, the opening of the natural gas market in Rio de Janeiro opens the door to explore new opportunities to decarbonize operations at the Presidente Vargas Steelworks.





## Decarbonization in Steelmaking

CSN has set a target to reduce CO<sub>2</sub>e emissions per metric ton of crude steel by 10% by 2030 and 20% by 2035, in line with the World Steel Association (WSA) approach. This commitment covers our Presidente Vargas Steelworks (UPV), located in Volta Redonda (RJ), and Stahlwerk Thüringen (SWT), in Germany. As of 2024, we achieved an 8% reduction compared to the baseline year, accelerating our journey toward decarbonization.

One of our standout ongoing initiatives is the implementation of UC3® (Ultimate Cell® Continuous Combustion) technology in the regenerators of blast furnace 2 at UPV. Developed through CSN Inova projects in collaboration with Portuguese startup UTIS, this solution uses green hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) in a controlled manner to stabilize combustion, increase blast temperature, reduce coke consumption, and ultimately reduce GHG emissions. For more information, see page 48 of this report.

In 2024, CSN began testing initiatives outlined in the Olive phase of its decarbonization *roadmap*. As part of these efforts, we also advanced studies on the use of charcoal in blast furnaces and sinter plants, while exploring artificial intelligence systems to enhance resource efficiency in steelmaking operations. Since May,

CSN has invested in sourcing higher-grade iron ore, leading to a measurable reduction in CO<sub>2</sub> emissions. During the same month, we successfully trialed the use of charcoal in UPV's Blast Furnace 3 and deployed an AI system that boosted blast temperatures and lowered coke consumption.

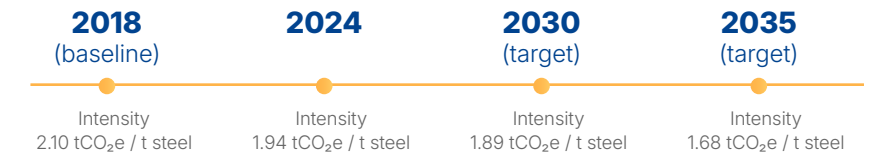
CSN was also among the first Brazilian industrial players to enter the country's liberalized natural gas market, which is set to increase energy supply flexibility and competitiveness. Today, we are the largest industrial consumer of natural gas in Brazil's free market and continue to explore its use across industrial processes. This transition could deliver an estimated reduction of up to 159 ktCO<sub>2</sub>e annually at UPV. Another key milestone was our Selene Project, focused on green hydrogen production—details of which are available on page 69 of this report.

Improved operational stability at UPV also contributed significantly to lower emissions, supported by investments in process and equipment upgrades. As of 2024, CSN had reduced CO<sub>2</sub>e intensity to 1.94 tCO<sub>2</sub>e per metric ton of steel—down from 2.07 tCO<sub>2</sub>e in 2023. Our 2035 target is 1.68 tCO<sub>2</sub>e per metric ton of steel, supported by a consistent downward trajectory. Further research is underway to identify new emission reduction

pathways, supporting CSN's commitment to advancing the energy transition, operational excellence, and sustainability in steelmaking.

Meanwhile, SWT—CSN's steel operation in Germany—has established itself as a leader in green steel, producing steel from 100% recycled scrap, powered entirely by renewable energy, and processed via electric arc furnaces (EAF). This model delivers one of the industry's lowest carbon footprints, at just 204 kg of CO<sub>2</sub>e per metric ton of steel produced.

### OUR DECARBONIZATION JOURNEY IN STEELMAKING







## Decarbonization in Mining

CSN Mineração has set a target to cut CO<sub>2</sub>e emissions per metric ton of ore produced by 30% by 2035 and become net zero by 2044 across Scopes 1 and 2. These targets reflect the company's commitment to implement more sustainable operational practices, with a focus on its Casa de Pedra mine and Pires Complex. To support these efforts, CSN Mineração uses the GHG Protocol methodology to calculate emissions and set decarbonization targets.

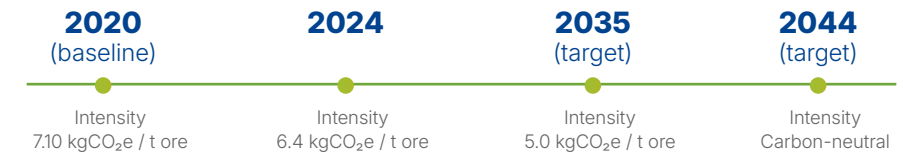
The roadmap to achieve these goals includes a series of strategic projects, primarily revolving around operational efficiency and technological innovation. A key focus area is the automation and electrification of the company's heavy equipment fleet. Based on MAC Curve projections, expanding the use of electric trucks in current and future operations could significantly reduce Scope 1 emissions. The rollout of electric trucks, already underway, marks a significant step in replacing diesel-powered vehicles with battery-electric models. In 2024, CSN Mineração trialed the use of six fully electric pieces of equipment—an excavator, a wheel loader, and four

trucks. This initiative will further the company's efforts around decarbonization and adopting more sustainable technologies. To date, seven electric trucks with capacities ranging from 60 to 70 tons have been added to the Casa de Pedra fleet, a significant step in the transition to cleaner and more efficient mining operations.

Another highlight from the year was our Mobile Fueling Station project, designed to optimize off-road truck fueling operations at Casa de Pedra. Deploying mobile fueling stations avoids the need for trucks to travel to a fixed station, eliminating downtime and waiting queues. Mounted on a custom-built convoy truck, the new fueling station will increase ore haulage capacity by 1.2% per year, as well as reducing emissions.

These initiatives are just one part of CSN Mineração's broader decarbonization strategy, which combines technological innovation, enhanced operational efficiency, and the adoption of renewable fuels—such as hydro-treated vegetable oil (HVO)—as part of the company's ongoing drive to develop sustainable solutions and reduce environmental impact across its mining operations.

## CSN MINERAÇÃO'S DECARBONIZATION JOURNEY







## Decarbonizing the Cement

In 2024, CSN Cimentos marked a major milestone in its decarbonization journey with the official approval of its emissions reduction target by the Science Based Targets initiative (SBTi). The company has set a target to reduce CO<sub>2</sub> emissions by 23% per metric ton of cement produced by 2030, targeting an intensity of 392 kg CO<sub>2</sub>e/t of cementitious material. This target reflects CSN's commitment to lead the industry in advancing more sustainable practices. CSN Cimentos is already a global benchmark in environmental performance, boasting one of the lowest CO<sub>2</sub> emissions intensities per metric ton of cement worldwide. It has also set the most ambitious SBTi-approved target among cement producers globally, underscoring its leadership in the shift toward a low-carbon industry.

To meet this target, CSN Cimentos is advancing a range of innovation and energy efficiency initiatives. A key area of focus is increasing the use of alternative fuels in its kilns, supported by the Revalora platform, which facilitates the adoption of more sustainable fuel sources throughout the cement manufacturing process. CSN Cimentos is the first company in the Brazilian cement industry to deploy UTIS green hydrogen Injection technology in combustion processes. This groundbreaking solution is being gradually rolled out across all integrated plants, enhancing energy efficiency and supporting

significant CO<sub>2</sub> emissions reductions. In 2024, UTIS technology was implemented at the Montes Claros and Caaporã plants, adding to the Arcos and Alhandra facilities, which had already implemented the solution in previous years—bringing the total to four integrated plants.

