

# INTEGRATED REPORT 2024



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# WELCOME



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→ A CSN Mineração  
employee at the Casa  
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# About This Report

As part of our ongoing commitment to transparency and accountability, CSN Mineração S.A. (CSN Mineração or CMIN) is pleased to share our operational results and environmental, social and governance (ESG) progress in our fifth consecutive Integrated Report. This edition covers the period from January 1<sup>st</sup> to December 31<sup>st</sup>, 2024, and is inclusive of all operations under CSN Mineração's operational control. 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's (SASB) Metals & Mining Sustainability Accounting Standard. 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 assurance's key findings and conclusions. The independent assurance statement is available on page 133 of this report.

Additional information on CSN Mineração's performance can be found in our [Management Report](#), [Reference Form](#), [Financial Statements](#), [Climate Action Report](#), [previous editions of our Integrated Report](#) and at [ri.csnmineracao.com.br/en](https://ri.csnmineracao.com.br/en) and [esg.csn.com.br/en](https://esg.csn.com.br/en).

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).

→ A CSN Mineração employee at the Casa de Pedra Complex – Congonhas (MG)







## How to navigate this report



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### Contents



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→ Ore reclaiming  
at TECAR – Itaguaí (RJ)

## 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. CSN Mineração regularly conducts materiality assessments to review and update our material topics, ensuring alignment with stakeholder expectations and evolving market dynamics.

In 2023, CMIN carried out a structured materiality review consisting of two complementary phases. The first phase involved a comprehensive review of relevant documents, including three market studies, four ESG rating assessments, and five mining 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 also considered inputs from existing channels and structured results from ESG and financial institution questionnaires, *Linha Verde* ("Green Line") cases, and Whistleblower Channel cases. 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.

One year ago,  
the Company  
revisited its materiality  
topics to ensure we  
remain **connected  
with stakeholder  
perceptions and  
market trends**

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 S1 and S2, as well as the European Sustainability Reporting Standards (ERS).

The second key improvement was the integration of the materiality review with CSN Mineração'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, CMIN 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 MINERAÇÃO'S MATERIAL TOPICS

CSN's approach to materiality assessments is supported by **robust governance systems**







## 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 includes practices related to water stewardship (reducing water footprint and ensuring efficient water, effluent, and air (particulate) emissions management). This topic is material from an impact perspective.



## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Average PM10 concentration in air ( $\mu\text{g}/\text{m}^3$ ) <sup>1</sup>	27.9	25.8	33.2
Water withdrawal ('000 megaliters)	16.1	16.8	13.1
Water consumption ('000 megaliters)	9.3	8.3	7.9

<sup>1</sup> Annual average PM10 concentration recorded at 11 air quality monitoring stations at Casa de Pedra.

## ESG TARGETS

 Positive
  Negative
  In progress
  Met
  New target

Target	Target KPI	Performance in 2024	Status
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% of water recycling by 2032	Percentage of water recycled In 2023 (baseline): 88.2%	92	

<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.

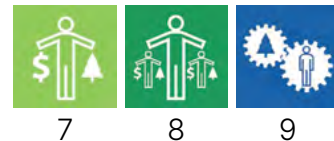


## Priority disclosures

- GRI 303-1, 303-2, 303-3, 303-4, 303-5, 305-7
- SASB EM-MM-120a.1, EM-MM-140a.1



## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting Capitals







## Tailings Dams and Co-products

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

→ The Vigia and Vigia Auxiliary dams, both now fully decommissioned – Ouro Preto (MG)

### ESG TARGETS



Positive



Negative



In progress



Met



New target

Target	Target KPI	Performance in 2024	Status
Fully decommission CSN Mineração's upstream-raised dams by 2030	Number of dams decommissioned In 2020 (baseline): 1 In 2030 (target year): 4	Three dams decommissioned: Vigia Auxiliary, Vigia and B5	

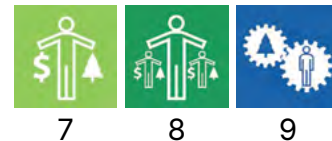


### Priority disclosures

- SASB-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 CSN Mineração'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.

### ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Kilograms of CO <sub>2</sub> e per metric ton of ore	7.92	7.01	6.49

### ESG TARGETS

Positive
 Negative
 In progress
 Met
 New target

Target	Target KPI	Performance in 2024	Status
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	Percent renewable electricity supply 2020 (baseline): 100%	100%	

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

<sup>2</sup> The target's baseline year was revised from 2019 to 2020 to reflect when dry tailings disposal (without dams) became standard practice, significantly changing CMIN's GHG emissions profile. This makes 2020 a more accurate and representative baseline year.

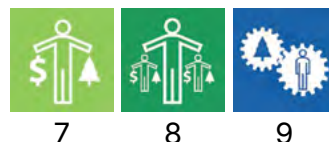


### Priority disclosures

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



### Global Compact Principles



### Sustainable Development Goals (SDGs)



### Integrated Reporting Capitals









## Biodiversity

This topic describes the organization's practices to mitigate biodiversity impacts and offset, 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.

→ Protected areas maintained by CSN Mineração

### ESG TARGETS

 Positive
  Negative
  In progress
  Met
  New target

Target	Target KPI	Performance in 2024	Status
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 hectares cleared	

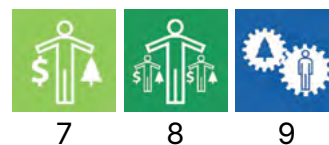


### Priority disclosures

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



### Global Compact Principles



### Sustainable Development Goals (SDGs)



### Integrated Reporting Capitals



Natural








## Local Communities

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

→ A beneficiary of the CSN Foundation's Garoto Cidadão program, which promotes social inclusion through art and education

### ESG TARGETS

 Positive
  Negative
  In progress
  Met
  New target

Target	Target KPI	Performance in 2024	Status
By 2027, expand initiatives and structure our stakeholder engagement plan in municipalities directly affected by our operations	Initiatives carried out throughout the year	Two initiatives: Social and Economic Monitoring Program and Environmental and Social Risk Assessment for the P15 project	

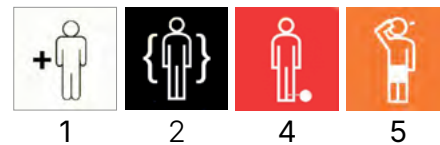


### Priority disclosures

- 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.

## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Employees trained in human rights (thousand) <sup>1</sup>	6.0	7.8	8.7

<sup>1</sup> 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

Target	Target KPI	Performance in 2024	Status
In 2024, update the human rights training provided to CSN Mineração's Security team	Training updated	Training updated	
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%	

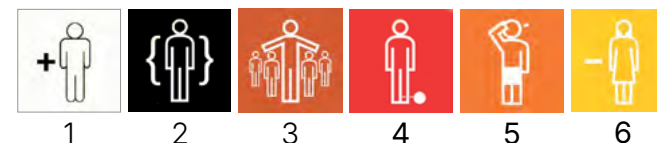


## Priority disclosures

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



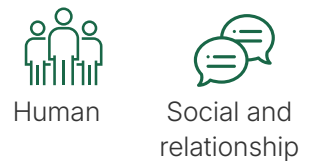
## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting Capitals







## 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 well-being of the workforce. This topic is material from a financial and impact perspective.

## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Number of fatal injuries	0	0	0
TRIFR <sup>1</sup>	1.30	1.09	0.99

<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.

## ESG TARGETS

Positive
 Negative
 In progress
 Met
 New target

Target	Target KPI	Performance in 2024	Status
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 injuries for employees and contractors, per 1 million hours worked In 2021 (baseline): 1.96 In 2030 (target year): 1.37	0.99	
Reduce the number of lost workdays among employees by 30% by 2030	Lost workdays involving employees. In 2021 (baseline): 746 In 2030 (target year): 522	916	

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



## 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-MM-320a.1



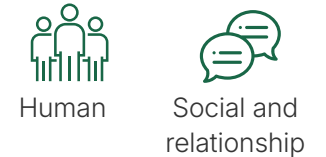
## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting Capitals







## People Management and DE&I

This topic addresses CSN Mineração'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 both a financial and an impact perspective.

## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Female representation in the workforce <sup>1</sup>	21.8%	24.0%	26%
Female representation in leadership positions <sup>2</sup>	11.4%	11.5%	12.1%

<sup>1</sup> Includes direct employees in Brazil as well as participants in the Apprentice, Internship, and Capacitar programs. The data excludes positions filled through insourcing transitions, as these transitions do not affect overall headcount. These figures differ from GRI disclosures as the GRI data does not cover the Internship Program.

<sup>2</sup> Includes the following levels: supervisors, coordinators, managers, general managers, and executives.

## ESG TARGETS

Positive
 Negative
 In progress
 Met
 New target

Target	Target KPI	Performance in 2024	Status
Double the percentage of women in the workforce by 2025 <sup>1</sup>	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. The data excludes positions filled through insourcing transitions, as these transitions do not affect overall headcount. These figures differ from GRI disclosures as the GRI data does not cover the Internship Program.



## 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	88%	100%	100%

## ESG TARGETS

 Positive
  Negative
  In progress
  Met
  New target

Target	Target KPI	Performance in 2024	Status
Maintain 100% compliance training coverage among active employees, including the Code of Conduct and Anti-Corruption Policy.	Percentage of employees trained in compliance	100%	



## Priority disclosures

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



## Global Compact Principles



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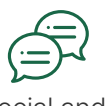
## Sustainable Development Goals (SDGs)



## Integrated Reporting Capitals



Human



Social and relationship



## Value Chain

This topic describes CSN Mineração's 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 uphold ESG best practices within the supply chain. This topic is material from an impact perspective.

## ESG SCORECARD PERFORMANCE

KPI	2022	2023	2024
Percentage of spending on locally-based suppliers	37.2%	34.7%	39.5%
Suppliers assessed through compliance due diligence <sup>1</sup>	936	3,394 <sup>2</sup>	1,616

<sup>1</sup> The data is for the CSN Group as a whole, as this is a corporate process and cannot be reported specifically for CSN Mineração.

<sup>2</sup> The significant increase in 2023 reflects the integration of assets acquired by CSN Cimentos in 2022.

## ESG TARGETS

Positive
 Negative
 In progress
 Met
 New target

Target	Target KPI	Performance in 2024	Status
Assess 100% of critical suppliers using the Supply Chain ESG Risk Matrix for social and environmental aspects by 2026 <sup>1</sup>	Percentage of suppliers assessed	-	

<sup>1</sup> This is a corporate target for the entire CSN Group, including CSN Mineração.



## Priority disclosures

- GRI 204-1, 308-1 and 414-1



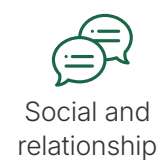
## Global Compact Principles



## Sustainable Development Goals (SDGs)



## Integrated Reporting Capitals





# Messages **FROM OUR LEADERSHIP**



## IN THIS CHAPTER

- Message from the  
Board of Directors

- Message from the CEO





→ Benjamin Steinbruch  
Chairman of the Board of Directors, CSN Mineração

## Message from the Board of Directors

CSN Mineração has further consolidated its position in the industry, guided by a strategy that combines operational excellence, technological innovation, and sustainability. In 2024, we took decisive steps to advance our operations and amplify our positive impact, reaffirming our role as a catalyst for transformation in a market that increasingly demands cleaner and more efficient solutions.

One of our flagship initiatives as part of these efforts is the P15 Itabirites plant, a landmark achievement for CSN Mining, reaffirming the Company's commitment to the future. With a design capacity to produce 16.5 million metric tons of pellet feed annually, P15 will not only boost production capacity but will also position CSN Mineração as one of the few suppliers of the high-grade iron ore needed for low-carbon steelmaking.

High-grade pellet feed used in more sustainable steelmaking routes is shaping the future of the steel industry. With its high iron content (67% Fe), P15 pellet feed is produced through advanced processing techniques that allow for the utilization of itabirite ores. Once agglomerated into small pellets, this ore becomes a critical input for steel production through direct reduction processes. In these processes, the resulting material can be used directly in electric arc furnaces (EAF), eliminating the need for coke and reducing CO<sub>2</sub> emissions by up to

Innovation and continuous improvement remain **strategic pillars for CSN Mineração**

50% when natural gas is used. If hydrogen (H<sub>2</sub>) is used as a reducing agent, CO<sub>2</sub> emissions could be cut by up to 98%, a significant advancement in an industry that accounts for a substantial share of global CO<sub>2</sub> emissions.

In addition to P15, CSN Mineração is implementing an ambitious expansion plan aimed at increasing production capacity to over 60 million metric tons by 2030. A key component of this plan involves new tailings reprocessing projects featuring High-Intensity Magnetic Separators (HIMS) — which will allow for the recovery of materials previously disposed of in dams, reducing environmental impact while improving



operational efficiency. There are also plans to convert our existing Central Plant at the Casa de Pedra Complex to produce pellet feed in the future, increasing its capacity to meet growing global demand for high-grade iron ore.

In 2020, we transitioned to dry stacking of tailings, a technique that eliminates the need for conventional dams, enhances operational safety, and reduces environmental impacts. We are strictly following our decommissioning schedule. Regarding the remaining dams, as part of our governance, we conduct external audits twice a year, in addition to performing cross-checks. All dam stability certificates were renewed in September following an independent audit, as part of our commitment to transparency and operational safety.

CSN Mineração is implementing an ambitious expansion plan to produce **more than 60 mtpy by 2030**

Innovation and continuous improvement remain strategic pillars for CSN Mineração. Robust operational optimization programs have been implemented, leveraging predictive technologies powered by artificial intelligence (AI) to enhance asset reliability. In addition, a continuously improved rain management plan has been essential in ensuring operational resilience during extreme weather events.

In 2024, CSN Mineração made important progress in managing climate and nature-related risks. We completed a Climate Vulnerability Assessment and initiated the development of a Climate and Nature Adaptation Plan, which is planned for completion in 2025 at our Casa de Pedra operation. Aligned with ISO 14090, the plan will guide CSN Mineração 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 Mineração is prepared for future climate-related challenges.

We achieved strong ESG ratings in 2024, strengthening our leadership position in the mining industry. We were positioned among the top 8% of companies with the highest S&P ESG Rating Scores and ranked 8th out of 158 companies assessed by Sustainalytics worldwide.

The year was also marked by a key leadership transition within CSN Mineração's Executive Board. Carlos Mello assumed the role of Chief Executive Officer (CEO), bringing extensive experience to further drive operational excellence and sustainable growth. Under



→ Ore reclaiming operations - Itaguaí (RJ)

his leadership, CSN Mineração will continue to focus on innovation, safety, and value creation for all stakeholders.

Our future is promising. We are building a mining operation that goes beyond generating economic value, contributing to a more balanced and sustainable planet. In the coming years, we will continue to pursue this path with determination, navigating challenges and embracing opportunities to consolidate our position as a global leader for innovation, quality, and sustainability. I would like to thank everyone who has been part of this journey—this is a shared vision that we will continue to accomplish together.

**Benjamin Steinbruch**  
Chairman of the Board of Directors, CSN Mineração

## Message from the CEO

In 2024, we navigated a challenging global market environment, characterized by a significant fluctuation in iron ore prices. Despite the challenges, we achieved exceptional operational performance, a testament to our adaptability and operational efficiency. Our combined iron ore production and sourcing volume totaled 42 million metric tons, exceeding our publicly disclosed production target.

This strong performance resulted from the relentless dedication and hard work of our entire team in maximizing operational efficiency, deploying new technologies, and reducing costs. The results are impressive: We achieved a substantial increase of 3.7 million metric tons, and total shipments through the TECAR port terminal reaching 38.5 million metric tonnes,

In 2024, **we achieved exceptional** iron ore production and sales figures

up from 35.96 million metric tons in 2023—a 7% increase driven by significant improvements in asset reliability.

In line with our strategy to boost efficiency and productivity, we continued to advance our continuous improvement program—a core pillar in our cost reduction and process optimization efforts. Our operational gains throughout the year are the result of a set of initiatives to improve operational efficiency and resilience, including robust continuous improvement programs, measures to enhance asset performance, deployment of predictive technologies (AI), and integrated rainfall management plans designed to sustain production even amid adverse rainfall conditions.

Despite declining iron ore prices, we delivered an adjusted net revenue of R\$ 13 billion and a unit revenue of US\$ 56.6 per metric ton. Adjusted EBITDA totaled R\$ 5.8 billion, with a margin of 45.3%, underscoring the resilience of our business model and capacity to seize opportunities.

In dam management, CSN Mineração is pleased to confirm the continued safety and integrity of our tailing storage facilities, with all stability certificates successfully renewed through independent audits. Of the four upstream-raised dams we previously operated, three have already been decommissioned, with the B4

→ Carlos Mello  
CEO, CSN Mineração





dam currently in the process of decommissioning. CSN Mineração's industry leadership in dam management is a source of great pride for our entire team, whose daily efforts have enabled the successful transition of our operations to dry iron ore stacking. CMIN has become the first company in the industry to implement large-scale tailings filtration and dry stacking of its tailings.

To this end, we have continuously pursued projects to repurpose tailings as part of a new mining model. These initiatives include the recovery of Pires, B4, Ultrafines, and Casa de Pedra tailings, which are projected to add millions of metric tons of high-grade iron ore to our production output. Additionally, 16.5 million metric tons of pellet feed will be produced from the P15 project, with startup scheduled for 2027. These initiatives all support CSN Mineração's ESG commitments and our continued focus on decarbonizing the global steel industry. Combined, these projects are expected to raise the company's total production and sourcing volumes to 60 million metric tons annually by 2030. They will also contribute to our sustainability strategy by creating over 1,500 permanent jobs—while enabling the use of lower-grade ore and extending the operational life of Casa de Pedra well beyond 2080.

We made progress in consolidating a culture of compliance by strengthening controls, expanding training and promoting ethical conduct at all levels. We maintained active and effective whistleblowing hotlines, ensuring confidentiality and proper handling of grievances. Our firm commitment to legal compliance protects our reputation, reinforces stakeholder trust and

supports business sustainability. We remain committed to high governance standards, confident that integrity is essential for a bright future.

On the decarbonization front, our company made substantial progress in 2024. We maintained a 100% renewable electricity supply to our operations, acquired new electric equipment, and enhanced operational efficiency—all of which have contributed to a lower greenhouse gas emissions footprint. We successfully completed tests on six electric pieces of equipment—including an excavator, a wheel loader, and four trucks—making further progress in our transition to cleaner operations. Additionally, through our new Refueling Management Plan, we redesigned fuel management with a low-cost solution that cuts unnecessary refueling routes, streamlines internal logistics, and lowers greenhouse gas emissions.

Workplace safety remains a non-negotiable value for CSN Mineração. We celebrated our eleventh consecutive year without fatalities and continued our efforts to mitigate risks and prevent high-potential incidents. In 2024, we launched the *AGIR* program, which—through strong leadership engagement and structured initiatives—led to a 71.1% reduction in Potential Serious Injury and Fatality (PSIF) incidents compared to the previous period, surpassing our 2030 target.

Our commitment to diversity was reinforced through initiatives such as *Primeira Liderança* and *EMPODERA*, aimed at accelerating the development of internal talent and advancing gender equity. As a result, in 2024, we



→ Ore reclaiming at the TECAR port terminal – Itaguai (RJ)

achieved 26% female representation across our workforce, reaching our 2025 target one year ahead of schedule.

In terms of social impact, CSN Foundation invested R\$ 66 million in social responsibility initiatives, positively impacting over 6,000 young people throughout the year.

Looking to the future with confidence and determination, we are guided by a strategy focused on operational excellence, innovation, and sustainability. We remain firm in our efforts to enhance CSN Mineração's global competitiveness while delivering value to all of our stakeholders. I am sincerely grateful to everyone who is part of this journey—every achievement is the result of our team's collective effort and commitment. I invite you to explore this report and learn about the steps we are taking to build a more promising and sustainable future.

**Carlos Mello**  
 CEO, CSN Mineração



# 2024 OVERVIEW



## IN THIS CHAPTER

● The Year at a Glance

● Awards and Recognition





## Operational and Financial Highlights



**42,010,000**

metric tons of iron ore produced  
(production + sourcing)



**42,552,000**

metric tons sold



**R\$ 13 billion**

in net revenue



**R\$ 5.8 billion**

Adjusted EBITDA



**R\$ 250 million**

in financial gains from the  
10<sup>th</sup> Continuous Improvement Cycle

→ A CSN Mineração  
employee at the Casa  
de Pedra Complex –  
Congonhas (MG)







→ A protected area maintained by CSN Mineração.