Another key pillar of CSN Cimentos' decarbonization strategy is reducing the clinker factor—or the percentage of clinker in cement. Clinker is produced in rotary kilns through the calcination of limestone, a process that generates a substantial share of the sector's CO<sub>2</sub> emissions. In the second half of 2024, CSN Cimentos introduced a robust clinker quality control process and began using additives to enhance clinker reactivity—leading to an approximate 2% reduction in the clinker-to-cement ratio. The company plans to build on this initiative by exploring additional ways to lower the clinker factor, including the use of innovative cementitious materials and disruptive activation techniques.

Revalora, CSN's waste management platform, also plays a key role in advancing decarbonization by expanding waste co-processing in clinker kilns. This allows fossil fuels to be replaced with waste-derived alternatives, significantly cutting emissions. In 2024, this solution was rolled out to the Alhandra (PB) plant, enabling the use of alternative fuels and biomass in the kiln's fuel mix.

Beyond process optimization, CSN is also improving cement quality through advanced additives, which help reduce the clinker factor without compromising product performance. This not only lowers CO<sub>2</sub> emissions but also enhances the efficient use of raw materials and reduces energy intensity in cement production.

## CEMENT DECARBONIZATION JOURNEY





## Adaptation

CSN's Adaptation approach is focused on identifying climate-related risks and opportunities to inform measures to boost resilience to different climate scenarios. As part of this approach, we conduct assessments of both physical and transition risks and opportunities, as we work to transition to a low-carbon economy.

A key milestone in 2024 was the integration of our climate risk and opportunity assessment model with its counterpart nature-related risk model, resulting in a unified risk matrix. The integration has enhanced CSN's capacity to adapt to environmental impacts while transitioning to a more sustainable and resilient business model. The matrix now provides a comprehensive and integrated perspective on risks and opportunities, enabling a more strategic and effective approach to climate change.

**CSN's Climate Vulnerability Study** provides a basis for strategic decision-making related to climate challenges.

In 2024, CSN completed a comprehensive Climate Vulnerability Study, a science-based assessment to identify key vulnerabilities under projected climate scenarios. The assessment spanned five business segments, analyzing 48 facilities and involving 51 employees through interviews. Using targeted climate scenarios, we modeled potential changes and assessed their impacts. The study comprised four key phases:

- Gathering internal data and conducting industry benchmarking;
- Quantifying risks, building a risk matrix, and evaluating potential impacts;
- Evaluating significant physical risks, including detailed financial impact projections;
- Identifying and recommending adaptation measures as part of our overall strategy to address physical risks.

Our Climate Vulnerability Study and adaptation plans play an important role in improving our approach to identifying and managing climate-related risks and opportunities. These tools provide a robust framework for strategic decision-making, equipping CSN to navigate climate challenges while capitalizing on opportunities. By implementing a structured, science-based approach to climate adaptation, CSN is strengthening operational readiness for future environmental challenges and aligning more closely with the global transition toward sustainable development.



→ CSN Cimentos Brasil team members – Pedro Leopoldo (MG)

Building on these findings, we are developing climate adaptation plans outlining strategies to enhance resilience, ensure operational continuity, and mitigate adverse climate impacts.





→ CSN Mineração  
team members –  
Congonhas (MG)

## Stakeholder Engagement

CSN's approach to Stakeholder Engagement aims to build strategic partnerships to continuously integrate external perspectives into our strategy. These factors include market trends, emerging technologies, and public policies, all of which are critical for aligning our operations with global best practices and future demands. Stakeholder engagement is a key imperative to ensure that CSN stays ahead of changes and evolves sustainably.

Our approach ensures that stakeholders—including investors, regulators, and the broader public—have access to relevant updates on CSN's progress via reports such as this Integrated Report and CDP disclosures. CSN is an active member of several initiatives and platforms where we showcase our climate governance framework, risk and opportunity management strategies, and our progress on low-carbon transition projects. Continuous engagement enhances transparency and builds stakeholder trust in our commitments and initiatives.

Feedback received by CSN over the years has confirmed the effectiveness of our governance mechanisms and stakeholder perceptions of our commitment to transparent disclosure, helping to build trust in CSN's practices. Since 2021, CSN has been a strong performer on the global CDP platform, which consolidates data on climate governance and water security risks.

As part of our value chain process, CSN has started working with its most critical suppliers to lower their CO<sub>2</sub> footprint, particularly those providing carbon-intensive products such as coal and coke. The goal is to help the strategic partners improve their management practices, gain a better understanding of their carbon footprint, prepare for the Brazilian Emissions Trading System (SBCE), and enhance the quality of their greenhouse gas (GHG) emissions inventory data. CSN has also held several discussions with customers in the automotive, home appliance, and construction sectors to better understand and co-develop products aligned with these companies' decarbonization strategies. One successful example was the sale of cement from the Montes Claros plant with an Environmental Product Declaration (EPD), which enabled a strategic customer to obtain the LEED® Platinum certification for a real estate development. CSN will now expand this strategy to supply products aligned with key customers' decarbonization and adaptation needs.



# ECO-EFFICIENCY



## IN THIS CHAPTER

- Waste Management and the Circular Economy
- Water and Effluents
- Air Emissions and Air Quality



# Eco-efficiency

CSN Group remains firmly committed to embedding eco-efficiency across its operations by promoting the responsible use of natural resources and mitigating environmental impacts related to our business activities. Guided by our [Sustainability Policy](#) and supported by a robust Environmental Management System (EMS), we are allocating investment and implementing initiatives focused on waste reduction, water efficiency, strict effluent control, and emissions reduction and monitoring.

CSN has continued to improve its environmental performance through sustained investments. In 2024, we allocated R\$ 1.27 billion to environmental initiatives—R\$ 702.5 million in operational expenditure (OPEX) and R\$ 569.6 million in capital expenditure (CAPEX)—as part of our commitment to minimizing impacts and ensuring sustainable operations.



# Waste Management and the Circular Economy

The CSN Group is widely recognized for our capabilities in advancing the circular economy for materials and co-products, both within our own operations and across external value chains. These capabilities are supported by the integration of our mining, steel, and cement production streams, generating synergies that create value across operations. In the steel segment, this integration is key to enabling the reuse of co-products either within the steelmaking process or by other industrial sectors. CSN's strong logistics expertises and in-house generation of renewable energy further support more efficient and sustainable resource management.

CBA strictly follows the waste management hierarchy defined by Brazil's National Waste Policy (PNRS)—reuse, recycling, co-processing, and, as a last resort, safe disposal. For hazardous waste, CSN ensures full traceability and proper disposal, including co-processing in cement operations or final disposal in licensed industrial landfills. Each facility follows site-specific procedures for waste monitoring, segregation, and appropriate disposal, with designated areas for temporary storage and sorting.

To further advance these initiatives, CSN has established a Circular Economy Group within the ESG



→ A team member at the recycling yard, Presidente Vargas Plant – Volta Redonda (RJ)

Committee, with a mission of driving innovative solutions and integrating best practices in reuse of waste and co-products across all our operations. We also have a dedicated team for managing sales of co-products and scrap materials. The Special Sales Management (GVS) team plays a key role in diverting waste from landfills and promoting material recovery both within and outside the organization—efforts that generated net revenue of R\$ 324.7 million in 2024. Thanks to these initiatives, 96% of the waste generated by CSN Group operations was sustainably treated and disposed of in 2024, reinforcing our commitment to efficient materials management and advancing the circular economy.