## Environmental Highlights



Completed a

**Climate Vulnerability Assessment**



**A 22% reduction**

in water withdrawals and a 23% reduction in water intensity



**A 7% reduction**

in emissions intensity



Tested

**6 new fully electric** pieces of equipment



**92%**

water recycling at Casa de Pedra



All dams renewed their

**stability certificates**

following independent audits





## Social Highlights



### Our **EMPODERA** program

continued to support women's career growth



## 26%

women in the workforce



## 11<sup>th</sup> year

with no fatalities



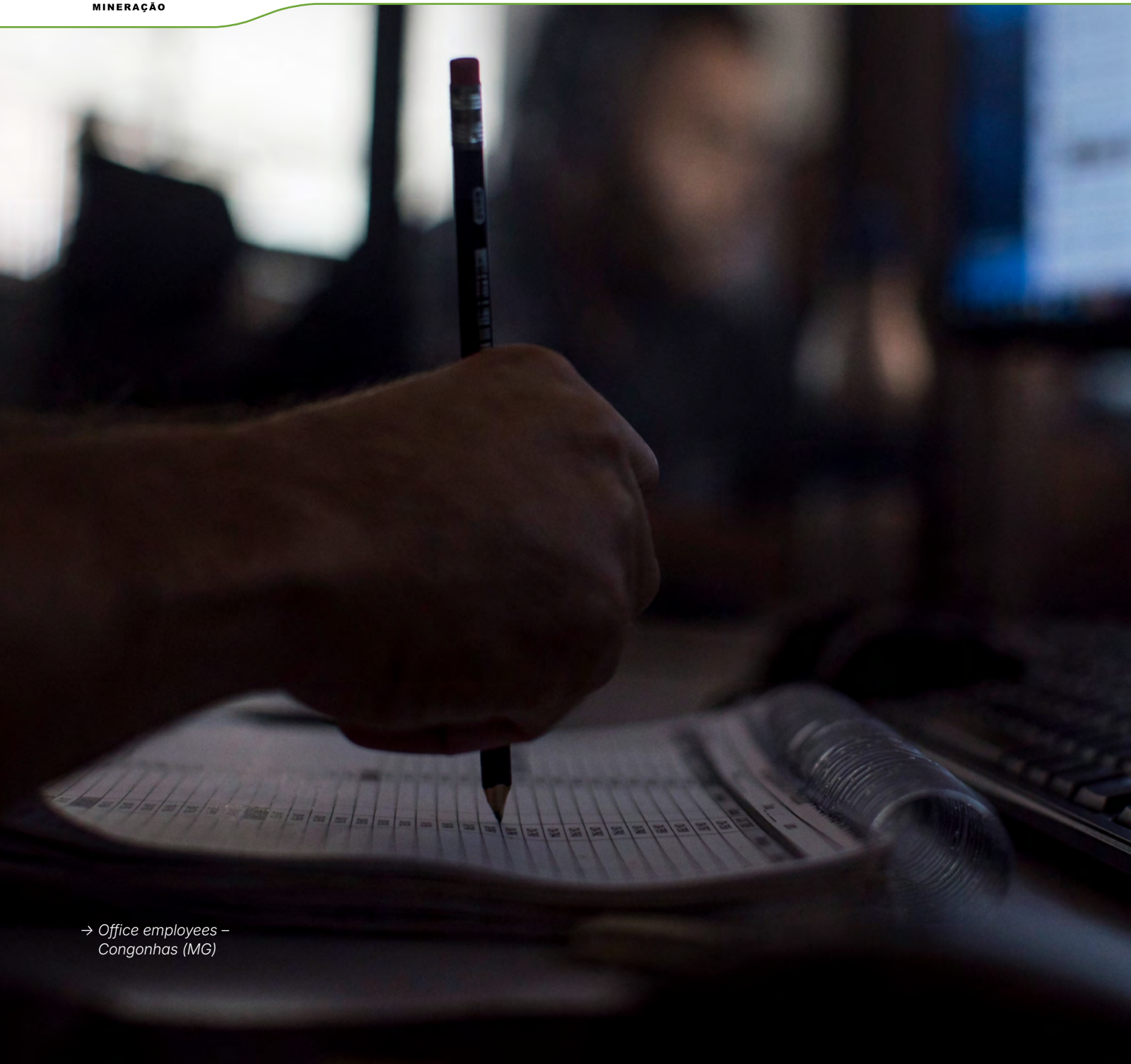
0.99 injury frequency rate, an

## 8.56% reduction



→ CSN Mineração employees – Congonhas (MG)





→ Office employees – Congonhas (MG)



## Governance Highlights



Began implementing the ISO 20.400

**Sustainable Procurement standard**



**100%**  
of employees trained in compliance



**Listed in the FTSE4GOOD portfolio**





## Awards and Recognition

### 1<sup>st</sup> place

in the Development category of the *Ser Humano* awards, presented by the Brazilian Human Resources Association of São Paulo (ABRH-SP), recognizing HR professionals and initiatives that demonstrated outstanding leadership, innovation, and exceptional organizational impact

### 2<sup>nd</sup> place

in the *Broadcast Empresas* awards, recognizing strong growth and value creation for shareholders

### 3<sup>rd</sup> place

in the Mining and Metals category of the Top 100 Open Corps Ranking, reinforcing the company's role as a leader in Brazil's open innovation ecosystem



### 3<sup>rd</sup> place

in the "Steel, Mining, and Metals" category of the *Exame Best & Biggest Awards*, highlighting CSN Mineração's position as one of Brazil's largest and most successful mining companies

### 4 awards

at "O Grande Encontro – High-Performance Teams 2024," organized by the Brazilian Union for Quality (UBQ): 1<sup>st</sup> place in Lean Management; 1<sup>st</sup> place in Agile Methods; 2<sup>nd</sup> place in 5S; and 3<sup>rd</sup> place in Critical Maintenance Management (GMC)

→ A CSN Mineração employee – Congonhas (MG)



# Corporate PROFILE



## IN THIS CHAPTER

● About CSN Mineração

● Business Model





→ Ore reclaiming operations  
- Itaguaí (RJ)

## About CSN Mineração

CSN Mineração is Brazil's second-largest iron ore exporter and ranks among the top ten producers globally. With certified reserves of over 2 billion metric tons, CSN Mineração 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, located in 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-free operations. All mined ore is processed through filtration and dry stacking, removing the need for conventional tailings dams and ultimately ensuring a safer process.

On the logistics side, 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

CSN Mineração is  
**Brazil's second-largest iron ore exporter**  
and ranks among  
the top ten  
producers globally

of reducing agents (such as coal and coke), TECAR is a strategic logistics asset supporting CSN Mineração's export capacity. We also own an 18.74% equity stake in MRS Logística S.A., a rail operator connecting the Iron Quadrangle and southern Rio de Janeiro to Brazil's main port terminals. This strategic stake supports efficient outbound transportation of iron ore to international markets and inbound transportation of raw materials.



CSN Mineração also has investments in the energy sector, including ownership of the Quebra-Queixo Hydroelectric Power Plant in Ipuacu, Santa Catarina. With an installed capacity of 120MW,, the plant supplies 100% renewable electricity to meet CSN Mineração's full electricity requirement, along with a surplus that is sold in Brazil's free energy market. All electricity sold to third parties is certified as renewable, contributing to the decarbonization of other industrial value chains.

In tailings management, CSN Mineração was a pioneer in implementing large-scale dry stacking of tailings. This innovative approach represents a major contribution to environmental sustainability and safety. In addition, this practice reflects the company's commitment to the continuous pursuit of more efficient and environmentally responsible solutions, prioritizing dam independence and promoting increasingly safer mining practices.

CMIN is **self-sufficient**  
in **100% renewable**  
energy

CSN Mineração is a member of the CSN Group, Brazil's largest industry conglomerate, with integrated operations spanning mining, steelmaking, cement, energy, and logistics. Our iron ore is shipped to the CSN Group-owned Presidente Vargas Steelworks (UPV) in Volta Redonda, Rio de Janeiro. UPV is one of Brazil's leading steel mills, producing steel products that serve multiple industries.

As part of our commitment to innovation and sustainability, CSN Mineração's *CSN Inova* innovation platform develops disruptive technological solutions and leads our digital transformation efforts. Through *CSN Inova*, CSN Mineração is able to anticipate market trends and consolidate our position as a forward-looking, resilient company.

Adjacent to our core business, CSN Mineração engages in social responsibility initiatives through the CSN Foundation, which leads impactful projects across education, culture, and income generation. These initiatives create lasting positive impact in the communities where we operate, reaffirming our commitment to social inclusion and building a more equitable future.

→ A CSN Mineração  
employee – Congonhas  
(MG)



## CSN Mineração's Assets

- 2 iron ore mines
- 3 iron ore beneficiation plants
- TECAR Port Terminal
- Quebra-Queixo Hydroelectric Power Plant
- 18.7% ownership stake in MRS Logística



# Portfolio

CSN Mineração has a diversified portfolio of high-quality iron ore products, tailored to meet the evolving needs of the global steel industry.



## Lump Ore

Produced through a crushing and screening process, lump ore comes in particle sizes ranging from 50 mm to 6.3 mm. Its high mechanical strength allows it to be used directly in blast furnaces without the need for prior agglomeration, making it an efficient option for pig iron production.



## Sinter Feed

With particle sizes ranging from 6.3 mm to 0.150 mm, sinter feed is an intermediate product obtained in the more advanced stages of iron ore beneficiation. Before being used in blast furnaces, it undergoes a sintering process, in which particles are fused to form a cohesive charge, ensuring greater efficiency in steel production.



## Pellet Feed

With particle sizes below 0.150 mm, pellet feed requires an additional pelletizing process before being used in the steel industry. This step is essential for producing high-quality pellets, which enhance blast furnace performance and help reduce emissions during steel production.



# CSN Mineração's Essence

CSN Mineração 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  
We have company pride.





# Our Operations

## Engenho mine and Pires complex

The Engenho mine is part of the Casa de Pedra complex and one of its main mining fronts. The Pires complex comprises crushing and screening units, along with dry beneficiation plants.

## Quebra-Queixo Hydroelectric Plant (HPP)

Located in Ipuaçu, Santa Catarina, the Quebra-Queixo HPP provides a fully self-sufficient, 100% renewable electricity supply to CSN Mineração's operations. Any surplus is sold on the free energy market.

## Casa de Pedra

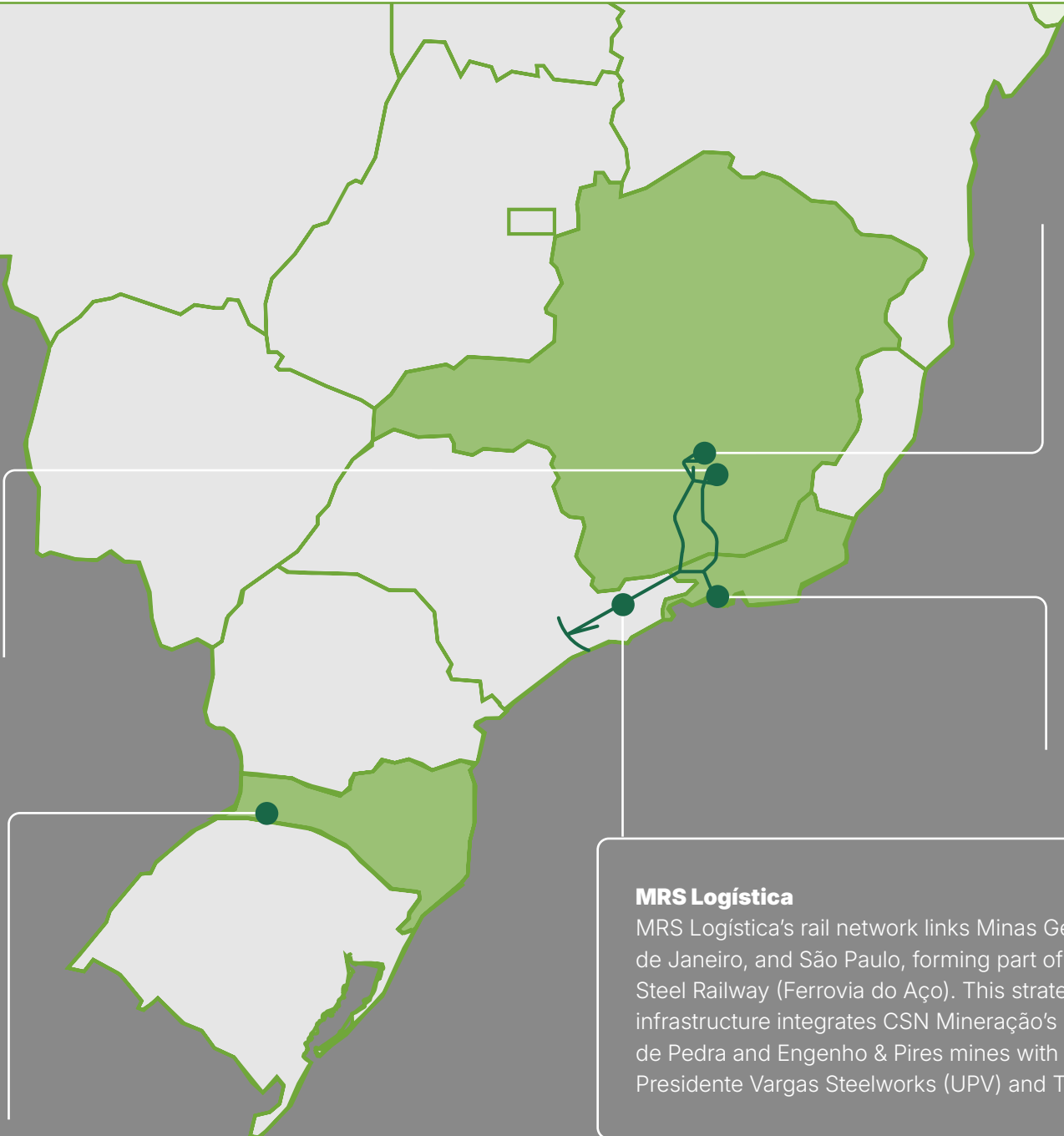
The Casa de Pedra mine, in operation since 1913, holds the distinction of being Brazil's oldest active mine. It is renowned for its high-grade iron ore and world-class reserves, ranking among the largest globally.

## TECAR

TECAR is a port terminal operated by CSN Mineração. Its strategic integration with MRS Logística's rail network enhances overall logistics efficiency.

## MRS Logística


MRS Logística's rail network links Minas Gerais, Rio de Janeiro, and São Paulo, forming part of Brazil's Steel Railway (Ferrovia do Aço). This strategic infrastructure integrates CSN Mineração's Casa de Pedra and Engenho & Pires mines with the Presidente Vargas Steelworks (UPV) and TECAR.



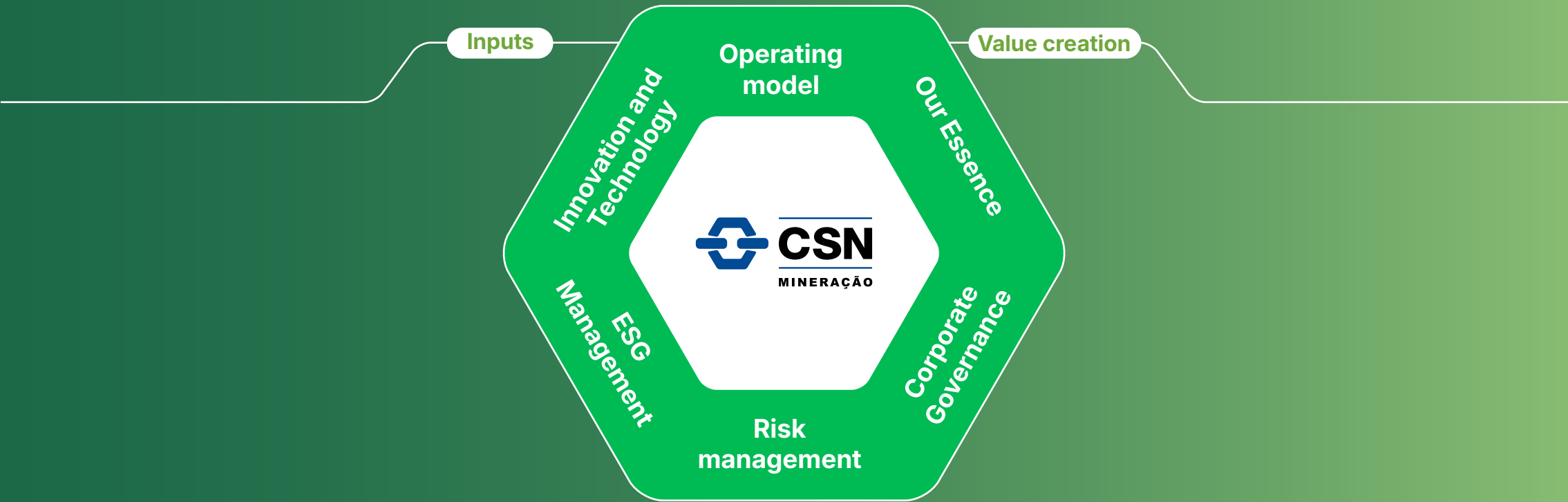


# Business Model

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 CSN Mineração 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 Mineração'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





CSN MINERAÇÃO - CMIN

# Premium iron ore

With certified mineral reserves, CSN Mineração implements innovative solutions across our operations that support our commitment to safety and social and environmental responsibility

Location

Air

Central plant

CASA DE PEDRA

ENGENHO-PIRES

Pires

Integrated logistics

Products

Tailings filtration

Energy

Water



# Modernization and **EXPANSION**



## IN THIS CHAPTER

- Strategy and Growth

- Innovation and Technology





→ The Casa de Pedra Complex - Congonhas (MG)

## Growth Strategy

CSN Mineração's growth strategy is focused on expanding production capacity, improving iron ore quality, and driving sustainability. In support of this strategy, CSN Mineração has committed to investing R\$ 13.2 billion in Minas Gerais through 2030. These investments are directed toward initiatives that combine technological innovation, operational excellence, and environmental stewardship.

The flagship 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 has created 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 P15 Itabirite 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 currently produces over 30 million metric tons of iron ore annually.

Beyond its impacts on the global market, this project will deliver substantial benefits to the local economy. In Congonhas, municipal tax revenue is projected to increase by approximately 70% with proceeds from Financial Compensation for Mineral Resource Exploitation (CFEM) payments. In addition, higher payrolls and increased commercial activity will further boost the regional economy.

CSN Mineração is also investing in initiatives such as the B4 and Casa de Pedra High-intensity Magentic Concentrators (CMAI)—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, recover valuable resources, decommission additional dams, and incorporate circular economy principles by repurposing the tailings currently stored in these facilities.

In addition, 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 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 our global competitiveness.

We are investing R\$ 13.2 billion in Minas Gerais across **capacity expansion, technological innovation, operational efficiency, and sustainability**

### EXPANSION PROJECTS - PHASE 1

#### Pires Tailings Rec.



• 1.1 Mtpy • 64% Fe • Startup 1Q26

#### B4 Tailings Rec.



• 2.5 Mtpy • 66% Fe • Startup 1Q27

#### P15 Itabirite



• 16.5 Mtpy • 67% Fe • Startup 4Q27

Works in progress

#### Ultrafines Rec.



• 1.0 Mtpy • 66% Fe • Startup 4Q27

Detail engineering in progress

#### Casa de Pedra Tailings Rec.



• 2.5 Mtpy • 66% Fe • Startup 3Q29

Continued progress on mineral characterization and process route design

#### Tecar expansion



• From 45Mtpy to 60 Mtpy

The project will incrementally increase 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.

Pellet feed consists of fine iron ore particles (below 0.15 millimeters) obtained through flotation, a technique used to separate minerals in a liquid medium. Once agglomerated into small pellets, this material is fed into steelmaking processes. Its main advantage is its suitability for direct reduction (DRI) processes, in which iron ore is reduced directly in solid state, 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 the elimination of coke and up to 50% reduction in carbon emissions from steel production—potentially reaching 98% reductions when hydrogen is used. 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, 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 CSN Mineração employee – Congonhas (MG)



# Innovation and Technology

Innovation is a core pillar that sustains CSN Mineração’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 Lab Ideas*, a program that 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 financial gains, verified by our budget and finance teams. This cycle was complemented by *Lab Week*, an event where employees showcased their projects, with 21 initiatives receiving awards in various categories including Kaizen ESG, Kaizen Productivity, Quality and Cost, PDCA, and Lean Six Sigma. The event highlighted improvements implemented across the value chain—from our mines to our TECAR port—and celebrated five years of CSN Mineração’s Continuous Improvement Program, highlighting the positive impact of these initiatives on business growth and competitive positioning.



→ An employee performing a chemical assay as part of the ore quality control process at CSN Mineração – Congonhas (MG)

Employees at all levels are encouraged to embrace our **innovation culture**

CSN Mineração also encourages intrapreneurship through *CSN Conecta*, a program that identifies and accelerates sustainable initiatives capable of transforming daily operations and creating broader positive impacts on the industry. 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 Fueling Management Plan, a solution developed internally for field equipment fueling. This solution not only reduces operating costs and diesel consumption, but also developed at a significantly lower cost than available commercial alternatives. Another innovative project as part of CSN Conecta is the use of recycled oil on trucks, which reduces material buildup in truck beds, improves transportation efficiency, and minimizes waste.





## Recognized for Excellence in Operational Efficiency

CSN Mineração received national recognition for operational excellence, winning four awards at "O Grande Encontro – High-Performance Teams 2024", organized by the Brazilian Union for Quality (UBQ). Out of five award categories, CSN Mineração won in four, reinforcing our commitment to operational excellence and our aspiration to be a national industry leader for efficiency and innovation. The award-winning projects showcased new applications for cutting-edge technologies, including artificial intelligence (AI) and the continuous pursuit of process optimization, highlighting the results of CSN Mineração's continuous improvement program, which has yielded both sustainability practices and operational excellence. The award-winning projects were:



### 1<sup>st</sup> Place in LEAN (Lean Manufacturing System)

Material feed optimization project in the crushing circuit – Mine Operations, Infrastructure, and Crushing.