In the steelmaking process, pig iron production generates blast furnace slag, a by-product entirely reused by CSN Cimentos in cement production. Steel slag aggregates, generated from the treatment of steelmaking slag, are also reused in a range of applications such as rural road paving, soil amendments, railway ballast, and as a substitute for natural aggregates in building and construction. Since 2023, CSN has also utilized non-hazardous waste to support land reclamation efforts in Pinheiral (RJ), helping to address severe erosion by gullies and mitigate associated environmental impacts. CSN's steel production process also supports the reuse of various metal scraps, further advancing circular economy practices within the sector.



A key highlight from 2024 was the implementation of co-processing at the Alhandra (PB) kiln, which is now equipped with a full system for the safe handling, storage, and transport of waste and biomass. With this addition, all of CSN Cimentos' clinker production facilities now have co-processing capabilities—further reducing the company's carbon footprint while embedding circular economy principles into its industrial processes. In line with our sustainability commitments, CSN has set a new target for our cement operations: reaching 50% thermal substitution in clinker kilns through the use of co-processed waste and biomass by 2030.

Our waste management system is supported by strict traceability and compliance controls. Regular environmental audits are conducted to ensure proper waste disposal and to verify that suppliers and customers involved in material reuse meet all applicable regulations. CSN actively monitors environmental performance indicators to support the ongoing improvement of its waste management practices. Key indicators include industrial waste reuse rates and safe disposal rates for hazardous materials.

CSN seeks to implement

# best-in-class

waste and by-product reuse practices across all our operations

### WASTE GENERATED BY THE CSN GROUP

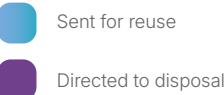
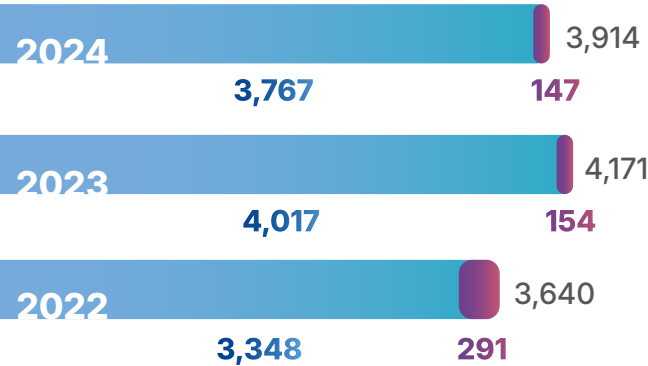
(thousand metric tons)



<sup>1</sup> In 2024, our steel operations (Brazil and global) accounted for 98.8% of the total waste generated. This disclosure does not include mine waste.

### WASTE DISPOSED OF BY THE CSN GROUP<sup>1</sup>

(thousand metric tons)



<sup>1</sup> The gap between waste generation and disposal volumes is due to the elimination of residual stockpiles accumulated in previous years. This disclosure does not include mine waste.



→ Waste stored at Revalora, CSN Cimentos Brazil – Pedro Leopoldo (MG)

Apart from these initiatives, CSN has created a dedicated platform, Circula+, to optimize the reuse and repurposing of by-products and surplus materials, fostering circular economy practices across multiple industries. Circula+ was established in 2022 by CSN Inova as the Group's first spinoff, with a mission to unlock new business opportunities within CSN's various sectors. Since its launch, the platform has evolved into a digital marketplace that connects material suppliers and buyers, while also offering specialized consulting services to companies to help improve their waste and materials management systems. In 2024, Circula+ continued to advance its innovation strategy, delivering tailored solutions that help businesses optimize material reuse, minimize waste, and comply with evolving environmental regulations.



# Revalora

Revalora, CSN Cimentos' innovative waste recovery platform, supports circular economy practices and CO<sub>2</sub> emissions reductions across our operations. The platform converts industrial and municipal waste into alternative fuels, helping to reduce reliance on fossil fuels and enabling more responsible, sustainable materials management. Currently undergoing significant expansion, Revalora is managing over 30 high-return projects and developing a strong pipeline of new waste co-processing initiatives. In 2024, CSN Cimentos achieved a major milestone by implementing co-processing across 100% of its integrated plants—further strengthening its leadership in industrial waste reuse within the cement sector.

To scale these efforts, Revalora operates strategically located infrastructure to streamline logistics and increase waste recovery capacity. Our facility in Pedro Leopoldo (Minas Gerais), one of the most competitive in Brazil, supplies alternative fuels to our Arcos and Barroso cement plants. Meanwhile, a new project in Sorocaba (São Paulo)—now in advanced engineering—benefits from its proximity to key urban waste sources. This facility will process and dispatch waste to other company sites, ensuring an efficient, cost-effective supply chain for alternative fuels.

In 2024, Revalora's replacement of fossil fuels with sustainable alternatives enabled the reuse of 621,000 metric tons of waste. This initiative also had a positive financial impact, adding R\$ 32.46 million to the Company's EBITDA.

Alongside its role in decarbonization, Revalora also generates positive social impacts by managing urban waste, benefiting communities and supporting the productive inclusion of waste pickers. One example of this contribution is its partnership with the Minas Recicla Energia project, an initiative by the Government of Minas Gerais that aims to turn the rejects from waste segregation into fuel for cement production. The CSN Cimentos plant in Pedro Leopoldo (MG) plays an active role in the project, ensuring the sustainable disposal of this waste and reducing landfilling. The initiative involves waste picker associations, which now have a new source of income from the recovery of collected residual material. By integrating these workers into the cement industry's value chain, CSN Cimentos helps create new livelihoods, strengthen cooperatives, and foster the circular economy in the waste sector.



# Water and Effluents

Water stewardship is a top priority for the CSN Group, led strategically by the Sustainability department and monitored by the Board of Directors, with advisory support from the ESG Committee. CSN has advanced practices in place to optimize water usage and manage the effluents generated across our operations, ensuring water security while minimizing environmental impacts. We withdraw groundwater and surface water (4.94% less than in the previous year) for multiple purposes, such as human consumption, industrial processes, and cooling. However, we ensure our water withdrawals are aligned with our Sustainability Policy and Environmental Management System (EMS) requirements. Supporting this commitment, CSN continuously invests in technologies and initiatives around water conservation, reuse, and enhanced water stewardship.

In the steel business, CSN Group’s operations are highly water-intensive, particularly our steelworks. The Presidente Vargas Steelworks (UPV) draws water from the Paraíba do Sul River for various industrial processes and applies strict management practices to ensure water efficiency. The facility continuously monitors both water intake and discharge, using key performance indicators to inform water management strategies. CSN consistently invests in technologies and projects to improve internal water recycling and reduce the use of fresh water. In 2017, UPV became the first steelworks in Brazil

to conduct a water footprint assessment, a practice that was later extended to CSN Mineração and the cement plant in Arcos. This assessment laid the groundwork for local water efficiency projects focused on increasing recycling and reducing water withdrawals.

UPV is recognized for its top-tier water efficiency, with a water withdrawal intensity well below the global average for the steel industry. This performance reflects our continuous investment in water management improvements and process optimization. Over the last ten years, UPV has achieved a significant reduction in water withdrawals, supporting its commitment to sustainability. Today, the plant maintains a water recirculation rate as high as 94%, demonstrating the success of its reuse and efficiency initiatives. CSN also made a voluntary decision to downgrade our water withdrawal permit volume for the Paraíba do Sul River by 30%, enabling more balanced use of this vital resource and bringing benefits to local communities and ecosystems.