### 1<sup>st</sup> Place in Agile Methods

TML prediction (Maximum Limit Rate: Artificial Intelligence (Ai)-driven prediction models to avoid shipping rate adjustments related to critical safety factors – Integrated Planning, PPC, and Port Operations.

### 2<sup>nd</sup> Place in 5S

5S Transformation Project: Model for equipment maintenance at CSN Mineração.

### 3<sup>rd</sup> Place in Critical Maintenance Management (GMC)

Focused on increasing the availability of heavy haul trucks at Casa de Pedra Mine.



An additional strategic highlight is **CSN Inova**, an innovation platform launched in 2018 to foster business transformation across the CSN Group, steering the business toward a more innovation- and ESG-driven management model. *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.

At CSN Mineração, *CSN Inova* has spearheaded projects like the MRS System, which reduced sinter feed moisture content, enhancing rail transport efficiency and lowering operational costs. *CSN Inova* has been developing R&D partnerships for the development of new technologies in areas such as cold agglomeration and direct reduction sponge iron (DRI) production from pellet feed or tailings, expanding sustainable alternatives for the mining and steel industries. Another priority for *CSN Inova* is the development of technologies to reuse ultrafine tailings in sludge form, adding value to mining waste.

*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 generated significant gains—approximately R\$100 million for CSN Mineração and R\$620 million for CSN Group - 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 real-world 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* guides our ESG transition via *Inova* which oversees the integrated management of the 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 CSN Mineração'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 for both CSN Mineração and the wider CSN Group.

## CSN Inova value creation pipelines



### Open Innovation (Pipeline 1)

Driving productivity and cost efficiency through the adoption of emerging 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 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, including mining operations.

CSN Inova has supported CSN Mineração in initiatives like the reduction of sinter feed moisture content through the use of drainage belts. This technology reduces operational costs and improves process efficiency, as it enables iron ore to be processed with lower moisture content, optimizing both transport and processing stages.

As of yearend 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.



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

## Corporate Venture Capital (CVC)

CSN Inova's Corporate Venture Capital (CVC) program provides strategic and financial support to startups, helping them scale their technological and commercial solutions and offering access to the CSN Group's extensive business ecosystem.

As of 2024, CSN Inova's CVC portfolio comprises 10 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 controlling variability in industrial processes, helping CSN improve product quality and production consistency.

Additionally, three other companies are currently at the development stage: Envicore, which is working on a solution to turn 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 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 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 the potential for scaling within CSN Group, with investment opportunities from both CSN Inova Ventures and SOSA Ventures.

→ An employee performing lab testing as part of quality and process safety assurance at CSN Mineração – Congonhas (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.

CSN Inova has 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.



## 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 in CSN's materiality matrix. 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 functions and stakeholders to ensure that solutions are

## CSN Inova Bridge supports CSN Mineração's **ESG innovation strategy**

fully aligned with CSN Mineração'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 team, 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.



→ Annual ESG Ambassadors Meeting, gathering leaders to define long-term sustainability strategies for the company – São Paulo (SP)



# Financial and Nonfinancial **PERFORMANCE**



## IN THIS CHAPTER

- Performance in 2024

- Tax Management



# Performance in 2024

CSN Mineração had a historic year with exceptional results across our operations. We 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 these conditions to build competitiveness and expand our market presence.

On the production front, we 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 us 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. We not only achieved but exceeded our 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.

Our 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 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 our IPO, our company has distributed approximately R\$17.1 billion in dividends—representing around 45% of our market value—evidencing our long-term commitment to shareholder value.



→ A protected area maintained by CSN Mineração – Congonhas (MG)



**R\$ 17.1 billion**  
in dividends since our IPO

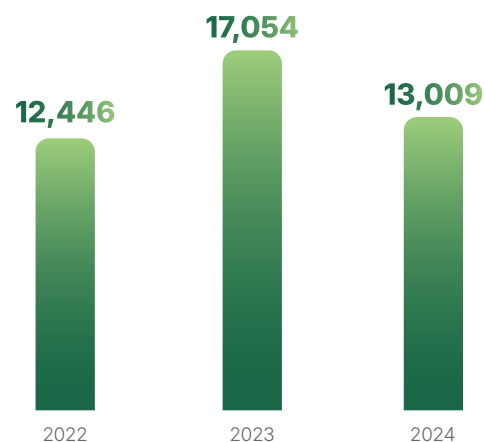


**42 million**  
metric tons of iron ore  
(produced and sourced)



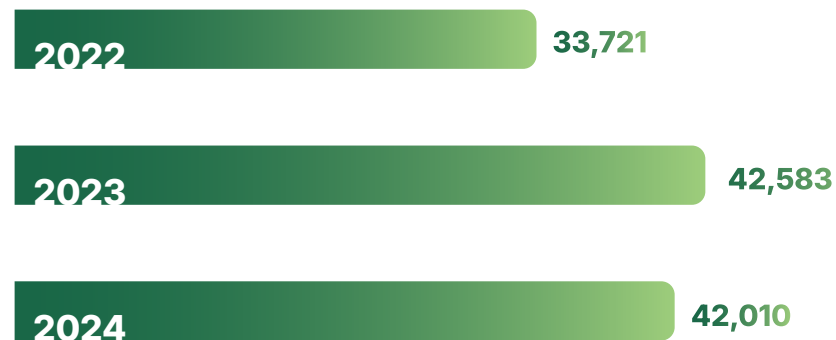
## ADJUSTED NET REVENUE

R\$ million



## PRODUCTION VOLUME<sup>1</sup>

thousand metric tons



<sup>1</sup> Own production plus third-party purchases

## SALES VOLUME

thousand metric tons



## STATEMENT OF ADDED VALUE - MAIN LINE ITEMS

(R\$ million)

	2022	2023	2024
Revenue	13,649.7	19,199.4	16,830.3
Inputs purchased from third parties	(6,741.8)	(10,549.1)	(9,894.3)
Gross added value	6,907.9	8,650.3	6,936.0
Withholdings	(998.9)	(1,041.1)	(1,150.0)
Net added value produced	5,908.9	7,609.2	5,786.0
Transferred added value	(159.4)	0.7	3,284.9
<b>Added value to be distributed</b>	<b>5,749.6</b>	<b>7,609.8</b>	<b>9,070.9</b>

### Distribution of added value

Payroll and related charges	696.1	292.5	840.0
Taxes, charges and contributions	1,604.7	1,862.1	840.0
Interest on third-party capital	498.5	1,886.5	1,906.9
Interest on equity	2,950.3	3,658.7	4,527.7
<b>Total added value to be distributed</b>	<b>5,749.6</b>	<b>7,609.8</b>	<b>9,070.9</b>



→ A CSN Mineração employee – Congonhas (MG)



## Tax Management

CSN Mineração's tax management practices are designed to ensure full compliance with applicable tax laws and industry-specific regulations on tax transparency across all operations. We ensure that all tax calculations and payments are accurate, timely, and organized, while also actively pursuing tax incentives that can improve competitiveness. Tax management processes are led by the CSN Group Tax Planning Department and regularly reviewed by the Chief Financial Officer, working with the CSN Group Tax-Legal Department, in line with corporate guidelines.

CSN Mineração's tax strategy is reviewed annually by the Tax Council and aligns with business guidelines and sustainable development objectives across social and economic impacts, inequality reduction, and environmental effects. This alignment is achieved through clear goal-setting, financial impact assessments, risk and opportunity assessments, and continuous monitoring and review.

Strategic tax issues are overseen by the Board of Directors and the. To ensure full compliance, the Tax Department constantly monitors developments in federal, state, and municipal legislation, as well as rules established by tax authorities in the regions where we operate. Tax practices and processes are subject to quarterly external audits, covering both direct and indirect taxes as well as tax compliance issues.

Our businesses are guided **by transparency** and regulatory compliance

CSN Mineração's tax management approach involves ongoing monitoring of tax risks through audits, reviewing laws and regulations, and transaction assessments. This is conducted through structured processes, communication with tax authorities, and specialized consulting. We conduct structured assessments, establish clearly defined responsibilities, and perform internal audits to maintain tax governance and control. Tax filings are subject to internal and external audits, along with routine reviews and document verification processes. CSN Mineração's [Financial Statements](#) are available on our Investor Relations website.





→ Young participants in the CSN Foundation's Garoto Cidadão program

## Our participation in industry forums **reinforces the Company's engagement** with a wide range of sectoral issues

Alongside our efforts to ensure tax transparency, CSN Mineração actively participates in industry forums and associations, such as the Minas Gerais State Minerals Industry Union (SINDIEXTRA), the Minas Gerais State Industry Federation (FIEMG), the National Industry Federation (CNI), the Brazilian Association of Wholesale and Free-Market Power Consumers (ABRACE), of which CSN Group is an active member, and the Brazilian Mining Institute (IBRAM). Through our membership, we actively influence public policy and sectoral regulatory discussions.

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. To strengthen stakeholder engagement, CSN Mineração includes tax matters in our institutional engagement activities. The Tax department, working with CSN Group's Legal department, continuously tracks legislative developments to ensure compliance in all regions where we operate.

To address questions or receive suggestions on tax topics, CSN Mineração offers an exclusive communication channel via email at [tributariocsn@csn.com.br](mailto:tributariocsn@csn.com.br). All feedback received helps enhance CSN Mineração's tax strategy and strengthen governance practices.



# Corporate GOVERNANCE



## IN THIS CHAPTER

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



# Governance Structure

CSN Mineração is listed on the Tier 2 Corporate Governance segment of the São Paulo Stock Exchange (B3: CMIN3), underscoring our commitment to high standards of transparency and corporate governance. Our corporate governance policies and processes are aligned with market best practices and the regulations of the Brazilian Securities Commission (CVM).

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. Its key responsibilities include overseeing Executive Board activities, appointing and, when necessary, removing executives, in addition to overseeing the Company's policies and strategies all in strict conformity to the Company's Bylaws and applicable laws and regulations. Board members are elected by the General Shareholders' Meeting for two-year terms, with the possibility of re-election, representing stakeholders from Companhia Siderúrgica Nacional (CSN) and Itochu Corporation. The selection of board members is based on criteria that evaluate



candidates' knowledge and experience relevant to CSN Mineração's business model, including the economic, social, and environmental impacts of our operations. Additional considerations include conformity to CSN Mineração's core principles, degree of independence, and time availability to perform their duties. As of 2024, CSN Mineração's Board of Directors was composed of eight members, including two independent directors (25%). In addition, the Chairman of the Board does not hold an executive role within the Company. This structure ensures greater balance in decision-making and reinforces CSN Mineração's commitment to diverse perspectives in strategic management.

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

Benjamin Steinbruch	Chairman
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	Substitute

<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.



The Board of Directors has the authority to create strategic and advisory committees, responsible for in-depth assessments and analysis in their respective areas, supporting more robust and well-informed strategic decisions. The **Audit Committee**, a non-statutory body, is made up entirely of independent members. Its duties encompass oversight of the financial statements, internal controls, risk management, and compliance programs, in addition to following investigations and responses to reports submitted through the Whistleblower Channel. No critical issues regarding misconduct or significant risk exposure were identified during the reporting period.

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

Yoshiaki Nakano	Independent member and committee 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 women, and 33.3% are men.

The **ESG Committee**—a non-statutory, Group-wide advisory body established by our parent company CSN's Board of Directors—supports decision-making on risk management, impacts, and opportunities related to environmental, social, and governance (ESG) issues. Composed of 19 members, including executives and leaders from CSN Group's industrial and corporate functions, the Committee is responsible for disseminating CSN's sustainability vision.

Our governance is aligned with the **best market practices**



→ CSN Mineração's office at Avenida Brigadeiro Faria Lima, a strategic hub for corporate operations – 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 CSN Inova – Vice-Chair of the ESG Committee
Alberto de Senna Santos	Advisor to the CEO – Member
Alexandre de Campos Lyra	Chief Operating Officer, Steelmaking – Member
Antônio Marco Campos Rabello	Chief Financial Officer – Member
Claudia Maria Sarti	Head of Corporate Legal, Governance, and Capital Markets – Member
Edvaldo Araújo Rabelo	Head of Cement Operations – Member
Enéas Garcia Diniz	Executive Director – Member
Felipe Spiri	Head of Innovation – Member
Harry Morgenstern	Chief Procurement and Investment Officer – Member
Helena Brennand Guerra	Head of Sustainability, HSE and 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 and 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 Mineração's operations, in line with policies and strategies established by the Board of Directors. The Executive Board meets whenever convened by the Chief Executive Officer or any two Executives, and each Executive is responsible for overseeing operations related to their area of expertise. Executives are appointed for two-year terms, with the option for re-election. The Executive Board is currently composed of five members, including the Chief Executive Officer. CSN Mineração's leadership team brings together executives with complementary expertise, supporting strategic planning and identification of growth opportunities.

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

Carlos Rodrigues de Campos Mello Júnior	Chief Executive Officer
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.



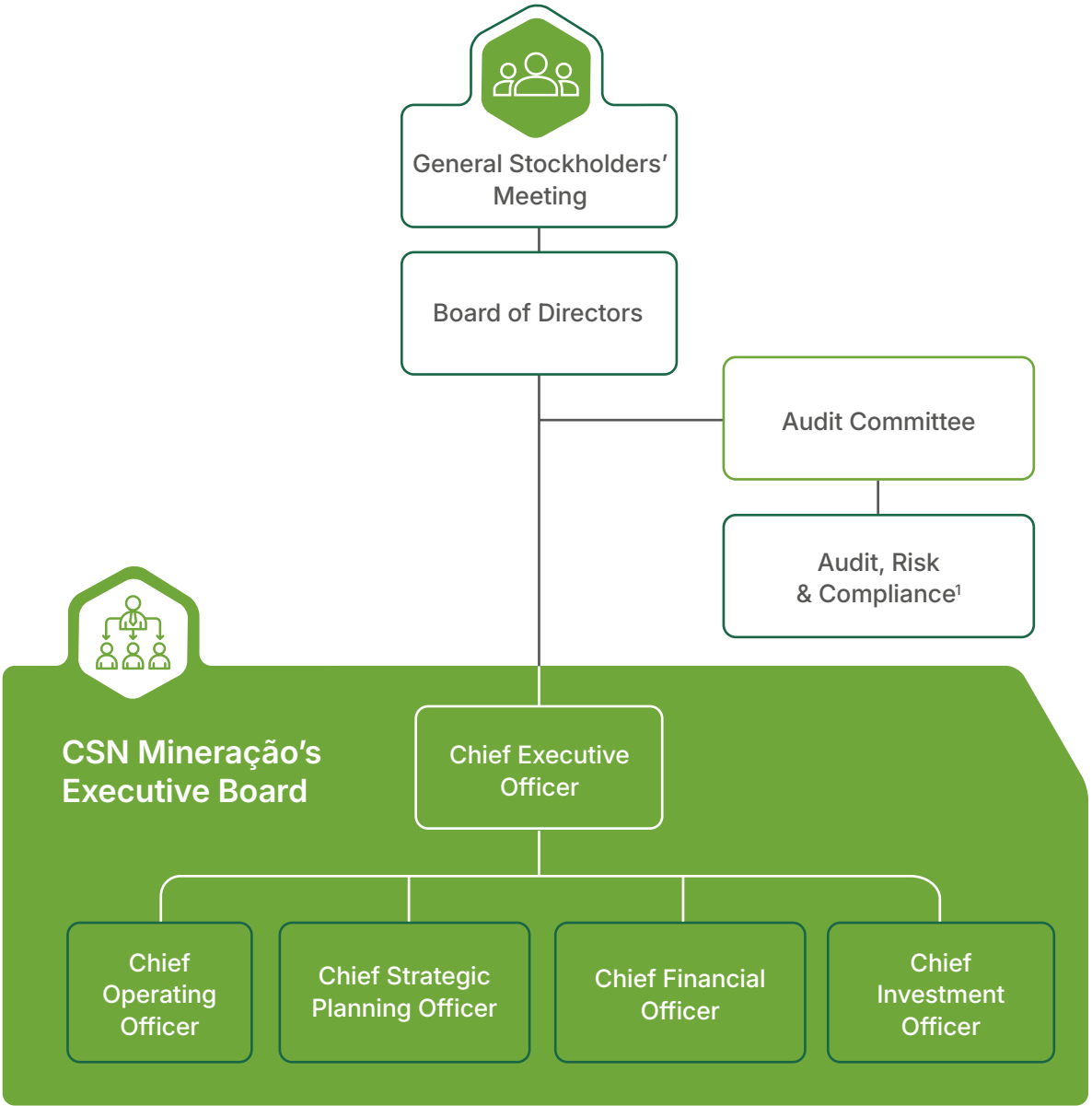


Decision-making on the Executive Board is supported by various non-statutory executive committees, which help assess action plans and define risk mitigation strategies. These include the Crisis Committee, Occupational Health and Safety Committee, Internal Environmental Management Committee, Investment 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.

→ A CSN Mineração employee - São Paulo (SP)

GRI 2-9, 2-10, 2-12, 2-16, 2-17

### GOVERNANCE STRUCTURE



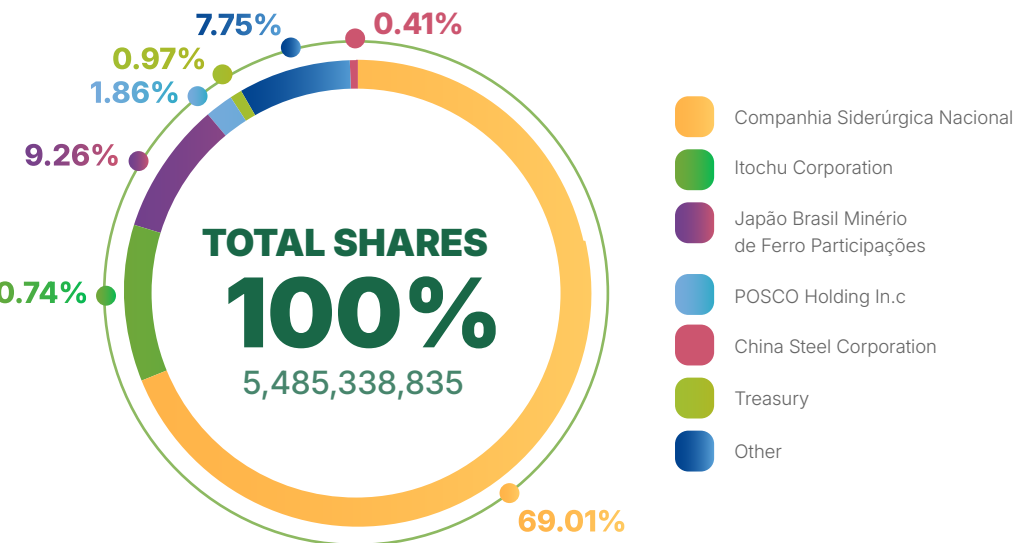
<sup>1</sup> Reporting to the CSN group



## Share ownership

CSN Mineração's entire share capital is subscribed and fully paid, 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 Mineração's approach to transparent and participatory governance.

CSN, our controlling shareholder, holds 69.01% of CSN Mineração's common shares. In this arrangement, CSN Mineração aligns with CSN Group's high governance standards without compromising its operational and financial autonomy.



## Executive Assessment and Remuneration

The performance of CSN Mineração's executives is regularly assessed against both financial and non-financial targets, including ESG aspects. Executives' performance against business 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 Mineração's compensation strategy is designed to ensure competitive market alignment and internal equity across leadership positions. The compensation package for both statutory and non-statutory executives includes fixed and variable pay, plus benefits, ensuring external competitiveness and alignment with the responsibilities for each role.

The compensation process at CSN Mineração is based on the definition of strategic objectives, market benchmarking, and regular reviews of remuneration packages.

The Audit Committee performs annual self-evaluations, using individual questionnaires filled out by each member. Evaluation results are discussed in groups to identify opportunities for improvement, and the entire process is documented in minutes to ensure transparency. The most recent self-assessment was completed on July 29, 2024.

While the Board of Directors does not yet undergo formal performance reviews, criteria such as active participation and strategic contributions are considered when evaluating members for re-election. Board members also have autonomy to engage in discussions about individual and collective performance, and to propose improvements during their tenure.

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



# Ethics and Compliance

CSN Mineração'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 ongoing assessments of corruption-related risks throughout our operations. The program structure is aligned with the Brazilian Anti-Corruption Act (Law No. 12.846/13), the U.S. Foreign Corrupt Practices Act (FCPA), and OECD Guidelines. In 2024, CSN Mineração, through its parent company CSN Group, renewed its commitment to integrity by rejoining the Business Pact for Integrity and Against Corruption, led by Instituto Ethos, further strengthening transparency in line with the highest standards of ethics.

CSN Group's [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, including CSN Mineração.

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 Mineração takes a proactive and preventive approach, with regular operational reviews to identify and mitigate corruption risks. In 2024, there were no confirmed cases of corruption in the Company's operations. 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 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.

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, 96 people participated in this initiative.



→ A CSN Mineração office employee – Itaguaí (RJ)

→ A CSN Mineração employee - Congonhas (MG)

CSN Mineração reinforces its message through initiatives such as Compliance Day, internal campaigns, and dedicated content on institutional portals. To expand the reach of our compliance initiatives, third-party partners also have access to onboarding compliance training. Annual compliance training, which is mandatory for all employees, plays a crucial role in embedding ethical values, reinforcing the principles and guidelines outlined in our Code of Conduct and aligning the entire organization under a common commitment to integrity.