In the mining segment, CSN continuously invests in technologies and initiatives around water conservation, reuse, and enhanced water stewardship. At our Casa de Pedra and Pires sites, we operate 47 control systems and 28 monitoring stations. As part of our water efficiency strategy, CSN has set an ambitious target to maintain water withdrawal intensity below 0.45 m³ per

## WATER WITHDRAWALS AT UPV (in ML)



metric ton of ore produced by 2032. We have also set a target to reach a 94% water recycling rate at our Casa de Pedra site by 2032, with significant progress already made—reaching 92% in 2024—primarily through the reuse of water recovered from tailings during the filtration process for subsequent dry stacking.

In 2024, CSN Mineração implemented operational improvements that resulted in an updated water balance for Casa de Pedra, optimizing water intake processes to improve overall efficiency. Furthermore, improved water recycling rates at the central plant have significantly reduced both total water withdrawal and water intensity, resulting in a 22% reduction in water withdrawals and a 23% decrease in water intensity.



CSN has also advanced efforts to improve water efficiency in the cement business. The segment's water intensity has increased as a result of the integration of recently acquired plants. However, CSN Cimentos is working to implement technologies already in use at its other plants at these new assets. For instance, the Arcos plant in Minas Gerais—the Company's first integrated cement facility—achieved a 94% water recycling rate through projects and initiatives identified in its water footprint study. These projects will be replicated at other sites, adapted to each asset's operational context and challenges. In 2024, water intensity stood at 0.20 m<sup>3</sup> per metric ton of cementitious product produced. The CSN Group has set clear water management targets for our operations, supported by our Water and Effluents Working Group, which tracks and forecasts water use based on production process changes and the adoption of new technologies. By 2025, we aim to standardize and transparently disclose water withdrawal and discharge volumes across all its sites, intersecting this data to the water stress levels of the basins where we operate. The system was developed in 2024 and will go live in 2025.

→ A water reservoir on one of the company's properties



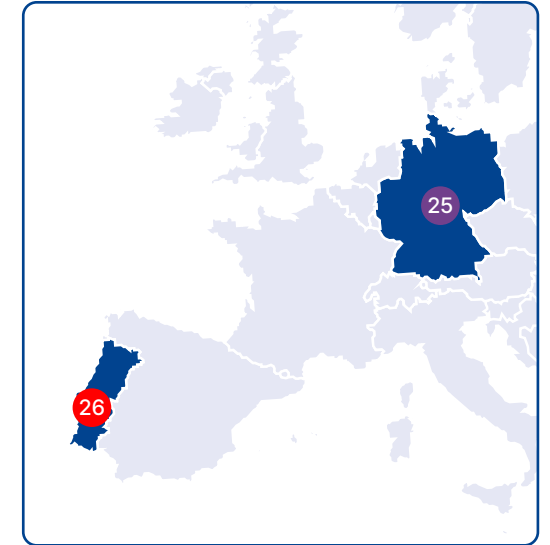
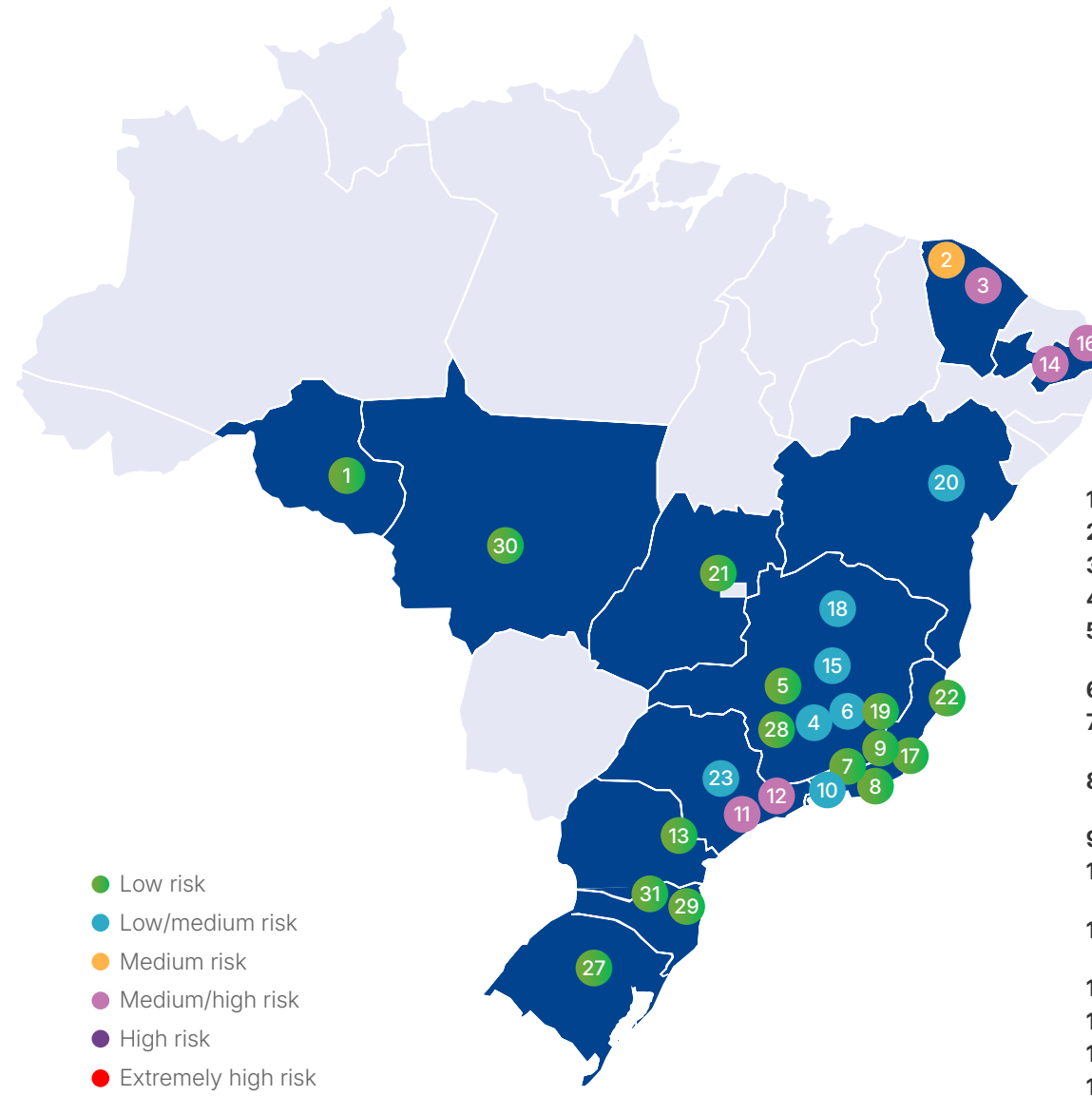


## Water risk management

CSN Group conducts ongoing water risk assessments in the regions hosting our operations, using tools such as the World Resources Institute's Aqueduct Water Risk Atlas. These evaluations help identify areas more prone to water scarcity and warranting increased efforts to boost water recycling and reduce freshwater withdrawals. In 2024, the analysis was updated and showed that most of CSN Group's operations are located in areas with a medium level of water stress. Currently, the only operations located in areas with water stress are our SWT operations in Germany and Lusosider in Portugal—underscoring the need for strategic and efficient water management in those locations.

Water consumption indicators from the production process are tracked to support the **sustainable use of water resources**

## WATER STRESS ASSESSMENT





CSN is also an active member of several watershed committees and forums, working with civil society representatives to continuously improve its water management practices and performance:

### Arcos (MG)

Upper São Francisco Watershed Committee (CBHASF)

### Barroso (MG)

Rio Grande Watershed Committee (GD1 and GD2)

### Congonhas (MG)

Paraopeba Watershed Committee (CBH SF3)

### Montes Claros (MG)

Verde Grande Watershed Committee (CBHVG)

### Pedro Leopoldo (MG)

Ribeirão da Mata Watershed Subcommittee – Caaporã (PB)  
Paraíba South Coast Watershed Committee (CBHLSPB)

### Cantagalo (RJ)

Dois Rios Watershed Committee (CBHR2R)

### Volta Redonda (RJ)

Middle Paraíba do Sul Watershed Committee (CBH/MPS)  
and Paraíba do Sul Watershed Integration Committee (CEIVAP)

### Rio Grande do Sul

Upper Jacuí Watershed Management Committee (COAJU), Sinos Watershed Management Committee of the (COMITESINOS), Caí Watershed Management Committee (Comitê Cai)

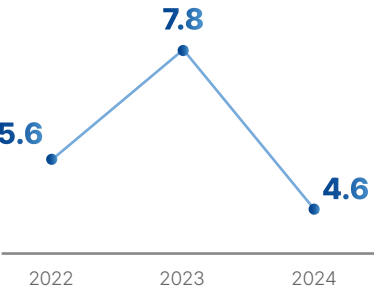
## WATER WITHDRAWAL

(in ML)



## CSN GROUP WATER INTENSITY (DVA)<sup>1</sup>

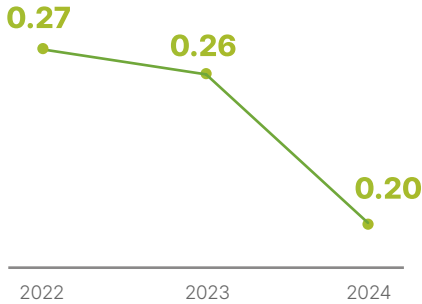
(m3/R\$ thousand)



<sup>1</sup> Calculated as the total water withdrawn divided by distributed value added (DVA)

## WATER INTENSITY IN MINING<sup>1</sup>

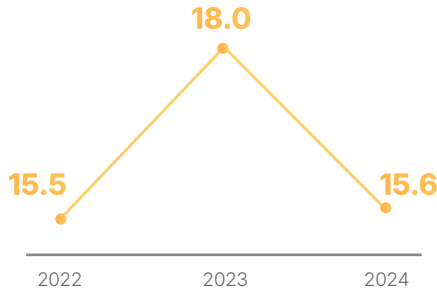
(in m³ withdrawn per metric ton produced)



<sup>1</sup> Water intensity is calculated based on total iron ore production (wet and dry) and water withdrawal for ore processing, including water used at the central plant, Pires Complex, and potable water supplies.

## WATER INTENSITY IN STEELMAKING<sup>1</sup>

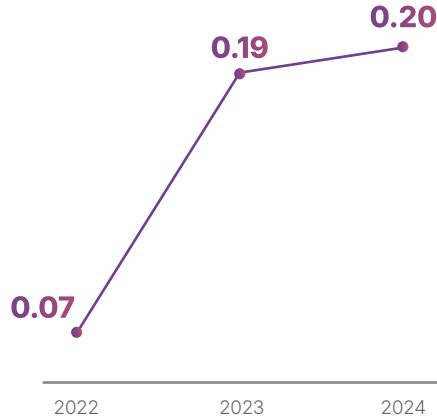
(m³ withdrawn per metric ton produced)



<sup>1</sup> Includes data for the Presidente Vargas Steelworks and SWT.

## WATER INTENSITY IN CEMENT PRODUCTION<sup>1</sup>

(in m³ withdrawn per metric ton of cementitious materials produced)



<sup>1</sup> Based on the methodology developed by the Global Cement and Concrete Association (GCCA) for cement production



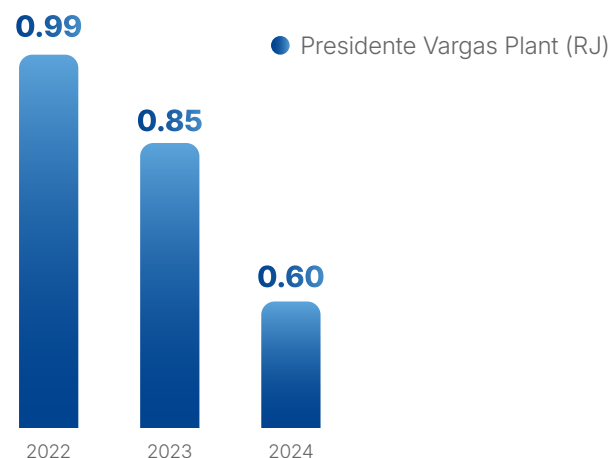
# Air Emissions and Air Quality

Emissions of particulate matter and other substances—such as nitrogen oxides (NOx) and sulfur dioxide (Sox)—RA potential environmental impact from CSN Group's operations, particularly in the steel and cement segments. To mitigate these impacts, we apply a set of guidelines, procedures, and tools under our Environmental Management System (EMS), with a focus on effective emissions monitoring and control. The goal of the system is to ensure compliance with regulatory environmental standards and to reduce impacts on neighboring communities.

In the steel segment, emissions are controlled using advanced particulate abatement systems, including filters and electrostatic precipitators. CSN is currently investing R\$ 750 million to modernize the particulate emission control systems at its sintering units. Installation of the new filters and precipitators is scheduled for completion by 2026. The benefits of these upgrades are already being observed, as shown by a significant 23% reduction in particulate emissions per metric ton of steel produced.

## PARTICULATE EMISSIONS

Per metric ton of steel produced (kgPM/t)



Our steel business has set a target to reduce particulate matter emissions per metric ton of crude steel

## Achieve 40% reduction

in particulate emissions per metric ton of steel by 2030. For the cement business, the target reduction is

## 25% by 2035

→ Weather monitoring by a CSN Mineração employee – Congonhas (MG)







→ CSN Cimentos facilities in Brazil – Pedro Leopoldo (MG)

At the Presidente Vargas Plant (UPV), emissions are continuously monitored using sensors installed in smokestacks, enabling real-time detection and automatic reporting to the environmental licensing authority. The facility also operates nine air quality monitoring stations in Volta Redonda (RJ), including three automatic, five semi-automatic, and one weather station—all of which transmit real-time data to the state environmental agency, which is responsible for consolidating the information and publishing the Air Quality Index (IQA<sub>r</sub>) for the community.

To prevent the dispersion of particulate matter from fugitive emissions and windborne dust from raw material piles, UPV employs effective control technologies and preventive measures. These include the application of polymers on stockpiles to prevent wind-driven particle dispersion. The plant also operates a network of 21 fog cannons in sintering areas and storage yards to significantly reduce airborne particulates.

In the mining segment, CSN Mineração has strict environmental controls in place to limit particulate emissions, particularly in mining areas and along haulage routes. The company uses automated water spraying systems at pit faces and a fleet of water trucks to control dust on service roads. As an extra precaution, operations are temporarily suspended during adverse weather conditions when there is an elevated risk of dust dispersion. To reduce the spread of dust onto public roads, vehicles are regularly cleaned, and tire-washing stations are installed at the exits of operational sites, minimizing dirt in nearby urban areas. For stockpiles and slopes, CSN applies special polymers and uses stabilization techniques such as hydroseeding, biomats, and nylon mesh to control soil erosion and reduce dust.