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 ethical 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.

The Investigation and Compliance team is responsible for reviewing reports and conducting internal investigations. Case resolution timelines vary depending on the complexity of each situation, with serious cases, such as sexual harassment, being treated as a priority. In such cases, reports submitted through the hotline (0800) have available psychologists providing supportive and professional assistance. CSN Mineração

also offers psychological support to victims, as part of our commitment to safety, well-being, and a compassionate response to sensitive situations.

Throughout 2024, CSN Mineração received 506 reports, with 58% assessed as fully or partially substantiated, leading to disciplinary actions or formal guidance for the parties involved. None of these cases involved corruption or bribery. In addition, CSN Mineração and our management were not party to any lawsuits or legal proceedings regarding these issues throughout the year. Depending on the severity of the case, some completed investigations are escalated to the Ethics Committee for collective review and resolution.

To promote best practices, we rely on the support of employees participating in our **Compliance Ambassadors program**



Key performance indicators and reports related to the Compliance Program and Whistleblower Channel are regularly submitted to the Audit Committee, which follows up on corrective and preventive actions and oversees other aspects of the Compliance Program. Through this governance structure, CSN Mineração ensures that all issues are handled with the utmost professionalism, upholding a culture of integrity aligned with international best practices.

Questions or requests for clarification on how to comply with CSN Mineração's Code of Conduct may be submitted directly to the Compliance team at [compliance@csn.com.br](mailto:compliance@csn.com.br). All reports are carefully reviewed and responded to, with clear guidance on appropriate procedures in accordance with the Code of Conduct. In 2024, reviews of contractual compliance clauses, legal opinions, and other compliance-related inquiries resulted in a total of 3,092 cases across CSN Group, of which 255 originated from CSN Mineração.

## How to Access the Whistleblower Channel



**By phone:**  
0800 884 2006 (Brazil)

**By email:**  
[canal\\_denuncia@csnmineracao.com.br](mailto:canal_denuncia@csnmineracao.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  
Estrada Casa de Pedra, s/ nº – Zona Rural  
Caixa Postal 101 Congonhas (MG) – Brazil  
CEP 36415-000

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

→ An employee at a company facility



## Data Protection

In 2024, CSN Mineração 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 Mineração'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 Mineração'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 Mineração's ongoing commitment to privacy and digital security.

→ A rail operations control room

## Managing Conflicts of Interest

CSN Mineração 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 Mineração 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.



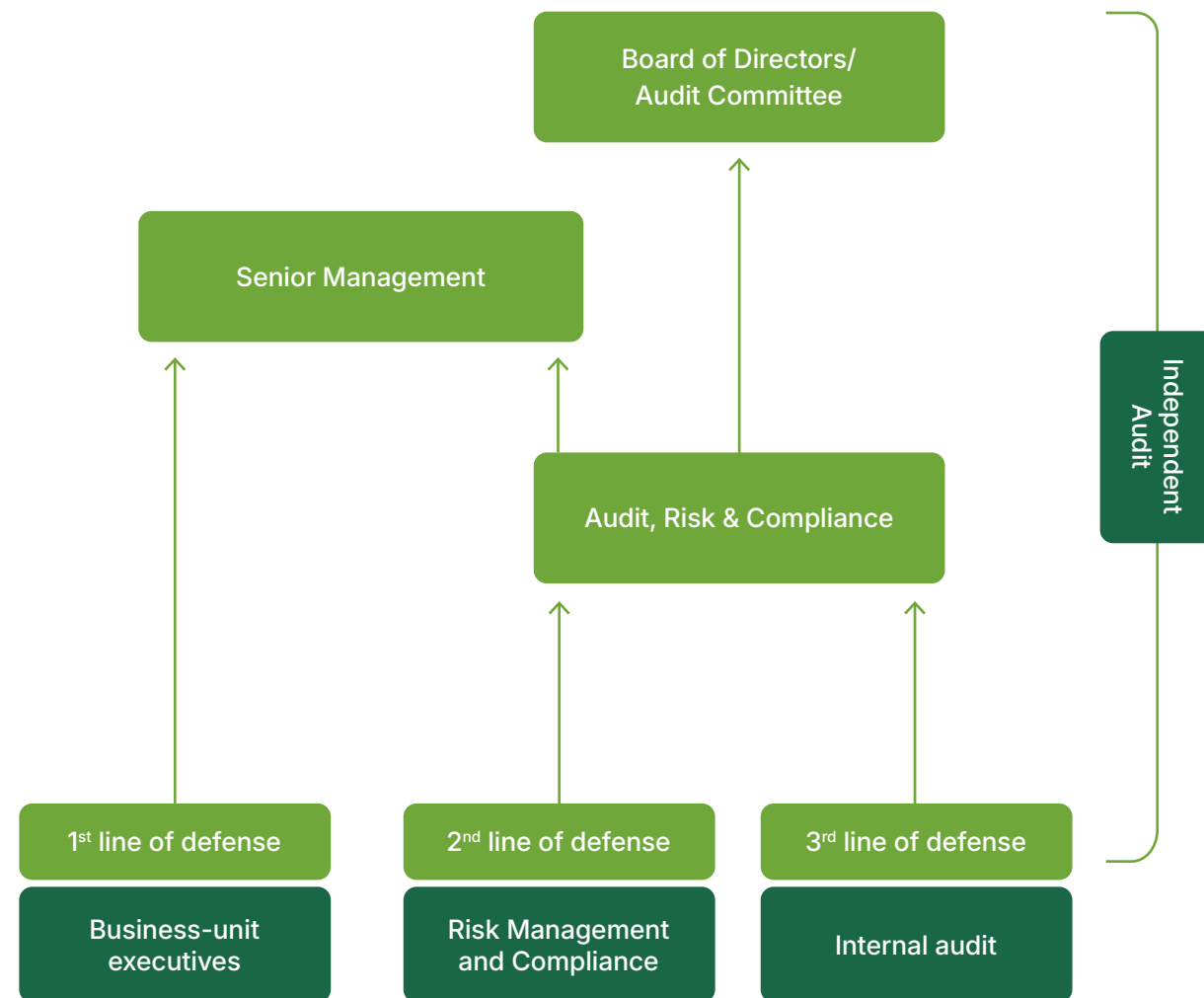
→ Company facilities at Congonhas, MG

## Risk Management and Audit

CSN Mineração 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 Mineração'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, working with our parent company, 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.

### RISK MANAGEMENT FRAMEWORK





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 CSN Group 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, which regularly reports to the Board of Directors, providing a robust basis for strategic decision-making and building trust in business operations.

We provide training programs designed to strengthen our organizational culture and enhance **risk mitigation practices**



## Strengthening a Culture of Internal Controls

In 2024, CSN Mineração'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), People and Governance, Accounts Payable/Treasury, Accounts Receivable/Billing, Tax, and Controllershship participated in the sessions, which reaffirmed CSN Mineração'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 Mineração'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

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



## MARKET VOLATILITY

CSN Mineração is 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 Mineração employs risk management strategies to reduce exposure and ensure financial stability.



## IMPACTS ON THE SUPPLY CHAIN

CSN Mineração'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 Mineração 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 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 Mineração 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 Mineração consolidated these climate 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 Mineração's enterprise-wide risk matrix, ensuring a holistic and consistent approach to corporate risk management.

The CSN Group Climate Action Report, which also covers CSN Mineração, was first published in 2023 and is updated biennially. The report provides a detailed account of identified risks and opportunities, modeled climate scenarios, and governance structures supporting the ongoing evolution of climate risk management. *The most recent edition of the report will be published in 2025 and will be available on the CSN Group's ESG [website](#).*

→ A protected area maintained by CSN Mineração



## Adaptation Plan

In 2024, we completed a Climate Vulnerability Assessment and initiated the development of a Climate and Nature Adaptation Plan, which is scheduled for completion in 2025 for the Casa de Pedra operation. Aligned with ISO 14090, the plan will guide CSN Mineração 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 Mineração is well-prepared for future climate and environmental challenges.



## RISKS:

Topic	Risk Factor	Time Horizon
Climate	Increased intensity and frequency of extreme rainfall events	Long term
	Changes in wind patterns	Long term
	Carbon pricing regulation for international maritime transportation	Medium term
Nature (Physical)	Occurrence of natural phenomena that may compromise the safety of the dams.	Long term
	Reduced water availability or quality due to third-party activities in the same watershed	Long term
Nature (Transition)	External stakeholder pressure for low environmental impact production, especially regarding air quality	Medium term
	Extended timelines for new projects and licensing processes due to stricter regulatory requirements	Medium term

## OPPORTUNITIES:

Topic	Opportunity	Time Horizon
Climate	Construction of a new plant to process iron ore for use in direct reduction routes	Medium term
	Development of a Rain and Wind Management Plan to reduce exposure during critical periods	Short term
Nature	Efficient resource use through circular economy practices and the development of new products from mining tailings or waste rock	Short term
	Ecosystem restoration leveraging nature-based solutions (NbS) to lower reclamation and maintenance costs	Long term

Risks and opportunities are managed **using an integrated approach**



# ESG Management

CSN Mineração has a robust ESG management framework aligned with the CSN Group’s governance structure, ensuring a comprehensive and integrated approach to assessing sustainability risks, opportunities, and impacts.

The Sustainability Policy, approved by the Board of Directors, formalizes CSN Mineração’s ESG management guidelines. CSN’s ESG Committee serves as a strategic technical forum for ongoing discussion on challenges and opportunities relevant to CSN Mineração’s 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 also committee 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 Mineração’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 Ambassadors—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 Ambassadors 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







→ A CSN Mineração employee - Congonhas (MG)

## Management Systems

CSN Mineração has a comprehensive Integrated Management System (IMS) aligned with internationally recognized standards. The Sustainability team is responsible for developing, implementing, and overseeing the IMS, which encompasses environmental, occupational health and safety, and quality management components. The purpose of the IMS is to standardize processes, procedures, and tools across all operations, supporting efficient and sustainable business management.

The environmental component of the system is compliant with ISO 14001. All CSN Mineração sites are ISO 14001 certified, attesting to our commitment to best-practice environmental stewardship. The health and safety component is compliant with ISO 45001, which also informed the development of our [Occupational Health and Safety Management Manual](#). This manual establishes detailed procedures to prevent and avoid incidents and injuries, applying not only to employees but also to contractors and communities potentially affected by our operations.

CSN Mineração is constantly investing in environmental improvements, driving safer and more sustainable operations. In 2024, CSN Mineração allocated R\$ 57.8 million in capital expenditure (CAPEX) and R\$ 23.7 million in operational expenditure (OPEX) to environmental initiatives, as part of our commitment to deploying cutting-edge technology and processes to minimize environmental impacts. These investments have been allocated toward initiatives like tailings management

## All CMIN facilities are certified to ISO 14.001

improvements, emissions reduction, water efficiency improvements, and ecological restoration, ensuring alignment with internationally recognized best practices.

The quality component of the IMS is certified to ISO 9001 for our Casa de Pedra mine and TECAR port terminal, ensuring our operations meet the highest standards of quality. This certification recognizes that CSN Mineração applies effective quality management processes in our operations, maximizing efficiency and customer satisfaction.

The IMS is core to our approach to regulatory compliance, risk management, and continuous improvement enterprise-wide, aligning operations with global best practices.



# ESG Ratings Performance

In 2024, we continued to evolve our ESG practices and this was reflected in our ESG ratings and certifications. We maintained a B score on both the CDP Water Security and CDP Climate questionnaires, demonstrating consistent transparency regarding our management of these topics. Sustainalytics ranked CSN Mineração in the top 5%, at 8<sup>th</sup> place out of 158 companies evaluated globally. Our S&P Global Ratings score also improved significantly to 55 points, recognizing our efforts in sustainability and governance. Another important milestone was CSN Mineração’s inclusion in the FTSE4Good Index.

Since 2021, CSN Mineração has been Third-party-audited and has earned Gold reporting status within the Brazilian GHG Protocol Program, underscoring our ongoing commitment to transparent greenhouse gas emissions management. These recognitions affirm the strength of CSN Mineração’s ESG strategy and our commitment to continuous improvement and excellence in sustainability.



CMIN ranks in **8<sup>th</sup> place**.



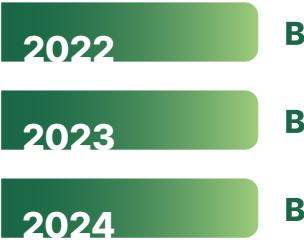
In sector evaluations, **CMIN is ranked among the top 8% globally in the mining and metals industry.**



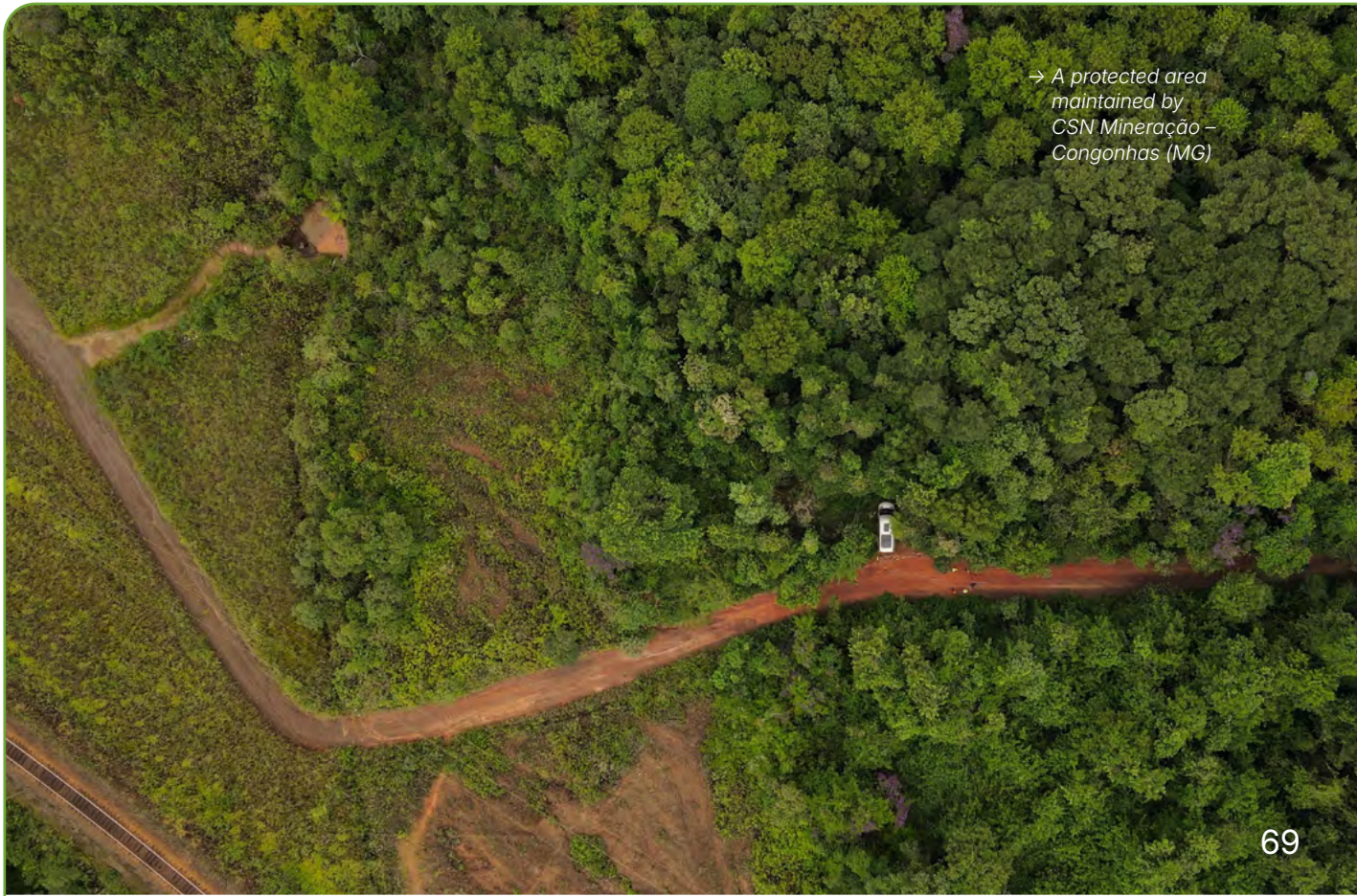
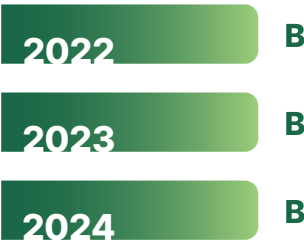
FTSE4Good



Water Security



Climate Change



→ A protected area maintained by CSN Mineração – Congonhas (MG)



# People and **HUMAN RIGHTS**

## IN THIS CHAPTER

- Employees
- Health, Safety and Well-Being
- Human Rights
- Value Chain
- Local Communities





# Employees

As of 2024, CSN Mineração had a workforce of 7,796 people—all covered by formal employment contracts and union-negotiated collective agreements. Combining technical expertise with vast operational experience, CSN Mineração’s workforce is equipped to address the complex challenges of mining operations, both domestically and internationally. We are also supported by 4,342 contractors, including 305 in administrative roles and 4,037 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 Mineração’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, empowering them to shape their own learning journeys. These courses are supplemented by in-person training supporting employee development and engagement around CSN Mineração’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



→ An electric truck operating at the Casa de Pedra Complex - Congonhas (MG)

schools—the School of Excellence, Innovation School, Business 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,

completed 8,232 times by CSN Mineração employees, 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.

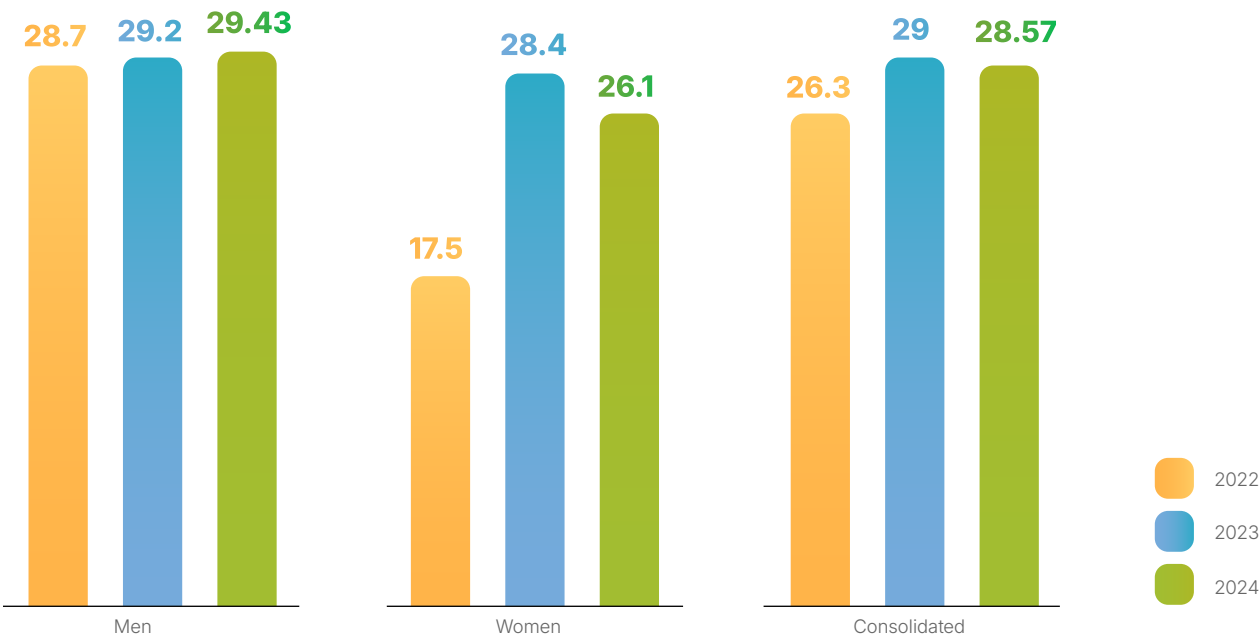
CSN Mineração recorded 97% participation in the leadership development track, which in 2024 included a technical training module for supervisors, branded as “SuperTechnicians.” More than 140 supervisors completed the “Requirement Management (GPD) and Routine Management (GRD)” module.



AVERAGE HOURS OF TRAINING PER EMPLOYEE

	2022	2023	2024
BY GENDER			
Men	28.7	29.2	29.4
Women	17.5	28.4	26.1
BY EMPLOYEE CATEGORY			
Executive	1.9	2.1	1.6
Leadership	15.8	30.9	36.1
Specialist	9.5	20.7	21
Engineer	18.3	28.3	34.6
University Level	11.1	17.2	23.1
Technical	22.3	25.6	27.1
Administrative	14.5	14.7	13.4
Operational	30	30.8	29
Internship Program	50.4	46.1	69.6
Capacitar program	33.2	41.1	23.3
Apprentice Program	0.6	5.2	6.9
TOTAL	26.3	29	28.6

AVERAGE HOURS OF TRAINING PER EMPLOYEE



Average training time per employee was 28.6 hours in 2024, as part of our **commitment to continuous team development**



During the year, CSN Mineração also launched a Mining School as part of the School of Excellence, dedicated to knowledge management within the mining business. In November, the first module, titled “Maintenance Basics,” was released, creating additional on-demand learning options for employees.