In the cement segment, CSN has invested in upgrading filters and electrostatic precipitators at its integrated facilities, resulting in a 19% reduction in particulate matter emissions compared to 2023. The company is also expanding the use of alternative fuels in co-processing—reducing reliance on fossil fuels and helping lower NO<sub>x</sub> emissions. Continuous emissions monitoring, along with specialized process control systems at facilities such as the Arcos plant, have improved operational efficiency and reduced thermal energy use, supporting an overall reduction of air emissions.



# APPENDICES



## IN THIS CHAPTER

- [GRI Content Index](#)
- [SASB Content Index](#)
- [Assurance Report](#)
- [Credits](#)



# GRI Content Index

Statement of use	Companhia Siderúrgica Nacional S.A. has developed its report in accordance with the GRI Standards for the period from January 01 to December 31, 2024.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	Not applicable

GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
GENERAL DISCLOSURES						
The organization and its reporting practices						
GRI 2: General Disclosures 2021	2-1 Organizational details	<a href="#">37</a> , <a href="#">39</a> , <a href="#">41</a> , <a href="#">81</a> to <a href="#">86</a>	-	-	-	-
	2-2 Companies included in the organization's sustainability reporting	<a href="#">04</a>	-	-	-	-
	2-3 Reporting period, frequency and contact point	<a href="#">04</a>	-	-	-	-
	2-4 Restatements of information	<a href="#">88</a> , <a href="#">91</a>   <a href="#">ESG Databook</a>	-	-	-	-
	2-5 External assurance	<a href="#">04</a>	-	-	-	-
ACTIVITIES AND WORKERS						
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	<a href="#">37</a> , <a href="#">39</a> , <a href="#">41</a> , <a href="#">124</a> , <a href="#">126</a> and <a href="#">127</a>	-	-	-	-
	2-7 Employees	<a href="#">104</a> and <a href="#">105</a>   <a href="#">ESG Databook</a>	-	-	-	8, 10
	2-8 Workers who are not employees	<a href="#">ESG Databook</a>	-	-	-	8



GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
GOVERNANCE						
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	<a href="#">81</a> to <a href="#">86</a>	-	-	-	5, 16
	2-10 Nominating and selecting the highest governance body	<a href="#">81</a> to <a href="#">86</a>	-	-	-	5, 16
	2-11 Chair of the highest governance body	<a href="#">81</a> to <a href="#">86</a>	-	-	-	16
	2-12 Role of the highest governance body in overseeing the management of impacts	<a href="#">81</a> to <a href="#">86</a>	-	-	-	16
	2-13 Delegation of responsibility for managing impacts	<a href="#">82</a> to <a href="#">86</a> and <a href="#">99</a> and <a href="#">100</a>	-	-	-	-
	2-14 Highest governance body's role in sustainability reporting	<a href="#">04</a> , <a href="#">06</a> and <a href="#">07</a>	-	-	-	-
	2-15 Conflicts of interest	<a href="#">93</a>	-	-	-	16
	2-16 Communicating critical concerns	<a href="#">81</a> to <a href="#">86</a>	-	-	-	
	2-17 Collective knowledge of the highest governance body	<a href="#">99</a> and <a href="#">100</a>	-	-	-	-
	2-18 Evaluating the highest governance body's performance	<a href="#">87</a>	-	-	-	-
	2-19 Remuneration policies	<a href="#">81</a> to <a href="#">87</a>	-	-	-	-
	2-20 Process for determining remuneration	<a href="#">87</a>	-	-	-	-
	2-21 Annual total compensation ratio	<a href="#">ESG Databook</a>	-	-	-	-



GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
STRATEGY, POLICIES AND PRACTICES						
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	<a href="#">21</a> to <a href="#">24</a>	-	-	-	-
	2-23 Policy commitments	<a href="#">88</a> to <a href="#">92</a> , <a href="#">99</a> and <a href="#">100</a>	-	-	-	16
	2-24 Embedding policy commitments	<a href="#">88</a> to <a href="#">92</a> , <a href="#">99</a> and <a href="#">100</a>	-	-	-	-
	2-25 Processes to remediate negative impacts	<a href="#">88</a> to <a href="#">92</a> , <a href="#">128</a> , <a href="#">130</a> and <a href="#">131</a>	-	-	-	-
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	2-27 Compliance with laws and regulations	<a href="#">ESG Databook</a>	-	-	-	-
	2-28 Membership associations	<a href="#">ESG Databook</a>	-	-	-	-
STAKEHOLDER ENGAGEMENT						
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	<a href="#">06</a> and <a href="#">07</a> , <a href="#">104</a> and <a href="#">105</a> , <a href="#">124</a> , <a href="#">126</a> to <a href="#">128</a> , <a href="#">130</a> , <a href="#">131</a> and <a href="#">157</a>	-	-	-	-
	2-30 Collective bargaining agreements	<a href="#">104</a> and <a href="#">105</a>	-	-	-	8
MATERIAL TOPICS						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	<a href="#">06</a> and <a href="#">07</a>	-	-	-	-
	3-2 List of material topics	<a href="#">07</a>	-	-	-	-
ETHICS AND COMPLIANCE						
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">88</a> to <a href="#">92</a>	-	-	-	-
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	<a href="#">88</a> to <a href="#">92</a>	-	-	-	16
	205-2 Communication and training on anti-corruption policies and procedures	<a href="#">88</a> to <a href="#">92</a>   <a href="#">ESG Databook</a>	-	-	-	16
	205-3 Confirmed incidents of corruption and actions taken	<a href="#">88</a> to <a href="#">92</a>	-	-	-	16



GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
GRI 207: Taxes 2019	207-1 Approach to tax	<a href="#">79</a>	-	-	-	1, 10, 17
	207-2 Tax governance, control and risk management	<a href="#">79</a>	-	-	-	1, 10, 17
	207-3 Stakeholder engagement and management concerns related to tax	<a href="#">79</a>	-	-	-	1, 10, 17
	207-4 Country-by-country reporting	<a href="#">ESG Databook</a>	-	-	-	1, 10, 17
VALUE CHAIN						
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">124</a> , <a href="#">126</a> and <a href="#">127</a>	-	-	-	-
GRI 204: Procurement practices 2016	204-1 Proportion of spending on locally-based suppliers	<a href="#">124</a> , <a href="#">126</a> and <a href="#">127</a>   <a href="#">ESG Databook</a>	-	-	-	8
GRI 308: Supplier environmental assessment 2016	308-1 New suppliers that were screened using environmental criteria	<a href="#">124</a> , <a href="#">126</a> and <a href="#">127</a>   <a href="#">ESG Databook</a>	-	-	-	-
GRI 414:Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	<a href="#">124</a> , <a href="#">126</a> e <a href="#">127</a>   <a href="#">ESG Databook</a>	-	-	-	5, 8, 16
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GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">104</a> , <a href="#">105</a> and <a href="#">109</a> to <a href="#">111</a>	-	-	-	-
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	<a href="#">ESG Databook</a>	-	-	-	4, 5, 8, 10
	401-3 Parental leave	<a href="#">ESG Databook</a>	-	-	-	5, 8
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	<a href="#">104</a> , <a href="#">105</a>   <a href="#">ESG Databook</a>	-	-	-	4, 5, 8, 10
	404-3 Percentage of employees receiving regular performance and career development reviews	<a href="#">106</a> and <a href="#">107</a>   <a href="#">ESG Databook</a>	-	-	-	5, 8, 10



GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	<a href="#">109 to 111</a>   <a href="#">ESG Databook</a>	-	-	-	5, 8
	405-2 Ratio of basic salary and remuneration of women to men	<a href="#">ESG Databook</a>	-	-	-	5, 8, 10
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	<a href="#">88 to 92</a>	-	-	-	5, 8
HUMAN RIGHTS						
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">119 to 123</a>	-	-	-	-
GRI 408: Child labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	<a href="#">119 to 123</a>	-	-	-	5, 8, 16
GRI 409: Forced or compulsory labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	<a href="#">119 to 123</a>	-	-	-	5, 8
GRI 411: Rights of indigenous peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	<a href="#">ESG Databook</a>	-	-	-	2
CSN Disclosure 001	Human rights training	<a href="#">119</a>	-	-	-	-
HEALTH, SAFETY AND WELL-BEING						
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">112, 114 to 118</a>	-	-	-	-



GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	8
	403-2 Hazard identification, risk assessment, and incident investigation	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	8
	403-3 Occupational health services	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	8
	403-4 Worker participation, consultation, and communication on occupational health and safety	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	8, 16
	403-5 Worker training on occupational health and safety	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	9
	403-6 Promotion of worker health	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	3
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	8
	403-8 Workers covered by an occupational health and safety management system	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	8
	403-9 Work-related injuries	<a href="#">112</a> , <a href="#">114</a> to <a href="#">118</a>	-	-	-	3, 8, 16
	403-10 Work-related ill health	<a href="#">ESG Databook</a>	-	-	-	3, 8, 16
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GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">128</a> , <a href="#">130</a> and <a href="#">131</a>	-	-	-	-
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GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	<a href="#">128</a> , <a href="#">130</a> to <a href="#">136</a>	-	-	-	-
	413-2 Operations with significant actual or potential negative impacts on local communities	<a href="#">128</a> , <a href="#">130</a> and <a href="#">131</a>	-	-	-	1, 2



GRI Standard/Other source	Disclosure	Location	Omission			SDG
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GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">149</a>	-	-	-	-
GRI 201: Economic performance	201-2 Financial implications and other risks and opportunities due to climate change	<a href="#">97</a>	-	-	-	13
GRI 302: Energy 2016	302-1 Energy consumption within the organization	<a href="#">ESG Databook</a>	-	-	-	7, 8, 12, 13
	302-2 Energy consumption outside of the organization	<a href="#">ESG Databook</a>	-	-	-	7, 8, 12, 13
	302-3 Energy intensity	<a href="#">ESG Databook</a>	-	-	-	7, 8, 12, 13
	302-4 Reduction of energy consumption	<a href="#">12</a> , <a href="#">149</a> , <a href="#">153</a> to <a href="#">155</a>	-	-	-	7, 8, 12, 13
GRI 305: Emissions	305-1 Direct (scope 1) GHG emissions	<a href="#">149</a>   <a href="#">ESG Databook</a>	-	-	-	3, 12, 13, 14, 15
	305-2 Energy indirect (scope 2) GHG emissions	<a href="#">149</a>   <a href="#">ESG Databook</a>	-	-	-	3, 12, 13, 14, 15
	305-3 Other indirect (scope 3) GHG emissions	<a href="#">149</a>   <a href="#">ESG Databook</a>	-	-	-	3, 12, 13, 14, 15
	305-4 GHG emissions intensity	<a href="#">ESG Databook</a>	-	-	-	13, 14, 15
	305-5 Reduction of GHG emissions	<a href="#">12</a> , <a href="#">149</a> , <a href="#">151</a> to <a href="#">155</a>	-	-	-	13, 14, 15
ECO-EFFICIENCY						
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	303-3 Water withdrawal	<a href="#">163</a> to <a href="#">166</a>   <a href="#">ESG Databook</a>	-	-	-	6
	303-4 Water discharge	<a href="#">163</a> to <a href="#">166</a>   <a href="#">ESG Databook</a>	-	-	-	6
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GRI 305: Emissions	305-7 NOx, SOx, and other significant air emissions	<a href="#">167</a> , <a href="#">168</a>   <a href="#">ESG Databook</a>	-	-	-	3, 12, 14, 15
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	306-2 Management of significant waste-related impacts	<a href="#">160</a> and <a href="#">161</a>	-	-	-	3, 6, 8, 11, 12
	306-3 Waste generated	<a href="#">160</a> and <a href="#">161</a>   <a href="#">ESG Databook</a>	-	-	-	3, 6, 11, 12
	306-4 Waste diverted from disposal	<a href="#">160</a> and <a href="#">161</a>   <a href="#">ESG Databook</a>	-	-	-	3, 11, 12
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<b>TAILINGS DAMS AND CO-PRODUCTS</b>						
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">139</a> and <a href="#">140</a>	-	-	-	-
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GRI Standard/Other source	Disclosure	Location	Omission			SDG
			Requirements omitted	Reason	Explanation	
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	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by the organization's operations	<a href="#">ESG Databook</a>				
GRI 101: Biodiversity 2024	101-1 Policies to halt and reverse biodiversity loss	<a href="#">142, 143, 145 and 146</a>	-	-	-	-
	101-2 Management of biodiversity impacts	<a href="#">ESG Databook</a>	-	-	-	-
	101-4 Identification of biodiversity impacts	<a href="#">142, 143, 145 and 146</a>	-	-	-	-
	101-5 Locations with biodiversity impacts	<a href="#">142, 143, 145 and 146</a>	-	-	-	-
	101-8 Ecosystem services	<a href="#">142, 143, 145 and 146</a>	-	-	-	-
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GRI 202: Market presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	<a href="#">ESG Databook</a>	-	-	-	5, 8
GRI 206: Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	<a href="#">ESG Databook</a>	-	-	-	16
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GRI 305: Emissions	305-6 Emissions of ozone-depleting substances (ODS)	<a href="#">ESG Databook</a>	-	-	-	3, 12
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	<a href="#">108</a>	-	-	-	3, 5, 8
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	EM-IS-110a.2	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	<a href="#">149</a>
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	EM-IS-130a.2	(1) Total fuel consumed, (2) percentage coal, (3) percentage natural gas, (4) percentage renewable	<a href="#">ESG Databook</a>
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## Metals & Mining 2023

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## Construction Materials 2023

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Energy & Fleet Fuel Management	EM-CM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage alternative and (4) percentage renewable	<a href="#">ESG Databook</a>
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	<a href="#">ESG Databook</a>
Waste management	EM-CM-150a.1	Amount of waste generated, percentage hazardous and percentage recycled	<a href="#">ESG Databook</a>
Biodiversity impacts	EM-CM-160a.1	Description of environmental management policies and practices for active sites	<a href="#">142</a> and <a href="#">146</a>
	EM-CM-160a.2	Terrestrial acreage disturbed, percentage of impacted area restored	<a href="#">ESG Databook</a>
Workforce health and safety	EM-CM-320a.1	(1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	<a href="#">ESG Databook</a>
	EM-CM-320a.2	Number of reported cases of silicosis	<a href="#">ESG Databook</a>
Product innovation	EM-CM-410a.1	Percentage of products that qualify for credits in sustainable building design and construction certifications	<a href="#">ESG Databook</a>
	EM-CM-410a.2	Total addressable market and share of market for products that reduce energy, water or material impacts during usage or production	<a href="#">ESG Databook</a>
Pricing integrity and transparency	EM-CM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and antitrust activities	<a href="#">ESG Databook</a>
Activity metrics	EM-CM-000.A	Production by major product line	<a href="#">ESG Databook</a>



# Independent auditor's limited assurance report on the non-financial information included in the Integrated Report

(Free translation from the original issued in Portuguese. In the event of any discrepancies, the Portuguese-language version shall prevail.)