In Occupational Health and Safety, our *Agir* program (*learn more on page 83*) released an updated training track on the Occupational Health and Safety Consequence Management Procedure in July, now part of mandatory virtual onboarding for all new hires. Initially launched by CSN Mineração, this program has since been expanded across the entire CSN Group.

The Leadership and Business Schools play a key role in developing future leaders at CSN Mineração. They offer comprehensive learning pathways that blend hard and soft skills training, equipping emerging leaders to assume greater responsibilities and drive key strategic and high-impact initiatives.

→ Employees at the Casa de Pedra mine – Congonhas (MG)

## 97% attendance in our leadership development program

A key element of CSN Mineração’s people management strategy is our “People Cycle” program, which aims to drive professional development and identify talents with leadership potential across business segments. Through a transparent, objective performance review process, the People Cycle evaluates all employees—with the exception of interns, apprentices, and employees on-boarded after September of the prior year. The assessment is designed to identify development opportunities, supporting both career advancement and personal growth for employees.

A core benefit of the People Cycle is its direct impact in shaping career development, including promotions, pay raises, and other formal recognition for individuals who demonstrate outstanding contributions to the Company’s strategic objectives. The process utilizes the 9-Box Matrix methodology to identify and recognize talent, ensuring that CSN Mineração continues to nurture a high-performance, results-focused workplace culture.



## Talent Attraction and Recruitment

CSN Mineração uses a structured approach to attracting and selecting talent, ensuring new hires align with our organizational culture. We provide dedicated platforms for the inclusion of young professionals, with our Apprentice, Internship, and Trainee Programs as the main gateways for new talents.

The Apprentice Program is aimed at young individuals between 14 and 24 years old seeking their first employment. Participants gain hands-on experience alongside theoretical classroom training in their respective fields. The program is delivered in collaboration with the CSN Foundation and the National Industrial Training Service (SENAI). This initiative offers young participants early career exposure, equipping them with the practical skills for long-term career development.

CMIN fosters talent while promoting **diversity, equity, and inclusion**

CSN Mineração runs a **"Civic Mentoring"** (Mentoria Cidadã) program that connects CSN Group leaders with youth participating in the *Garoto Cidadão* program, coordinated by the CSN Foundation. 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. Beyond traditional career mentoring, the program is a tool for fostering diversity and inclusion, actively working to create pathways for professional opportunities for young participants. This initiative contributes to skill-building with a particular focus on youth from underprivileged communities. In 2024, all participants (100%) of the third mentoring cycle joined CSN's Young Apprentice Program, further enhancing the program's positive impact on their lives and future careers.

CSN Mineração's Internship Program represents another key entry point for young professionals. This initiative offers trade school and university students the opportunity to gain hands-on professional experience. Interns have the opportunity to apply their academic learning in real-world settings across different business areas, and follow a mandatory development track throughout the year, preparing them for future roles in the job market.



→ A young participant in one of our programs



The Trainee Program is an 18-month development program for recent graduates, combining both hard and soft skills training. Throughout the program, trainees lead strategic projects across different departments, applying their skills and preparing to take on future leadership challenges. Upon completing the program, trainees were matched with experienced, accomplished senior executives as mentors, providing personalized career guidance.

All these programs are carefully designed to ensure equal opportunities regardless of gender, ethnicity, or any other personal trait, cultivating a workplace free from discrimination. As of 2024, CSN Mineração had: 228 apprentices (with 20% hired as permanent employees), 119 interns (28% retained), and 13 trainees (23% retained as of December 2024, with additional hiring anticipated upon program completion in April 2025).

Beyond entry-level programs, CSN Mineração also actively pursues strategies to attract and recruit talent with extensive market experience. Job openings are published on our internal communication channels, with internal mobility given priority. We value employees who demonstrate outstanding performance and alignment with our values and culture, providing opportunities for growth and development.

→ A former trainee and participant in our Internationalization Journey at our Swiss office – São Paulo (SP)







→ A CSN Mineração employee - Congonhas (MG)

## Compensation and Benefits

CSN Mineração has a transparent and competitive compensation policy designed to ensure fairness and proper recognition of employee performance. To determine compensation, we conduct wage benchmarking surveys against companies of similar size and industry segments. This ensures that our compensation packages remain aligned with market best practices while fairly recognizing the value of each employee's role and contributions.

CSN Mineração takes a clear no-tolerance approach to any form of wage discrimination based on gender or other factors unrelated to performance and role

seniority. We uphold a firm stance on non-discrimination and promote equality through our policies, ensuring a fair and inclusive workplace for all. We also ensure strict compliance with International Labour Organization (ILO) conventions and all applicable labor laws, including the standard 48-hour workweek and a maximum of 60 hours when including overtime, in order to ensure a healthy work-life balance. CSN Mineração enforces collective bargaining agreements that define minimum wage levels, ensuring all wages comply with national labor standards. The only instances of pay below the minimum wage involve apprentices, whose compensation is regulated under specific laws that account for reduced working hours.

The total compensation package for CSN Mineração employees consists of a base monthly salary, vacation pay and 13<sup>th</sup> salary, and an annual performance bonus linked to the Company's global strategic targets. This bonus structure supports CSN Mineração's performance-driven culture and individual contributions to strategic targets.

Employee benefits are provided in accordance with collective labor agreements. Regardless of contract type or working hours, all employees are entitled to an extensive benefits package, including parental leave voluntarily extended to six months for women and 20 days for men, health and dental insurance (covering direct dependents), life insurance, meal vouchers, and childcare assistance, all designed to support employee well-being.

CSN Mineração also offers supplementary pension plans, managed by the CSN Employees' Benefit Fund (CBS). This private, non-profit pension fund is available to current and former employees of the CSN Group and CSN Mineração, supporting retirement planning and offering greater long-term financial security.



## Diversity, Equity and Inclusion

CSN Mineração 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 Mineração 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. The ESG Committee, with the support of the People Group, functions as a diversity council, tracking key DE&I indicators and overseeing the progress of initiatives to ensure we honor our public commitments.

CSN Mineração successfully met one of our key diversity targets—increasing female representation across the workforce. In 2024, women made up 26% of our workforce, exceeding our target and representing a 100% increase compared to the baseline. This

includes employees under permanent contracts (CLT), apprentices, interns, and participants of the *Capacitar* program. The higher representation reflects CSN Mineração's commitment to providing equal opportunity and strengthening the presence of women in all areas.

One of the flagship initiatives contributing to this milestone is our *Capacitar Mulheres* program, which offers free vocational training courses for women in municipalities neighboring CSN Mineração's operations. In partnership with the National Industrial Training Service (SENAI) and the CSN Foundation, the program equips women with the necessary skills and qualifications to pursue operational careers at CSN Mineração. To ensure the ongoing development of women entering through the program, scholarships were provided for truck driver's license certification, along with an exclusive learning track in the Group's corporate university and partnerships with suppliers to offer female-only driver retraining program courses and industry-first training in mining operation machinery. 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 Mineração launched the *Primeira Liderança* ("First Leadership") program, designed to develop employees identified as high-potential successors for supervisory roles, benefiting over 90 participants. Spanning approximately ten months, the program delivers targeted training to fast-track participants' professional development and equip them for future leadership challenges. As part of this initiative, the CSN Group launched *EMPODERA*, a dedicated track exclusively for women that provides additional leadership development training. The program aims to promote women's career advancement and enhance female representation in leadership positions across the CSN Group.

→ A CSN Mineração employee – Congonhas (MG)





Two additional initiatives stood out in the year: SupplyTec, which provides training for underrepresented groups in industrial operations, and *Mulheres que transformam a indústria*, an initiative that celebrates pioneering women within the company, serving as inspiration to encourage greater female participation in traditionally male-dominated roles.

In addition to gender equity, racial equity is a key pillar of CSN Mineração's broader diversity strategy. 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.

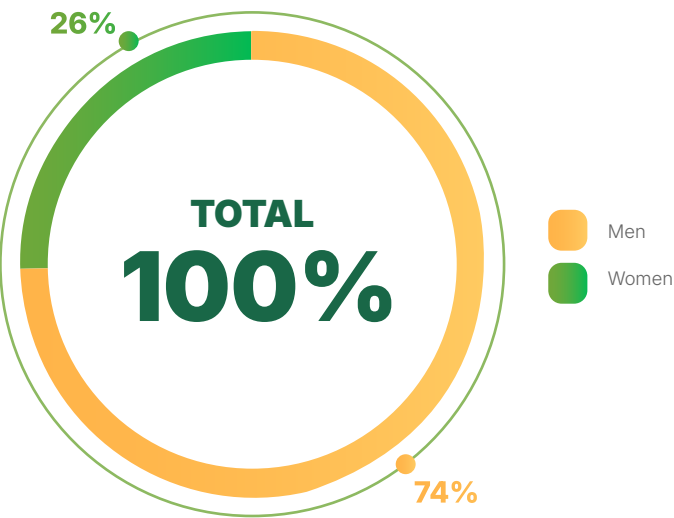
Employee awareness and training remain top priorities at CMIN, supported by initiatives like masterclasses on commemorative dates, including International Women's Day, covering topics such as Impostor Syndrome, and Black Awareness Day, focusing on anti-racist education. In addition, our Train the Trainers program provides strategic training to disseminate knowledge and foster a more inclusive workplace. This includes training for the Occupational Health team about Brazil's Quota Law and the biopsychosocial aspects of disabilities; anti-racist communication and unconscious bias training for the Security team; and training on compliance with anti-discrimination laws for the Legal department.

These initiatives help to deliver on our commitment to diversity, equity, and inclusion while fostering a more fair and equitable workplace for all employees.

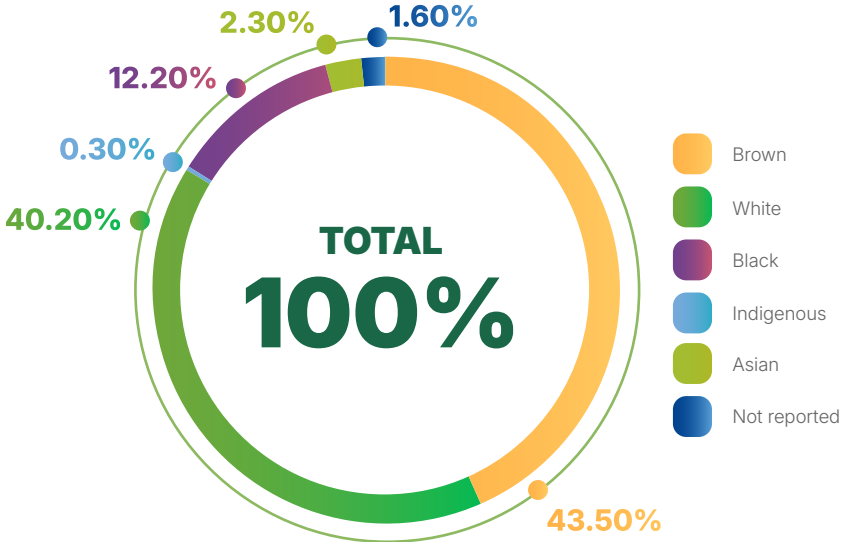
→ A CSN Mineração  
employee -  
Congonhas (MG)



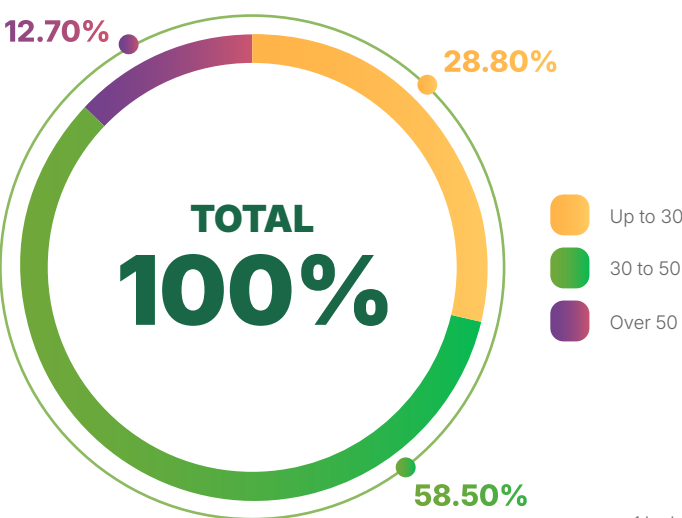
### WORKFORCE BY GENDER IN 2024<sup>1</sup>



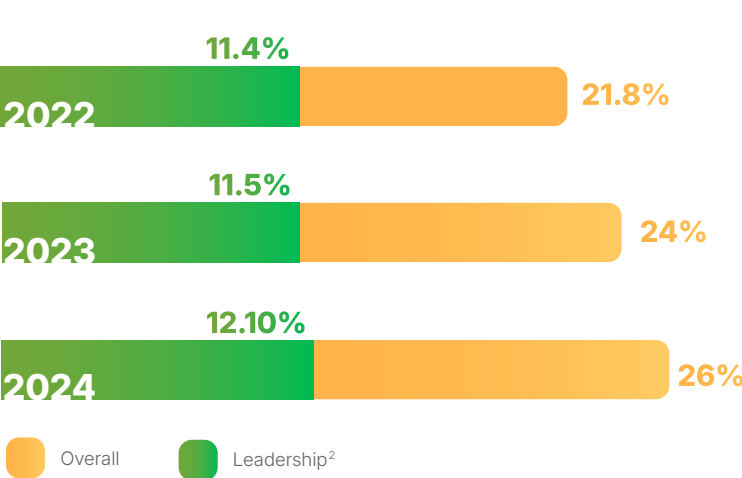
### WORKFORCE BY RACE IN 2024



### WORKFORCE BY AGE GROUP IN 2024



### WOMEN IN THE WORKFORCE<sup>1</sup>



<sup>1</sup> Includes direct employees in Brazil as well as participants in the Apprentice, Internship, and Capacitar programs. The data excludes positions filled through insourcing transitions, as these transitions do not affect overall headcount. These figures differ from GRI disclosures, as the GRI data does not cover the Internship Program.

<sup>2</sup> Includes the following levels: supervisors, coordinators, managers, general managers, and executives.



→ A CSN Mineração employee - Congonhas (MG)



→ A toolbox talk



## Health, Safety and Well-being

Occupational safety is a non-negotiable value at CSN Mineração, 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 and the environment. 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.

2024 was CSN Mineração's 11<sup>th</sup> consecutive year without a fatal accident, a testament to our **commitment to employee safety**



## OHSMS Core Elements

### 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.

### 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.

### STANDARDS AND PROCEDURES

Clear standards and procedures ensure that all tasks—operational or administrative—are performed in line with established safety guidelines.

### 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.

### CHANGE MANAGEMENT

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

### LEGAL COMPLIANCE

We ensure strict compliance with all occupational health and safety regulations, supported by thorough planning to minimize risks and hazards.

### 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.

### CONTRACTOR MANAGEMENT

This element ensures that suppliers and contractors conform to CSN Mineração's safety policies, including contractual obligations on compliance with the Supplier Health and Safety Management Manual.

### 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.





→ A CSN Mineração employee – Congonhas (MG)

## Over 89,000 hours of Occupational Health & Safety training throughout the year

CSN Mineração 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. To manage risks effectively, we use RISKEEX software to track each stage of our projects, from planning to decommissioning. In addition, a specialized team receives regular training on assessing risks and implementing preventive measures. 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, CSN Mineração provided over 89,000 hours of Occupational Health and Safety (OHS) training, including 2,500 hours specifically dedicated to emergency response, as part of our commitment to continuous workforce training. We also leverage cutting-edge tools to enhance learning. Through a virtual platform featuring gamification elements, a virtual assistant, and 3D simulation goggles, employees engage in interactive and immersive training, enhancing their learning experience in a dynamic and effective way. Daily readiness assessments, performed online, evaluate workers' fitness to perform critical tasks, ensuring that no activity begins if an employee's condition could compromise attention or safety. A smart lockout system is also in place to ensure safety during maintenance, automatically disabling electrical power in hazardous areas when required.

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. 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.



→ A nurse from the CSN Healthcare Team



## 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 for all levels of management. 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. As a direct outcome of this approach, CSN Mineração marked its eleventh consecutive year without fatalities in 2024. The Potential Serious Injury and Fatality (PSIF) rate decreased by 71.1% year on year. In 2025, the program will further strengthen leadership involvement, risk management, and preventive tools, supporting a more robust and effective safety culture. CSN Mineração ended 2024 with an injury frequency rate of 0.99 for CAF+SAF events (lost time and no-lost-time incidents) for both employees and contractors, an 8.6% reduction compared to 2023.

GRI 3-3 (Health, safety and well-being), 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8; SASB EM-MM-320a.1



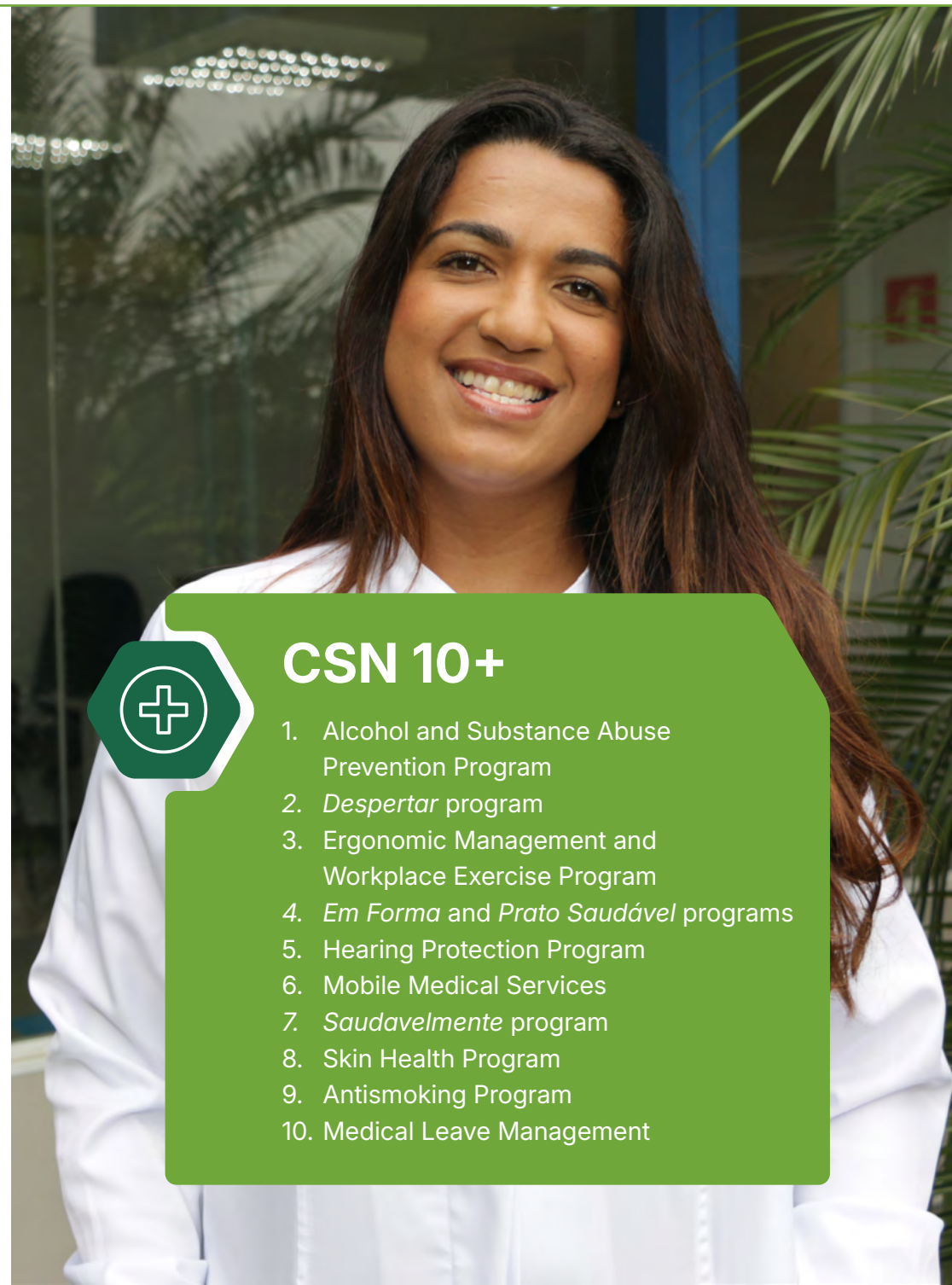
## Health Programs

CSN Mineração invests in initiatives to expand employee access to healthcare services, fostering well-being and improving quality of life both on and off the job. Health services are offered through walk-in, emergency, or scheduled occupational exams, along with preventive care counseling and guidance on occupational health risks.

Our Occupational Health Surveillance Program (PCMSO) establishes periodic checkup schedules and monitoring frequencies based on employees' roles and occupational risk exposures. On-site medical units offer consultations, emergency care, preventive screenings, and health guidance, enabling early identification of health issues, reducing absenteeism, and boosting productivity. Preventive measures help to lower healthcare costs and minimize employee sick leave. Health services are delivered by a qualified multidisciplinary team, adhering to strict and clearly defined protocols. To maximize accessibility, medical units are strategically located to ensure easy and timely access for employees and third-party workers.

CSN Mineração also runs programs to address chronic disease management, mental health, healthy nutrition, the need for regular exercise, and the prevention of alcohol, tobacco, and substance abuse. These initiatives are grouped together under the umbrella program CSN 10+, which is structured into multiple fronts.

GRI 3-3 (Health, safety and well-being), 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8; SASB EM-MM-320a.1



### 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 Services
7. *Saudavelmente* program
8. Skin Health Program
9. Antismoking Program
10. Medical Leave Management

We also offer TotalPass, a partnership with a country-wide gym network that promotes physical activity and supports employees' and their families' physical, mental, and social well-being. To further support well-being, the program includes access to psychological counseling, offering support for personal and professional challenges.

In addition, we conduct annual vaccination campaigns, including flu vaccination campaigns providing the quadrivalent vaccine—which includes protection against the H1N1 strain—along with vaccines for other illnesses. These initiatives reflect our commitment to comprehensive employee health and a workplace environment that goes beyond physical safety to promote a healthy work-life balance, wellness and mental health.

**In 2024,** over 84,000  
breathalyzer tests  
and more than 4,500  
toxicology screenings  
were carried out

→ A nurse from the CSN  
Healthcare Team





→ A young participant in our Garoto Cidadão program - Congonhas (MG)

## CSN Mineração reaffirms its commitment to human rights in its operational practices and corporate policies

## Human Rights

CSN Mineração is committed to upholding human rights, recognizing them as a core pillar of our risk management and community engagement practices. 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 2022, in partnership with the Fundação Getulio Vargas (FGV) Center for Human Rights and Business, CSN Mineração began identifying risks related to human rights violations. In 2023, CSN Mineração 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 potential 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.

Human rights compliance is also embedded in internal training practices. In 2024, CSN Mineração delivered more than 12,000 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.

Within our supply chain, suppliers play a critical role in upholding and promoting human rights. CSN Mineração's Procurement department applies a rigorous supplier screening process that mandates that all suppliers formally comply with our Code of Conduct, Anti-Corruption Policy, and General Terms and Conditions for the Provision of Services and Materials. We carry out regular integrity assessments—including Compliance and Anti-Corruption Background Checks, Know Your Customer (KYC) processes, and environmental compliance reviews—to ensure that all business partners conform to CSN Mineração's human rights expectations. Although we have not identified any suppliers involved in degrading labor practices,



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

CSN-001

12,031.13

8,746

110

- Hours of training provided
- Number of employees trained
- Percentage trained out of total headcount

<sup>1</sup> The percentage includes employees who were trained and then terminated later in the year, and therefore exceeds 100%.

→ A CSN Mineração  
employee



including child labor or forced labor, we have stringent preventive measures in place and use a risk matrix to prioritize critical suppliers and monitor them through regular assessments.

We also recognize that there may be potential risks to freedom of association and collective bargaining among suppliers and contractors in our operations. To mitigate these risks, we have implemented a zero-tolerance policy, specific procedures, regular document reviews, ongoing monitoring, audits, and reporting channels. All suppliers must formally agree to CSN Mineração's principles and guidelines when entering into or

renewing their contracts. Our Contractor Management Center (NGT), a division of our Integrated Management Center (CIG), performs monthly reviews of labor and social security documents to ensure legal compliance, with payment withheld in case of non-compliance.

The CSN Mineração Whistleblower Channel is another key mechanism for identifying and investigating potential human rights violations, ensuring that all cases of abuse or misconduct are properly addressed. This mechanism helps to strengthen operational integrity and ensure that all parties within CSN Mineração's value chain comply with the highest human rights standards.

## SUPPLIER SCREENING BASED ON SOCIAL CRITERIA AT CSN MINERAÇÃO GRI 414-1

	2022	2023	2024
Total new suppliers	1,171	1,251	1,412
Number of suppliers screened using social criteria	1,171	1,251	1,412
Percentage of suppliers screened using social criteria	100%	100%	100%



## Security

CSN Mineração's 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 Mineração 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.

## The training programs for CSN Mineração employees include **dedicated modules on human rights**

Our Corporate 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 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 core component of the training program, covering essential 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.



→ A CSN Mineração employee – Congonhas (MG)

This continuous training program helps to reinforce a culture of respect, integrity, and ethical conduct within CSN Mineração's asset team.

CSN Mineração also makes significant investments to continuously upgrade our physical security infrastructure. In 2024 alone, over R\$ 36 million was allocated to modernizing surveillance systems and upgrading physical security measures, including reinforced perimeter fencing, concertina wire installations, and advanced identification systems, ensuring regulatory compliance and strengthening security.



## Value Chain

In 2024, CSN Mineração transacted R\$ 8.28 billion in spending on 1,412 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. The main services provided in 2024 were rail transportation (27.04%), vehicles (11.56%), fuels (7.33%), engineering (6.89%), and maintenance (3.67%). Overall, 28.1% of our supplier expenditure was allocated to material suppliers, while 71.9% went to service providers. There were no major changes in our supply chain structure during 2024.



→ CSN employees  
- São Paulo (SP)

39.5% of total supplier spend was directed to **in-state suppliers**

We prioritize local suppliers to the extent possible, strengthening regional economies where we operate. In 2024, 39.5% of total supplier spend went to in-state suppliers, especially for service provision. However, in some cases, highly specialized or proprietary suppliers may be needed for items that are not available locally. Nevertheless, we are committed to developing and expanding the share of local and regional suppliers whenever feasible.

At CSN Mineração, supplier management is governed by high standards of ethics and compliance. All suppliers undergo a formal screening and assessment process, and must comply with the CSN Group's Code of Conduct, Anti-Corruption Policy, and notarized General Terms and Conditions for the Provision of Services and Materials. These terms and conditions are formalized in contracts, which contain specific clauses mandating compliance with environmental, labor, and ethical regulations. Depending on the material or service, certifications like ISO 9001 (quality), ISO 14001 (environment), and other specific permits may be required.





## Supply Chain ESG Risk Matrix

The Procurement department, working with the Sustainability team, CSN Inova Bridge, and an external consultancy, has developed a Supply Chain ESG Risk Matrix to support continuous improvement efforts. The matrix segments suppliers based on ESG and reputational risks, classifying the supply chain into 48 high-level categories, split between materials and services. This structure enables more precise monitoring and prioritization of corrective and development actions across the supply base.

CSN Mineração's Procurement team has also made progress in implementing a new supplier management area, which centralizes documentary and operational information, as well as classifying partners based on their performance and sustainable practices. Among its key activities, this function ranks suppliers to support identification of consistently underperforming partners and disqualification of those failing to meet defined requirements. 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 Mineração took an important step with the initial implementation of ISO 20400 - Sustainable Procurement, which provides guidelines on integrating sustainability into procurement processes. Working with CSN *Inova Bridge*, the Sustainability team, and an external specialized consultancy, the Procurement team conducted an assessment that indicated 84% compliance with the standard's requirements. Key measures to improve compliance performance include the development of a Supplier Code of Conduct and a Sustainable Procurement Policy—both now under internal review—as well as the restructuring of supplier screening, performance assessment, and monitoring processes.

→ A CSN Mineração employee - Congonhas (MG)



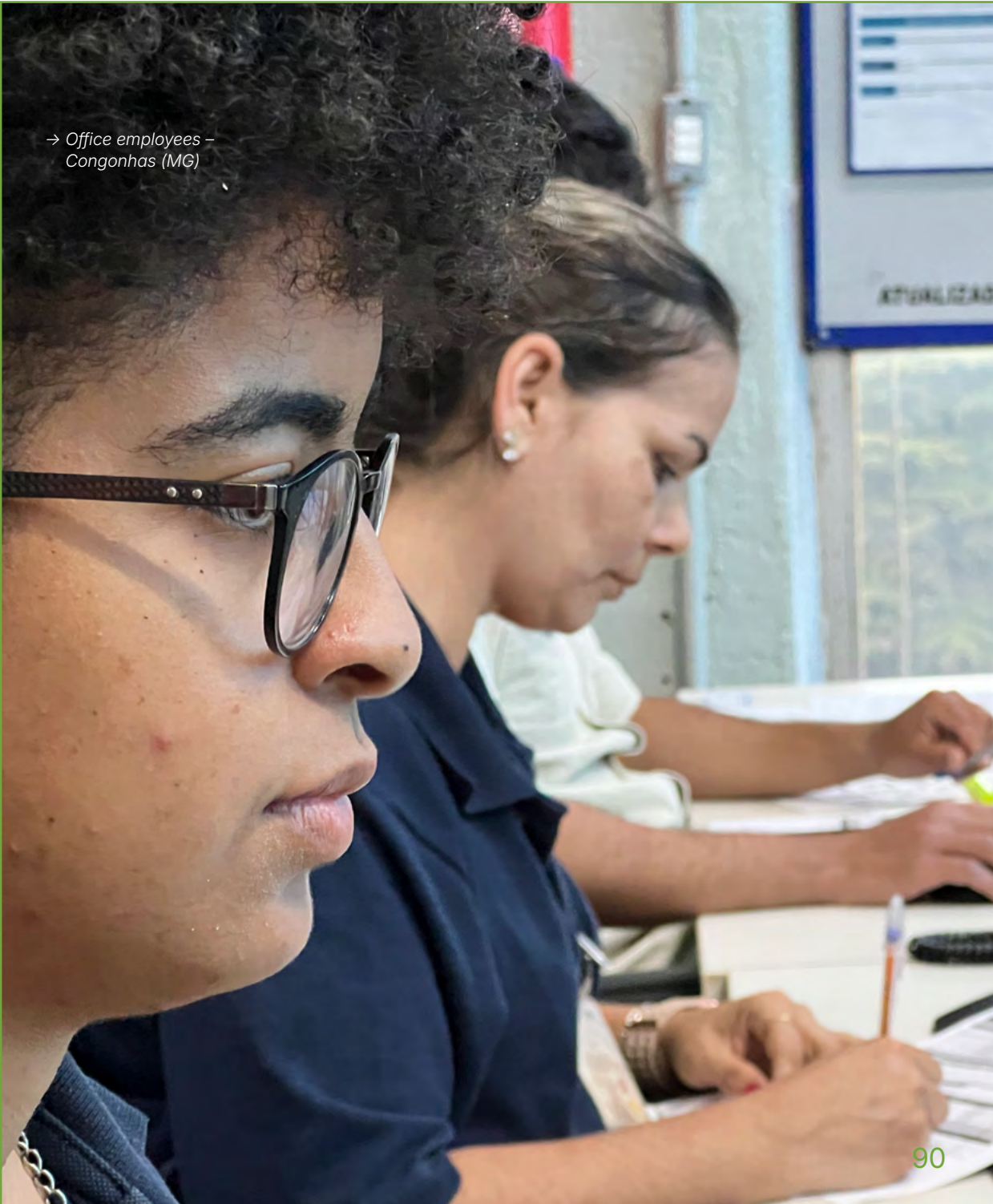
## Compliance Assessment during Supplier onboarding

CSN Mineração 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 Mineração’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. 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 Mineração 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, including 107 CSN Mineração suppliers. This due diligence effort covered over 5,000 individuals and legal entities, reinforcing CSN Mineração’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 human rights standards.



→ Office employees – Congonhas (MG)



# Local Communities

CSN Mineração engages closely with neighboring communities, continuously assessing and monitoring both potential and actual impacts that may affect them. We conduct comprehensive assessments in each location, covering factors such as intensity, duration, and reversibility. These assessments inform the development of mitigation plans and the implementation of mechanisms to receive and address complaints and concerns from community members.

Key potential impacts include noise and particulate matter emissions, which can affect residents' quality of life, in addition to potential adverse effects on human rights. To support environmental monitoring efforts, CSN Mineração operates an Air Quality and Noise Control and Monitoring Program, using both automatic and semi-automatic stations. To help mitigate dust generated by truck and equipment movement, mine roads are continuously sprayed with water as another ongoing practice.

In addition to mitigation measures, CSN Mineração offers several engagement and communication channels. One example is our Green Line, a platform that receives reports, complaints, suggestions, and inquiries regarding environmental and social matters. In 2024, the Green Line received and addressed eight submissions, all of which were reviewed by specialized teams that

provide responses within 15 days. Case information is regularly reported to Senior Management and discussed in governance meetings. Another important initiative is our Community Support Center near the Casa de Pedra Mine, operated 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. Community engagement is also amplified through our Community Committee, which includes 23 local representatives—such as community leaders and NGOs—and meets bi-monthly.

In addition, CSN Mineração works to raise awareness among employees and local communities through our Environmental Education Program (PEA), implemented in Congonhas, Belo Vale, and Ouro Preto. Following the Performance Standards of the International Finance Corporation (IFC), the PEA delivers lectures, workshops, and events in public schools. In 2024, the program carried out 738 initiatives with a total of 17,776 participants, including employees, suppliers, and community members from Congonhas.



→ Bom Jesus de Matosinhos Architectural Complex, a UNESCO World Heritage cultural site and an iconic landmark of Congonhas (MG)

## Green Line

Phone: 0800 282 4440

E-mail: [meio.ambiente@csn.com.br](mailto:meio.ambiente@csn.com.br)





## Social Initiatives Linked to the Expansion of the Itabiritos P15 Plant

In 2024, CSN Mineração launched a series of social initiatives in connection with the expansion of the Itabiritos P15 Plant as part of a strategic plan designed to support the project's development. We 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 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 Mineração's systemic plan to drive long-term social transformation and strengthen local communities, ensuring that the facility's development is both responsible and sustainable.

→ An aerial view of the city of Congonhas (MG)



## CSN Foundation

The CSN Foundation serves as a bridge between CSN Mineração and local communities, with a mission to promote social, educational, and cultural transformation. In 2024, the CSN Group invested R\$ 66 million in social responsibility initiatives and scholarships, directly benefiting 6,000 young people in the areas where we operate. 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), the Foundation promotes sustainable practices in the areas where we operate, reaffirming CSN Mineração'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 Mark from the São Paulo Municipal Office for Human Rights and Civics. The *Garoto Cidadão* initiative and the Theater Scholarship program were awarded a Human Rights and Diversity Mark while the Environmental Education Program (PEA) received a 2024 Sesi SDG Mark.

## Education

Education is one of the foundational pillars of Fundação CSN. In Congonhas (MG), the Foundation operates a Technological Education Center (CET) which offers primary, secondary and trade education, along with vocational training courses. In 2024, the CET served 432 students, of which 55% were scholarship recipients. The Foundation also launched new classes in the *Capacitar para Crescer* program, designed to prepare socially vulnerable youth to participate in Young Apprentice programs. In total, 99 young people completed training, and 23 have already secured positions in Young Apprentice programs.

To support youth inclusion in the job market, the Foundation offers *Conexão Aprendizagem*, a program that connects young individuals to companies where they gain practical work experience, supplemented by theoretical training on their chosen fields, the labor market, and personal and professional development. In 2024, the program benefited 744 young people in several cities throughout Minas Gerais.

The CSN Foundation also runs an Environmental Education Program (PEA) in communities across different towns in Minas Gerais, such as Congonhas, Belo Vale, and Ouro Preto. Activities include public space revitalization, compost bin installations, rainwater harvesting projects, creation of community kitchen gardens, training in building low-cost solar heaters, handicraft workshops, and awareness campaigns on commemorative dates. These initiatives raise



→ Young participants in our *Garoto Cidadão* program

environmental awareness and promote sustainable solutions in the communities served. Education initiatives in Congonhas engaged more than 17,000 people, supporting CSN Foundation's commitment to environmental education and nature preservation. In 2024, CSN Mineração invested over R\$ 420,000 in its Environmental Education Program (PEA).



## Culture

In the cultural sphere, CSN Foundation implements projects that foster social transformation and inclusion through art. The Foundation's flagship initiative in this area is *Garoto Cidadão*, a socio-cultural program that provides music, theater, dance, and visual arts activities for children and youth during after-school hours. Designed to develop life skills in vulnerable children and adolescents, the program serves participants aged 9 to 18, referred by local Social Assistance Reference Centers (CRAS) of partner municipalities, ensuring that support reaches those who need it most. In 2024, *Garoto Cidadão* benefited 1,201 children and adolescents, organized 91 cultural events, and reached a total of 16,027 people across Belo Vale, Congonhas, Moedas, and Rio Acima (MG), as well as Itaguaí (RJ).

→ Young participants in CSN Foundation's *Garoto Cidadão* program – Congonhas (MG)



## Tambores de Aço

One of the most vibrant expressions of the CSN Foundation's cultural work is *Tambores de Aço*, a spinoff from *Garoto Cidadão*. Targeted at scholarship recipients aged 15 to 20, this program offers intensive training combining theoretical and practical lessons in musical languages, dance, body expression, and stage performance. *Tambores de Aço* offers an immersive artistic experience to participants. In 2024, *Tambores de Aço* engaged 20 young participants and delivered 63 performances across 15 cities, reaching an audience of 186,885 people. The troupe performed at prestigious venues, including the Museum of Image and Sound and the Oscar Niemeyer Museum in Curitiba (PR), and the Palácio das Artes in Belo Horizonte (MG), as part of the opening event for the traveling edition of the 35<sup>th</sup> São Paulo Biennial—significantly increasing the visibility of these young talents. Additional performances took place in public spaces such as Praça Prefeito Milton and Rio Acima, and Praça Sant'Anna in Barroso (MG).



## Advocacy

The CSN Foundation recognizes advocacy as an essential tool to foster strong, collaborative relationships with public authorities, local business leaders, and other institutions, as part of its commitment to sustainable and inclusive local development. The Foundation's approach to advocacy 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.

The CSN Foundation manages Casa de Apoio Espaço Comunidade CSN in Congonhas (MG), a support center that helps to strengthen CSN Mineração's relationship with the local community. 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.



## Curation

In the curation pillar, the CSN Foundation supports CSN Mineração in selecting third-party projects, expanding its social outreach through tax incentive laws. The Foundation receives, reviews, and pre-selects proposals from partner institutions, ensuring they align with CSN Mineração's objectives and values. These projects span a variety of areas, including culture, sports, youth and adolescent development, senior care, and health. Following this initial review, the shortlisted proposals are forwarded to CSN Group's Executive Board, which determines which projects will receive sponsorship.

In 2024, the CSN Foundation directed investments toward 117 projects, benefiting 46 cities in 10 Brazilian states, using tax-deductible funding. The CSN Foundation plays a vital role in this curation process, ensuring that selected initiatives align with CSN Mineração's standards and deliver positive impacts for communities and regions where the company operates. Through this process, the Foundation helps CSN Mineração sponsor initiatives that address social, cultural, and health priorities in the communities where we operate, driving sustainable development and local transformation.

→ Our support center in the district of Gualter Pereira Monteiro – Congonhas (MG)



→ A performance by Coral dos Profetas – Congonhas (MG)



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

Projects	Locations	Benefits	<div>1ERRADICAÇÃO DA POBREZA</div>	<div>4EDUCAÇÃO DE QUALIDADE</div>	<div>8TRABALHO DECENTE E CRESCIMENTO ECONÔMICO</div>	<div>10REDUÇÃO DAS DESIGUALDADES</div>	<div>12CONSUMO E PRODUÇÃO RESPONSÁVEIS</div>	<div>13AÇÃO CONTRA A MUDANÇA GLOBAL DO CLIMA</div>	<div>17PARCERIAS E MEIOS DE IMPLEMENTAÇÃO</div>
Garoto Cidadão	MG   MS   PB   PR   RJ   SP	3,989 children and adolescents	✓	✓	✓	✓			
Environmental Education Program	MG	17,776 people impacted		✓			✓	✓	
Conexão Aprendizagem	MG   RJ   SP	1,470 young people		✓	✓	✓			
Capacitar para Crescer	MG   RJ	199 youth		✓	✓	✓			
Mentoria Cidadã	MG   MS   PB   PR   RJ   SP	52 youth	✓	✓	✓	✓			
Tambores de Aço	RJ	20 young people		✓	✓	✓			
Community Support Center	MG	1,098 beneficiaries							✓





## "If This Street Were Mine"

"If This Street Were Mine" (*Se Essa Rua Fosse Minha*) is an initiative as part of CSN Mineração's Environmental Education Program (PEA) that is designed to transform how communities engage with their environment through sustainable and cultural practices within urban spaces. Its primary goal is to improve quality of life by promoting community care for public spaces and collective initiatives that align with environmental, social, and cultural values.

Through field research, creative workshops (such as vertical gardens and natural earth paint making), and environmental awareness campaigns, the project directly engages residents in the revitalization of streets and public spaces. These activities strengthen community bonds and shared responsibility while promoting sustainable behaviors like tree planting and proper waste disposal.

Since its launch in 2022, the project has reached 419 participants, through initiatives in public schools and social service centers. In 2024 alone, 157 residents from Rio Acima, Congonhas, and Belo Vale (MG) participated in the project. These initiatives have revitalized urban areas—transforming public squares and murals into safer, more welcoming spaces—and raised environmental awareness among local residents.