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To the Shareholders, Directors and Management of **Companhia Siderúrgica Nacional**  
São Paulo – SP

## Introduction

We have been engaged by Companhia Siderúrgica Nacional (the Company) to present our independent auditor's limited assurance report on the non-financial information included in the Integrated Report 2024 CSN Group and its respective supplementary contents from attachment ESG Databook, hereinafter collectively referred to as the "Integrated Report 2024" of Companhia Siderúrgica Nacional for the year ended December 31, 2024.

Our limited assurance does not cover information relating to prior periods or any other information disclosed in conjunction with the Integrated Report 2024, including any embedded images and audio or video files.

## Responsibility of the Company's management

The Company's management is responsible for the following:

- Selecting and setting proper criteria for preparing the information included in the Integrated Report 2024;
- Preparing the information in accordance with the criteria and guidelines provided by the Global Reporting Initiative (GRI - Standards), with the indicators for the Iron & Steel Producers (EM-IS), Metals & Mining (EM-MM), and Construction Materials (EM-CM) sectors from the Sustainability Accounting Standards Board (SASB) and Guideline CPC 09 - Integrated Reporting, related to Integrated Reporting Framework prepared by the International Integrated Reporting Council (IIRC);
- Designing, implementing and maintaining internal control over information considered relevant for preparing the information included in the Integrated Report 2024 that is free from material misstatement, whether due to fraud or error.

## Responsibility of the independent auditor

Our responsibility is to express a conclusion on the non-financial information included in the Integrated Report 2024 based on the limited assurance engagement conducted in accordance with Technical Communication CTO 07/2022, issued by the Federal Accounting Council (CFC), and based on NBC TO 3000 – Assurance Engagements Other than Audits or Reviews of Historical Financial Information, also issued by the CFC, which is equivalent to the international standard ISAE 3000 – Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board (IAASB). Those standards require that the auditor comply with ethical and independence requirements and other related responsibilities, including as to the application of the Brazilian Standard on Quality Management

(NBC PA 01) and, therefore, the maintenance of a comprehensive quality management system that encompasses documented policies and procedures for compliance with ethical requirements, professional standards and legal and regulatory requirements applicable.

Moreover, the aforementioned standards require that we plan and perform our engagement to obtain limited assurance that the non-financial information included in the Integrated Report 2024, taken as a whole, is free from material misstatements.



A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) primarily consists of making inquiries of the Company's management and other individuals in the entity involved in the preparation of information, as well as applying analytical procedures to obtain evidence that enables us to issue a limited assurance conclusion on the information taken as a whole. A limited assurance engagement also requires that we perform additional procedures in the event matters come to our attention that cause us to believe that the information disclosed in the Integrated Report 2024, taken as a whole, may contain material misstatements.

The procedures selected were based on our understanding of the aspects relating to the compilation, materiality and presentation of the information included in the Integrated Report 2024 and other circumstances of our engagement and our consideration of the areas and processes associated with the material information disclosed in the Integrated Report 2024 which could contain material misstatements. Our procedures comprised, among others, the following:

- a)** Planning the work, considering the relevance, volume of quantitative and qualitative information and the operating systems and internal controls based on which the information included in the Integrated Report 2024 was prepared;
- b)** Understanding the calculation methodology and the procedures for the compilation of the indicators through inquiries with the managers responsible for the preparation of the information;
- c)** Applying analytical procedures on the quantitative information and making inquiries regarding the qualitative information and its correlation with the indicators disclosed in the information included in the Integrated Report 2024; and

- d)** For those cases where there is a correlation between the non-financial data and indicators having a financial nature, match such indicators to the financial statements and/or accounting records.

The limited assurance engagement also included the analysis of the compliance with the guidelines and criteria provided in the framework Global Reporting Initiative (GRI Standards), the Sustainability Accounting Standards Board EM-IS, EM-MM and EM-CM (SASB) and Guideline CPC 09 - Integrated Report (related to Integrated Report Framework prepared IIRC) applicable to the preparation of the information included in the Integrated Report 2024.

We believe that the evidence we have obtained during our work is sufficient and appropriate to provide a basis for our limited assurance conclusion.

## Scope and limitations

The procedures applied in a limited assurance engagement vary in nature and timing and are less in scope than an engagement to obtain reasonable assurance. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the level that would be obtained if a reasonable assurance engagement had been performed. If we had performed a reasonable assurance engagement, we might have identified other matters and possible misstatements in the information included in the Integrated Report 2024. Therefore, we do not express an opinion on this information.

Non-financial data is subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate or estimate such data. Qualitative interpretations of materiality, relevance and accuracy of the data are subject to individual assumptions and judgments. Furthermore, we neither

conduct any work based on prior-period information nor in relation to future projections and goals.

The preparation and presentation of sustainability indicators have followed the GRI Standards criteria and, therefore, their objective is not to assure that social, economic, environmental or engineering regulations and laws were complied with. Such criteria prescribe, however, the presentation and disclosure of any events of noncompliance with such regulations when significant sanctions or fines are imposed. Our assurance report should be read and understood in this context, inherent to the criteria selected (GRI Standards).

## Conclusion

Based on the procedures performed, described in this report, and on the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial information included in Companhia Siderúrgica Nacional's Integrated Report for the year ended December 31, 2024 has not been prepared, in all material respects, in accordance with the criteria and guidelines of the Global Reporting Initiative (GRI Standards), the Sustainability Accounting Standards Board EM-IS, EM-MM and EM-CM (SASB) and Guideline CPC 09 - Integrated Report, correlated to the Integrated Report Framework prepared by the IIRC.

São Paulo, April 30, 2025

Grant Thornton Auditores Independentes Ltda.  
CRC 2SP-025.583/O-1

Octavio Zampirolo Neto  
Accountant CRC 1SP-289.095/O-3

# Credits

## BOARD OF DIRECTORS

Benjamin Steinbruch  
Fabiam Franklin  
Yoshiaki Nakano  
Antônio Bernardo Vieira Maia  
Miguel Ethel Sobrinho

## EXECUTIVE BOARD

Benjamin Steinbruch  
**CEO**

Marco Rabello  
**Chief Financial and Investor  
Relations Officer**

Marcelo Cunha Ribeiro  
**Executive director**

Enéas Garcia Diniz  
**Executive director**

Stephan Heinz Josef Victor Weber  
**Chief Investment Officer**

Luis Fernando Barbosa Martinez  
**Chief Commercial Officer**

Rogério Bautista da Nova Moreira  
**Chief Legal Officer**

David Moise Salama  
**Head of Insurance and Credit**

## GENERAL COORDINATION

**Sustainability, Health, Safety, Environment,  
and Assets**

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**Executive officer**

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Débora Caroline Sá Meneguetti  
Eduardo Guadagnini Lima  
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## PROJECT MANAGEMENT, DISCLOSURES CONSULTING, CONTENT, DESIGN AND PROOFREADING

Grupo Report

## PHOTO CREDITS

CSN image archive  
Carol Lacerda

We would like to thank all individuals who were directly or indirectly involved in preparing the 2024 Integrated Report.

We would especially like to thank the managers, operational teams, and corporate departments whose assistance and collaboration in collecting and reviewing the information contained herein were essential in developing this report.

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