→ A young participant in our Garoto Cidadão program - Congonhas (MG)



# Tailings Dams and **MINERAL BYPRODUCTS**



## IN THIS CHAPTER

- Dam Decommissioning
- Waste management



# Tailings Dams and Byproducts

CSN Mineração is constantly improving its operations to minimize environmental impacts, with a particular focus on tailings management. Mining activities generate two primary mineral waste: waste rock, consisting of overburden with no economic value for mining, and tailings, which result from iron ore beneficiation. To reduce tailings generation, CSN Mineração has implemented advanced technologies, including High-Intensity Magnetic Concentrators (CMAIs), which improve iron recovery and significantly reduce waste volumes. We also invest in research aimed at expanding applications to repurpose these materials. One ongoing initiative is assessing the feasibility of using tailings as pozzolan in CSN Cimentos' cement production, creating added value from mine waste. In partnership with CSN Inova, we are also exploring solutions to extract additional iron from tailings generated at the central processing plant for reuse in steel production.



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



# Dam Decommissioning

CSN Mineração has made substantial progress in our commitment to fully decommission our tailings dams. In 2020, we transitioned to dry stacking of tailings, a technique that eliminates the need for conventional dams, enhances operational safety, and reduces environmental impacts. Following a rigorous schedule approved by regulatory agencies, CSN Mineração is decommissioning all its dams, regardless of the construction method used.

We achieved significant milestones in 2024. In September, all dams had their structural stability certified by independent external audits, in compliance with current regulations. The decommissioning efforts proceeded at an accelerated pace, with the successful decommissioning of the Vigia dam, which joins the already decommissioned B5 and Vigia Auxiliary dams. The decommissioning of the Vigia Dam has been officially recognized by the State Environmental Foundation (FEAM), pending only the final legal monitoring before deregistration by the National Mining Agency (ANM). Decommissioning of the B4 Dam is underway and is expected to be completed by 2028.

CSN Mineração places dam risk management as a top priority, with an utmost focus on safety and accident prevention. Although there have been no reported incidents involving any of our dams, we take a serious approach to dam safety as part of our ESG agenda, recognizing that it is essential for operational integrity and for safeguarding the environment and nearby communities. All of CSN Mineração's dams are classified at Hazard Level Zero, indicating they are safe and stable.

Our dam monitoring process incorporates multiple safety measures to detect and address any potential issues swiftly. Dams and dikes undergo visual inspections every 15 days, supported by drones equipped with georeferencing systems to ensure highly detailed and precise evaluations. In addition to these measures, independent external audits are carried out

biannually to validate safety compliance and ensure alignment with the highest industry standards. CSN Mineração also commissions peer reviews of audits and engineering documentation, providing a critical second-party analysis to capture potential improvements.

We invest in advanced technologies to support effective data monitoring and assessments. Data collection is performed online and in real time using automated instruments, allowing for continuous and detailed monitoring of dam conditions. Collected data is processed using specialized software and advanced data analytics tools, enhancing the ability to detect any anomalies that may pose risks. Endoscopic inspections are also performed to monitor internal pressure and water levels, providing accurate readings and helping prevent any potential structural failure.

## 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				✔								



CSN Mineração develops its Mining Dam Emergency Action Plans (PAEBM) in strict compliance with applicable legislation and makes them publicly accessible. The plan is built with active community participation, using forms to identify areas that could be potentially affected. We also organize annual orientation seminars, drills, and other activities to ensure readiness and effective emergency response.

We ensure the safety of our tailings storage facilities through a rigorous inspection and monitoring protocol, safeguarding the integrity of both structures and associated equipment. This process allows for early identification and recording of anomalies and the implementation of timely corrective measures. State-of-the-art monitoring instruments support real-time analysis of structural conditions, sound engineering design, and rapid response to potential adverse events. Data collection and analysis are conducted by the Inspection and Risk Assessment Group, under the oversight of the PAEBM Safety Management Committee. Readings are performed on a strict schedule aligned with routine inspections and are supplemented by regular visual inspections to identify cracks, fissures, or structural shifts. Inspection records, including forms and photographs, are stored in specialized systems, ensuring a detailed historical record of structural behavior. In addition, reports prepared by external consultants and auditors are kept on file for continuous analysis of dam stability.



→ Dam Safety and Stability Monitoring Room - Congonhas (MG)



## Safety Management and Emergency Response Plans

CSN Mineração has comprehensive Dam Safety Plans and Mining Dam Emergency Action Plans (PAEBM) for 100% of our tailings storage facilities. These plans are essential for managing potential emergencies and ensuring a swift and effective response when needed. They also serve as a reference for public authorities and civil defense agencies to design their own emergency and safety protocols, in order to protect communities, the environment, and cultural heritage in the event of an emergency.



# Waste management

Beyond tailings and waste rock, our operations also generate both hazardous and non-hazardous waste. Activities such as mineral processing, raw material sourcing, and equipment maintenance generate waste including automotive batteries, used lubricants, oil- and grease-contaminated solids, and oil-containing effluents. To mitigate environmental impacts, CSN Mineração applies an integrated waste management approach aligned with the Brazilian National Waste

Policy, using the waste management hierarchy of prevention, reduction, reuse, recycling, and proper disposal. All waste management practices comply with applicable laws and regulations, ensuring proper and responsible disposal. At present, only waste that cannot be reused, recycled, or repurposed is sent to licensed landfills, reflecting CSN Mineração's ongoing commitment to sustainable waste solutions.

Waste is classified according to NBR 10004, and we conduct employee training and lectures on proper waste segregation and management. Internal waste handling procedures ensure segregation and proper disposal, while annual reports assure compliance with environmental requirements. Continuous monitoring procedures identify any non-conformities, informing corrective action plans to mitigate risks and meet sustainability commitments.

**Our integrated waste management system** is compliant with Brazil's National Waste Policy





# BIODIVERSITY



## IN THIS CHAPTER

- Preservation of Native Vegetation



# Biodiversity

CSN Mineração 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, as a member of our parent company CSN, we met our 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, Prepare (LEAP) Methodology.

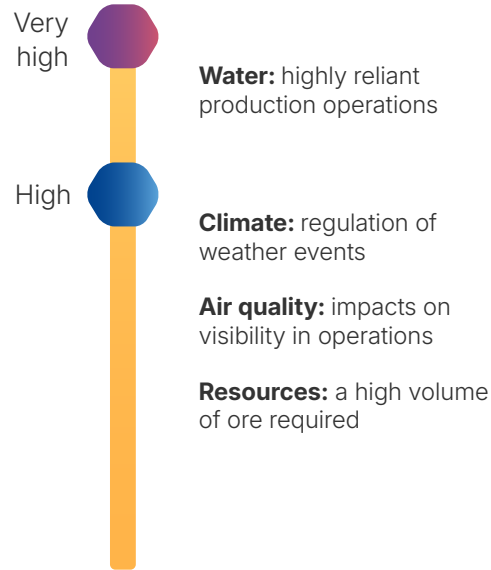
To inform related initiatives, we have mapped out and prioritized our operational impacts and dependencies on ecosystem services, consolidating this information into a Climate and Nature Risk Matrix. This assessment was supported by market research and methodologies from the World Resources Institute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

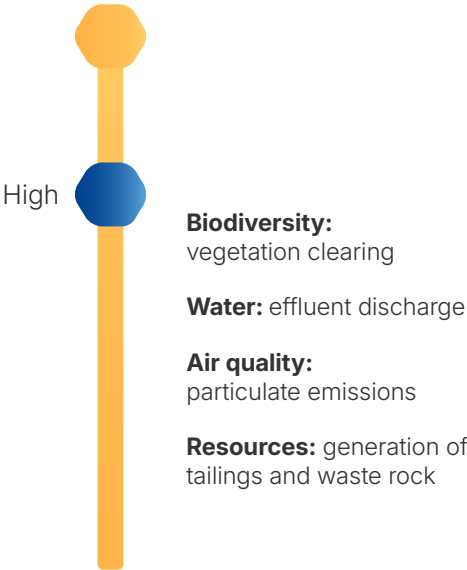
BIO offers several benefits, including enhanced measurement of biodiversity conservation progress, standardized numerical metrics for assessing biodiversity adequacy, and the ability to historically compare biodiversity conditions across operations.

## KEY PRIORITIZED IMPACTS AND DEPENDENCIES

### DEPENDENCIES



### IMPACTS





→ The Simeão legal reserve, maintained by CSN Mineração near the Casa de Pedra mine – Congonhas (MG)

## Preservation of Native Vegetation

CSN Mineração plays a significant role in environmental conservation, managing approximately 8,300 hectares of protected areas. These areas include native vegetation, sites under ecological restoration, Permanent Preservation Areas (APP), Legal Reserves (RL), and a Private Natural Heritage Reserve (RPPN), all within the state of Minas Gerais.

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. This mine is situated near ecologically sensitive areas, including the Cachoeira Ecological Park and the Poço Fundo RPPN. To mitigate impacts, CSN Mineração follows a strict mitigation hierarchy: avoid encroachment into natural areas whenever possible; minimize effects where intervention is unavoidable; rehabilitate and restore impacted areas; and offset unavoidable damage through specific biodiversity-focused initiatives.

CSN Mineração's main biodiversity management programs include flora salvaging, phenological monitoring (tracking the availability of fruits and seeds), seed collection, wildlife dispersal and salvaging, environmental offsets, and soil revegetation. We also conduct ongoing monitoring of fauna and flora,

implement forest fire prevention measures, build drainage systems, and install sediment containment structures to protect ecosystems. Other initiatives include road signage to prevent roadkill and environmental education programs that underscore CSN Mineração's commitment to ecosystem preservation and raising local community awareness.

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 of our 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 hectares 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 Industry Federation’s (FIEMG) Counsel for the Environment and Sustainable Development.



→ A seedling nursery



# Mitigation Hierarchy

CSN Mineração 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 Mineração 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.



# Climate CHANGE



## IN THIS CHAPTER

- [Climate Governance](#)

- [Climate Strategy](#)



# Climate Change

CSN Mineração is committed to tackling climate change and reducing our carbon footprint. As part of this commitment, we have set a target to reduce our scope 1 and scope 2 emissions by 30% by 2035, and to achieve net zero by 2044. This commitment supports the global effort to decarbonize the economy and build a more sustainable future.

CSN Mineração has developed a robust climate governance framework to steer investment and drive the innovation needed to accelerate the transition to a low carbon business model. This framework embeds sustainability in strategic decisions, ensuring our practices align with internationally recognized environmental standards.

In 2025, the CSN Group will publish its second Climate Action Report, providing detailed information on CSN Mineração's initiatives and performance in tackling global warming. The report, published biennially, describes our climate strategy, identifies climate change-related risks, and details established action plans to mitigate impacts and adapt the business to a changing climate. The report will be available on the CSN Group's ESG [website](#).



→ Weather monitoring by a CSN Mineração employee – Congonhas (MG)



# Climate Governance

CSN Mineração has a dedicated climate governance structure involving multiple levels of management and coordinated initiatives to ensure an effective climate strategy. At the top of the governance structure is the Board of Directors, which is advised by the CSN Group ESG Committee and its Working Group on Climate Change and Air Quality. This committee plays a central role in establishing guidelines and overseeing climate-related initiatives, ensuring our environmental agenda is aligned with global commitments and corporate targets.

Multiple management levels are involved in ensuring our **climate strategy is effective**

Our Decarbonization and Climate Change team is responsible for coordinating and integrating climate-related initiatives Company-wide. This team liaises between departments to ensure that climate strategies are well managed and implemented effectively. The Decarbonization team reports to the Chief Sustainability, Health, Safety and Environment Officer, who is a key member of the ESG Committee and reports directly to the CEO.

Expert sub-working groups, including a Mining Decarbonization and Climate Risk and Opportunity Management working group, support the orchestration of our climate agenda. All sub-working groups operate directly beneath the Climate Change and Air Quality Working Group, and are responsible for managing and developing climate metrics and ensuring our decarbonization strategy is implemented consistently across operations. These working groups also track progress on decarbonization projects and initiatives to adapt our processes to changing climate conditions.

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.





# Climate Strategy

CSN's Climate Strategy steers our efforts to transition into a low-carbon business model. Guided by the principles of Mitigation, Adaptation and Stakeholder Engagement, our initiatives aim to incorporate sustainability into our operations and processes, in line with global climate commitments.

Supporting these objectives, our parent company, CSN Group, has outlined a robust roadmap of initiatives in its Climate Action Plan. This plan comprises a set of 30 strategic initiatives and 180 different activities to mitigate environmental impacts, improve climate adaptation, and enhance stakeholder engagement. CSN Mineração is an integral part of this plan, with an ongoing pipeline of initiatives and projects to reduce greenhouse gas emissions, preserve natural resources, and develop innovative climate adaptation solutions.

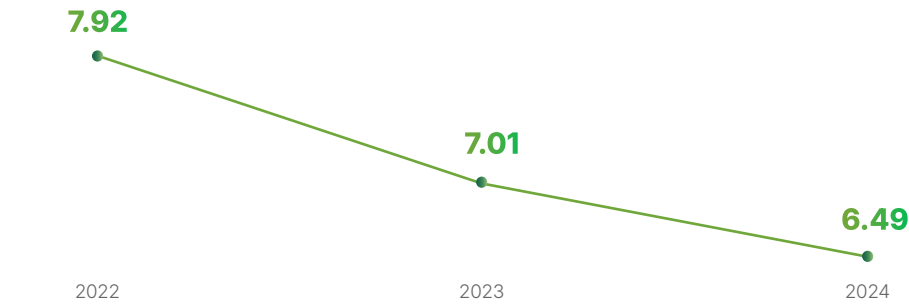
## Mitigation

The Mitigation pillar comprises a set of initiatives supporting CSN Mineração's decarbonization efforts, with a focus on reducing emissions and implementing sustainable projects. Activities as part of this pillar also include developing industry roadmaps and exercising oversight of decarbonization initiatives, with a particular focus on data quality. CSN Mineração is committed to ensuring that the information used as inputs into action plans is reliable and supports effective management of environmental impacts.

Since 2021, we have commissioned annual independent emissions inventories prepared in accordance with Brazilian GHG Protocol Program guidelines. Our inventories are independently audited and have been awarded Gold reporting status. All our inventories have been filed with the [Public Emissions Registry](#). Lessons learned from previous inventories inform the development of new methods for measuring emissions and evaluating the effectiveness of decarbonization projects.

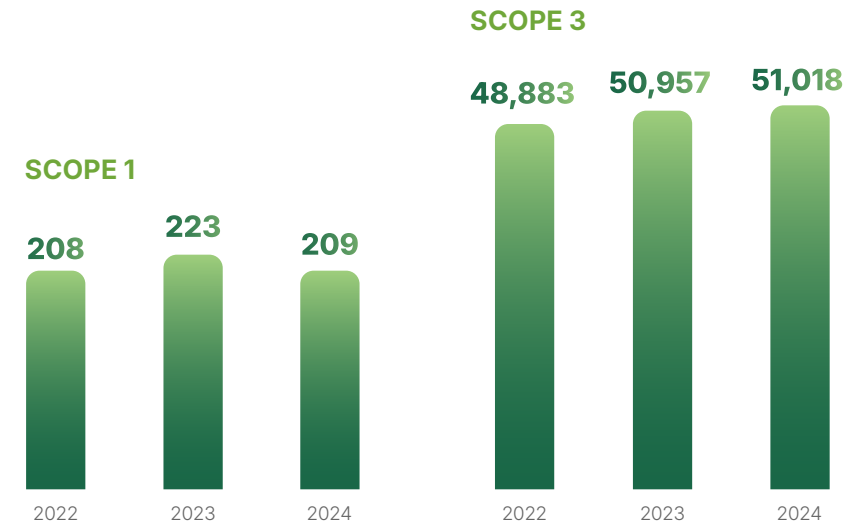
## GHG EMISSIONS INTENSITY

kgCO<sub>2</sub>e/metric ton of ore



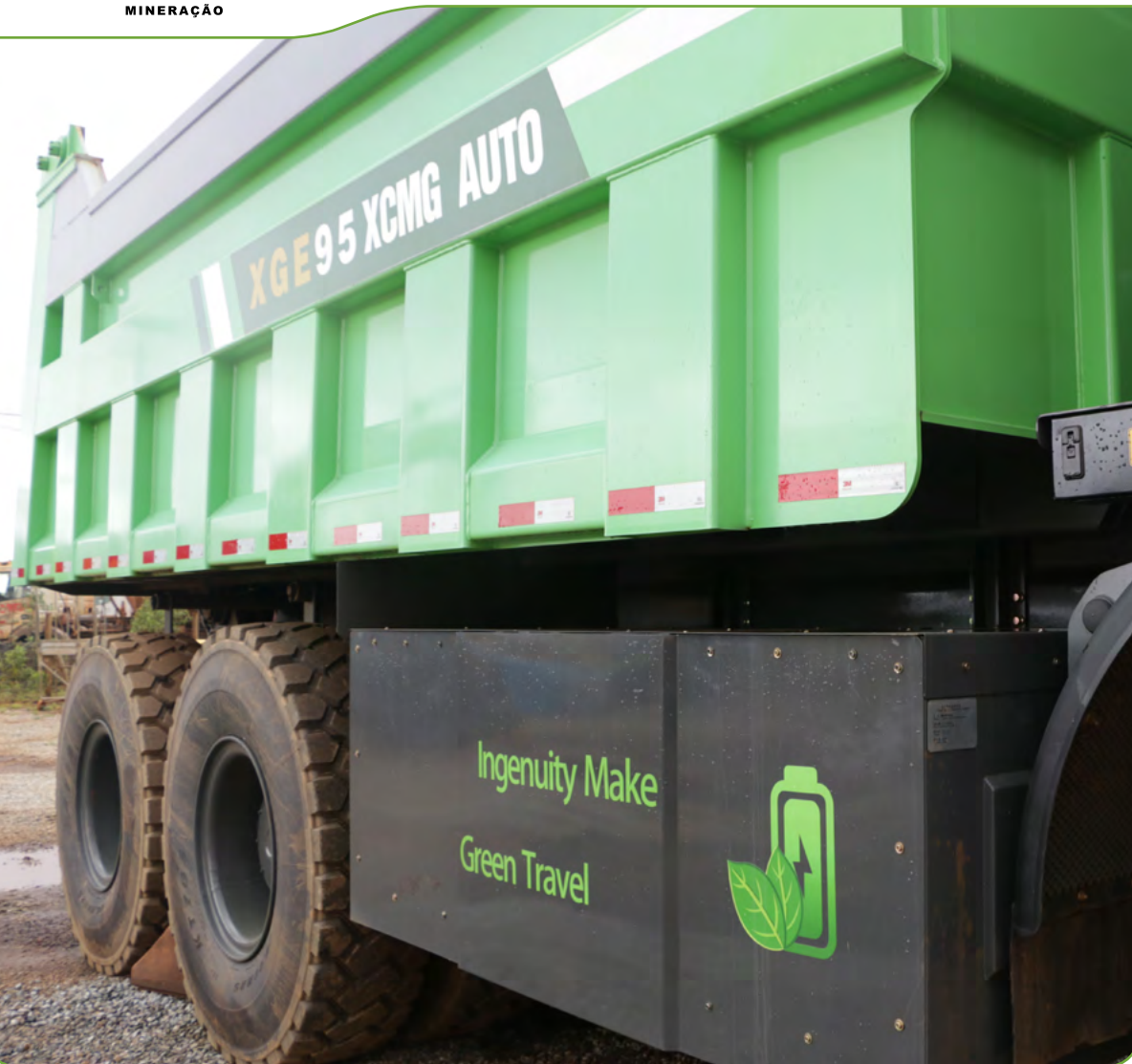
## GHG EMISSIONS INVENTORY<sup>1</sup>

tCO<sub>2</sub>e



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





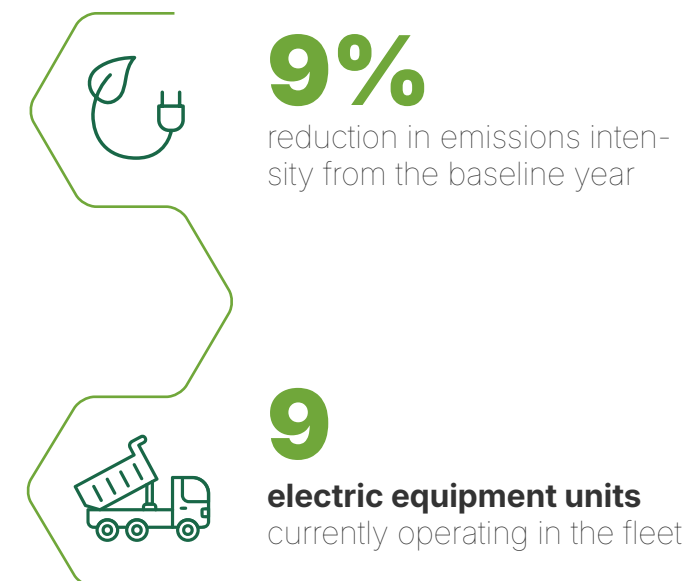
→ An electric truck operating in Congonhas (MG)

CSN Mineração's decarbonization roadmap is regularly updated through a structured methodology focused on planning, developing, implementing, and refining initiatives. One of the key tools we use in decarbonization planning is the MAC (Marginal Abatement Cost) Curve, which is used to assess each decarbonization project and technology in terms of its mitigation benefits and implementation costs. Based on MAC Curve estimates, expanding the use of electric trucks in current and future operations could generate significant Scope 1 emissions reductions, as the electricity source is 100% renewable. In addition, we are exploring alternatives such as replacing diesel with renewable fuels like HVO (hydrogenated vegetable oil), operational efficiency projects, and mine automation technology.

CSN Mineração's decarbonization roadmap is structured into three stages—Blue, Olive and Green—and four key drivers (1. Energy efficiency, 2. Biofuels, 3. Electrification, and 4. Renewable energy), with a goal of achieving net zero in iron ore production by 2044. The roadmap includes structural projects to improve operating efficiency at the Casa de Pedra mine and implement emerging technology, including mine equipment electrification and automation technology.

In 2024, CSN Mineração operated a fleet of nine fully electric pieces of equipment, including an excavator, a wheel loader, and seven trucks, a significant step forward in our effort to gradually replace diesel vehicles with battery-powered alternatives.

Another highlight from the year was our Fuel Management Plan, 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 and reducing diesel consumption. 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.





## Adaptation

CSN Mineração'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 and adapt to changing climate patterns. We actively identify climate challenges that could impact our operations while also exploring emerging opportunities as society evolves.

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 Mineração's capacity to adapt to environmental impacts while transitioning to a more sustainable and resilient business model.

In 2024, CSN Mineração completed a comprehensive Climate Vulnerability Study, a science-based assessment to identify key vulnerabilities under projected climate scenarios. The study employed the most recent climate models to forecast potential shifts in climate patterns and assess their potential impacts

on our operations. Building on these findings, CSN Mineração will develop a Climate Adaptation Plan that outlines strategies to enhance resilience, ensure operational continuity, and mitigate negative climate impacts. This process will be fully compliant with ISO 14.090, which outlines internationally recognized guidelines for climate adaptation planning.

Together, the Climate Vulnerability Study and the Climate Adaptation Plan form a centerpiece of CSN Mineração's transition to a world increasingly shaped by climate-related risks. These tools provide a robust framework for strategic decision-making, equipping CSN Mineração to navigate climate challenges while capitalizing on opportunities created by adaptation efforts.

During 2024, we also updated our Rain Resilience Plan, first implemented in 2023, to accommodate the expansion of our operations. This year's enhancements to the plan are focused on boosting the Company's ability to handle extreme weather events, protecting our operations, workforce, and surrounding communities. Incorporating preventive measures and enhanced strategies, the plan reinforces operational safety and resilience to climate variability, enabling the Company to sustain high production levels even during extreme rainfall events.



→ An employee in a protected area





→ CSN Mineração  
employees -  
Congonhas (MG)

## Stakeholder engagement

CSN Mineração'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. Our approach ensures that stakeholders—including investors, regulators, and the broader public—have access to relevant updates on CSN Mineração's progress via reports such as this Integrated Report and CDP disclosures.

CSN Mineração is a 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. Our evolving ratings and assessment performance over time demonstrate the robustness of our governance systems and the transparency of our disclosures, which helps to build stakeholder confidence in our commitments.

Since 2021, CSN Mineração has been a strong performer on the global CDP platform, which consolidates data on climate governance and water security risks. In 2024, we earned a B score for both our Climate Change and our Water Security questionnaire.

Supporting our decarbonization commitment, in 2024 we joined Pathways to Sustainability, a global Caterpillar-led initiative that supports mining, quarrying, and aggregates companies in their energy transition through specialized

consulting and sustainable technology solutions for emissions reduction. We also made continued progress in developing a strategic sustainable procurement plan, with a focus on decarbonization and supplier engagement to lower emissions across our value chain. As part of this effort, CSN Mineração is rolling out programs to select suppliers based on environmental performance, including low-carbon raw materials. CSN Mineração closely follows developments in Brazil's carbon regulations and the potential implications and opportunities that come with them, as part of a proactive approach to mitigating regulatory risks and establishing our company as a key player in Brazil's shift toward a low-carbon economy.

**CSN has joined  
the Pathways to  
Sustainability initiative,**  
which facilitates  
access to sustainable  
technologies supporting  
emissions reductions



# ECO-EFFICIENCY



## IN THIS CHAPTER

- Water and Effluents

- Air Quality



# Water and Effluents

Water stewardship is a top priority for CSN Mineração, led strategically by the Sustainability department and monitored by the Board of Directors, with advisory support from the ESG Committee. CSN Mineração 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 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 Mineração continuously invests in technologies and initiatives around water

Improved water recycling at the central plant supported a **22% reduction in water withdrawals and a 23% reduction in water intensity**

GRI 303-1, 303-2; SASB EM-MM-140a.2

conservation, reuse, and enhanced water stewardship. At our Casa de Pedra and Pires sites, we operate 47 control systems and 28 monitoring stations. In 2024, there were no recorded nonconformities related to water quality permits, standards, or regulations, including technological violations or breaches of quantitative and qualitative limits.

We conduct controlled discharge of water and liquid effluents in strict compliance with the quality standards set forth in COPAM/CERH Joint Normative Resolution 08/2022 and other applicable regulations.

As part of our water efficiency strategy, CSN Mineração has set an ambitious target to maintain water withdrawal intensity below 0.45 m³ per 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 Mine, with significant progress already made—reaching 92% in 2024. 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. Leveraging a planned suspension of water intake from the dam for production purposes, we carried out modifications to both intake and outflow points, improving water use 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.



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



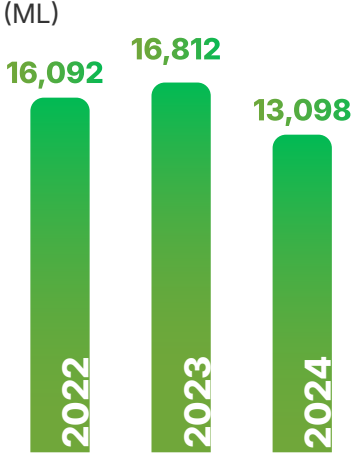
These targets were set with the support of the Water and Effluents Working Group under the ESG Committee, which carried out in-depth analyses of water consumption projections for the Casa de Pedra site. The study took into account factors such as the launch of new plants using advanced technologies, the dam decommissioning project, and the increased production of high-grade iron ore that requires additional beneficiation stages. The evaluations produced a detailed water consumption curve for the next decade, providing a robust basis for strategic planning and decision-making.

In 2024, we reassessed our water-related risks using the Aqueduct Water Risk Atlas platform, confirming that none of our sites are located in areas facing water scarcity. The Casa de Pedra site, which accounts for 99% of the total water withdrawn across operations, is located in a medium water-stress area, underscoring the importance of rigorous water management and an ongoing commitment to eco-efficiency.

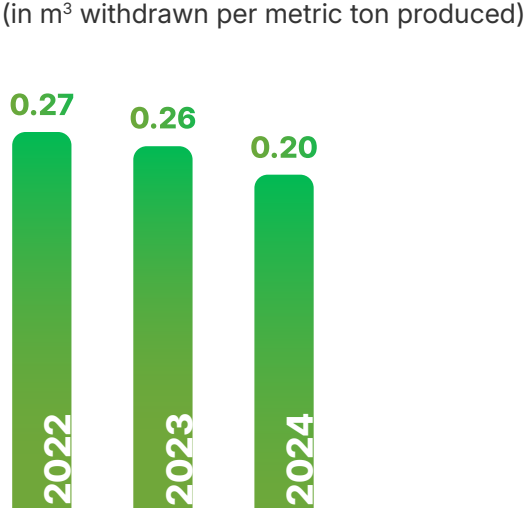
CSN Mineração also supports spring conservation and restoration projects in the Paraopeba River Basin, working in partnership with the State Environmental Department to help improve water availability and quality in the region. These efforts reflect our broader commitment to eco-efficiency, environmental sustainability, and the well-being of the communities where we operate.

In 2024, as part of our contribution to increasing water supply for the city of Congonhas, CSN Mineração, at the invitation of the Environmental Department, launched an initiative to conserve and restore springs within the Paraopeba River Basin. In June 2024, our team, along with a specialized contractor, conducted technical visits to the properties selected to benefit from this initiative. In total, four properties were included in the project, where a total of 11 springs will undergo conservation to improve both the quality and quantity of water available in the region, as well as ensuring the long-term preservation of local water resources.

### WATER WITHDRAWAL



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



<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.



→ Employees



# Air Quality

We are constantly refining our practices to minimize particulate (PM) emissions and mitigate the environmental impacts of our mining and logistics operations, with a strong focus on air quality. In line with our Sustainability Policy and supported by the CSN Group's Environmental Management System (SCA), we are constantly investing in increasingly sustainable processes.

Particulate emissions, one of the main impacts from our operations, are managed through a set of guidelines, procedures, and tools as part of the IMS, including continuous air quality monitoring using automatic and semi-automatic monitoring stations installed in operational areas.

In 2024, CSN Mineração purchased 17 new water trucks, **doubling our spraying capacity**

To reduce particle emissions, CSN Mineração has implemented strict controls and advanced technologies. Adding to our existing emissions control provisions—fixed spraying systems at the mine and plant, mobile water trucks, polymer application, nylon mesh on pit walls, laterite cover on product stockpiles, and hydroseeding on waste and tailings piles—we acquired 17 new water trucks in 2024, effectively doubling the spraying capacity of our fleet. We will also pilot an innovative spraying system using drones, increasing operational efficiency.

As another key milestone, we implemented a predictive technology that analyzes temperature and wind patterns to identify areas at higher risk of particulate emissions, supporting a more agile and proactive response. In 2024, over 440 hectares were protected through slope stabilization and stockpile management, as part of CSN Mineração's commitment to sustainability and the well-being of communities neighboring our operations.

## AIR QUALITY MONITORING

(Inhalable particles PM<10) (µg/m3)<sup>1</sup>

	2022	2023	2024	Air Quality Index
CSN Mineração – Nova Plataforma	32.6	43.3	39.6	Good
CSN Mineração – Basílica	26.7	27.8	37.0	Good
CMIN – EMMA 1 – Plataforma	36.0	30.5	37.1	Good
CSN Mineração – Casa de Pedra	28.0	23.6	33.3	Good
CSN Mineração – Cristo Rei	28.0	24.1	31.7	Good
CSN Mineração – Esmeril	25.0	20.4	32.7	Good
CSN Mineração – Belo Vale	n/a	23.8	36.6	Good
TECAR – Vila Califórnia	25.5	23.3	25.4	Good
TECAR – Vila Aparecida	25.3	19.5	28.2	Good
TECAR – Brisamar	25.0	22.8	29.9	Good
TECAR – Sítio Terezinha	27.2	24.1	31.7	Good

<sup>1</sup> Air quality was considered good in 70% of readings



# APPENDICES



## IN THIS CHAPTER

- GRI Content Index
- SASB Content Index
- Assurance Report
- Credits

→ A CSN Mineração  
employee -  
Congonhas (MG)



# GRI Content Index

Statement of use	CSN Mineração has developed its report in accordance with the GRI Standards for the period from January 1 to December 31, 2024.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	GRI 14: Mining Sector 2024

GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
GENERAL DISCLOSURES							
The organization and its reporting practices							
GRI 2: General Disclosures 2021	2-1 Organizational details	<a href="#">4</a> , <a href="#">30</a>					
	2-2 Companies included in the organization's sustainability reporting	<a href="#">30</a>					
	2-3 Reporting period, frequency and contact point	<a href="#">4</a>					
	2-4 Restatements of information	<a href="#">Databook ESG</a>					
	2-5 External assurance	<a href="#">4</a>					
ACTIVITIES AND WORKERS							
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	<a href="#">30</a> , <a href="#">31</a> , <a href="#">32</a> , <a href="#">34</a> , <a href="#">88</a> , <a href="#">89</a> , <a href="#">90</a>   <a href="#">Databook ESG</a>					
	2-7 Employees	<a href="#">71</a>   <a href="#">Databook ESG</a>					8, 10
	2-8 Workers who are not employees	<a href="#">71</a>   <a href="#">Databook ESG</a>					8



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
GOVERNANCE							
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	<a href="#">53</a> , <a href="#">54</a> , <a href="#">55</a> , <a href="#">56</a>					5, 16
	2-10 Nominating and selecting the highest governance body	<a href="#">53</a> , <a href="#">54</a> , <a href="#">55</a> , <a href="#">56</a>					5, 16
	2-11 1 Chair of the highest governance body	<a href="#">53</a> , <a href="#">55</a>					16
	2-12 Role of the highest governance body in overseeing the management of impacts	<a href="#">53</a> , <a href="#">54</a> , <a href="#">55</a> , <a href="#">56</a> , <a href="#">67</a> , <a href="#">68</a>					16
	2-13 Delegation of responsibility for managing impacts	<a href="#">67</a> , <a href="#">68</a>					
	2-14 Highest governance body's role in sustainability reporting	<a href="#">4</a> , <a href="#">6</a> , <a href="#">7</a>					
	2-15 Conflicts of interest	<a href="#">61</a>					16
	2-16 Communicating critical concerns	<a href="#">53</a> , <a href="#">54</a> , <a href="#">55</a> , <a href="#">56</a>					
	2-17 Collective knowledge of the highest governance body	<a href="#">53</a> , <a href="#">54</a> , <a href="#">55</a> , <a href="#">56</a>					
	2-18 Evaluating the highest governance body's performance	<a href="#">57</a>					
	2-19 Remuneration policies	<a href="#">57</a>	b	Confidentiality restrictions	CMIN's remuneration policy is confidential.		
	2-20 Process for determining remuneration	<a href="#">57</a>					
	2-21 Annual total compensation ratio	<a href="#">Databook ESG</a>					



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
STRATEGY, POLICIES AND PRACTICES							
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	<a href="#">19</a> , <a href="#">20</a> , <a href="#">21</a> , <a href="#">22</a>					
	2-23 Policy commitments	<a href="#">58</a> , <a href="#">59</a> , <a href="#">60</a> , <a href="#">61</a> , <a href="#">67</a> , <a href="#">68</a>					16
	2-24 Embedding policy commitments	<a href="#">58</a> , <a href="#">59</a> , <a href="#">60</a> , <a href="#">61</a> , <a href="#">67</a> , <a href="#">68</a>					
	2-25 Processes to remediate negative impacts	<a href="#">91</a> , <a href="#">93</a> , <a href="#">94</a> , <a href="#">95</a> , <a href="#">96</a>					
	2-26 Mechanisms for seeking advice and raising concerns	<a href="#">59</a> , <a href="#">60</a>   <a href="#">Databook ESG</a>					16
	2-27 Compliance with laws and regulations	<a href="#">Databook ESG</a>					
	2-28 Membership associations	<a href="#">Databook ESG</a>					
STAKEHOLDER ENGAGEMENT							
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	<a href="#">6</a> , <a href="#">7</a> , <a href="#">71</a> , <a href="#">72</a> , <a href="#">73</a> , <a href="#">74</a> , <a href="#">78</a> , <a href="#">79</a> , <a href="#">88</a> , <a href="#">89</a> , <a href="#">90</a> , <a href="#">91</a> , <a href="#">93</a> , <a href="#">94</a> , <a href="#">95</a> , <a href="#">96</a>					
	2-30 Collective bargaining agreements	<a href="#">71</a>					8
MATERIAL TOPICS							
GRI 3: Material Topics 2021	3-1 Process to determine material topics	<a href="#">6</a> , <a href="#">7</a>					
	3-2 List of material topics	<a href="#">7</a>					
ETHICS AND COMPLIANCE							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">58</a> , <a href="#">59</a> , <a href="#">60</a> , <a href="#">61</a>					



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	<a href="#">58</a>					16
	205-2 Communication and training on anti-corruption policies and procedures	<a href="#">58, 59, 60</a>   <a href="#">Databook ESG</a>	a	Not applicable	The CSN Group's Compliance training program does not cover employees not hired under the Brazilian Consolidated Labor Regulations, such as members of the Board of Directors and the Statutory Executive Board. However, while this group is not required to complete the annual Compliance training through the Corporate University platform, the content is made available to all executives on an optional basis—and several chose to complete it in 2024.		16
	205-3 Confirmed incidents of corruption and actions taken	<a href="#">59, 60</a>					16
GRI 14: Mining Sector 2024	Describe the approach to contract transparency	<a href="#">50</a>				14.22.5	
	Report the following information about the organization's beneficial owners, including joint ventures: name, nationality and country of residence; whether they are politically exposed persons; level of wnership; how ownership or control is exerted	<a href="#">57</a>				14.22.6	



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
GRI 207: Taxes 2019	207-1 Approach to tax	<a href="#">50, 51</a>					1, 10, 17
	207-2 Tax governance, control and risk management	<a href="#">50, 51</a>					1, 10, 17
	207-3 Stakeholder engagement and management concerns related to tax	<a href="#">50, 51</a>					1, 10, 17
	207-4 Country-by-country reporting	<a href="#">Databook ESG</a>					1, 10, 17
<b>VALUE CHAIN</b>							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">88, 89, 90</a>					
GRI 204: Procurement practices 2016	204-1 Proportion of spending on locally-based suppliers	<a href="#">88, 89, 90</a>				14.9.5	8
GRI 308: Supplier environmental assessment 2016	308-1 New suppliers that were screened using environmental criteria	<a href="#">Databook ESG</a>					
GRI 414: Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	<a href="#">85, 86, 87, 88, 89, 90</a>   <a href="#">Databook ESG</a>				14.17.9	5, 8, 16
<b>PEOPLE MANAGEMENT AND DE&amp;I</b>							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">88, 89, 90</a>					
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	<a href="#">Databook ESG</a>				14.17.3	4, 5, 8, 10
	401-3 Parental leave	<a href="#">Databook ESG</a>				14.17.5	5, 8



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	<a href="#">71, 72, 73, 74, 75</a>   <a href="#">Databook ESG</a>				14.17.7	4, 5, 8, 10
	404-3 Percentage of employees receiving regular performance and career development reviews	<a href="#">Databook ESG</a>					5, 8, 10
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	<a href="#">Databook ESG</a>				14.21.5	5, 8
	405-2 Ratio of basic salary and remuneration of women to men	<a href="#">Databook ESG</a>				14.21.6	5, 8, 10
GRI 406: Non- discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	<a href="#">Databook ESG</a>				14.21.7	5, 8
<b>HUMAN RIGHTS</b>							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">85, 86, 87</a>					
GRI 408: Child labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	<a href="#">85, 86, 87</a>				14.18.2	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="#">85, 86, 87</a>				14.19.2	5, 8
GRI 410: Security practices 2016	410-1 Security personnel trained in human rights policies or procedures	<a href="#">85, 86, 87</a>				14.14.2	16
GRI 411: Rights of indigenous peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	<a href="#">Databook ESG</a>				14.11.2	2
	Report whether the organization has been involved in a process of seeking free, prior, and informed consent (FPIC) from Indigenous Peoples for any of the organization's activities	<a href="#">Databook ESG</a>				14.11.4	



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
HEALTH, SAFETY AND WELL-BEING							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					8
	403-2 Hazard identification, risk assessment, and incident investigation	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					8
	403-3 Occupational health services	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					8
	403-4 Worker participation, consultation, and communication on occupational health and safety	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					8, 16
	403-5 Worker training on occupational health and safety	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					9
	403-6 Promotion of worker health	<a href="#">76</a> , <a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					3
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					8
	403-8 Workers covered by an occupational health and safety management system	<a href="#">80</a> , <a href="#">82</a> , <a href="#">83</a> , <a href="#">84</a>					8
	403-9 Work-related injuries	<a href="#">Databook ESG</a>					3, 8, 16
	403-10 Work-related ill health	<a href="#">Databook ESG</a>					3, 8, 16



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
LOCAL COMMUNITIES							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">91</a> , <a href="#">93</a> , <a href="#">94</a> , <a href="#">95</a> , <a href="#">96</a>					
GRI 203: Indirect economic impacts 2016	203-1 Infrastructure investments and services supported	<a href="#">91</a> , <a href="#">93</a> , <a href="#">94</a> , <a href="#">95</a> , <a href="#">96</a>					5, 9, 11
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	<a href="#">91</a> , <a href="#">93</a> , <a href="#">94</a> , <a href="#">95</a> , <a href="#">96</a>					
	413-2 Operations with significant actual or potential negative impacts on local communities	<a href="#">91</a> , <a href="#">93</a> , <a href="#">94</a> , <a href="#">95</a> , <a href="#">96</a>					1, 2
GRI 14: Mining Sector 2024	Report the percentage of workers hired from the local community at the mine-site level, broken down by gender, and the organization's definition used for 'local community'.	<a href="#">74</a>				14.9.6	
	For each mine site, report: the number and types of grievances from local communities during the reporting period; the percentage of grievances that were addressed and resolved during the reporting period; the percentage of grievances resolved through remediation during the reporting period.	<a href="#">91</a>				14.10.4	



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
CLIMATE CHANGE							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">108</a> , <a href="#">109</a> , <a href="#">110</a>					
GRI 201: Economic performance	201-2 Financial implications and other risks and opportunities due to climate change	<a href="#">65</a> , <a href="#">66</a> , <a href="#">108</a>				14.2.2	13
GRI 302: Energy 2016	302-1 Energy consumption within the organization	<a href="#">Databook ESG</a>				14.1.2	7, 8, 12, 13
	302-2 Energy consumption outside of the organization	<a href="#">Databook ESG</a>				14.1.3	7, 8, 12, 13
	302-3 Energy intensity	<a href="#">Databook ESG</a>				14.1.4	7, 8, 12, 13
	302-4 Reduction of energy consumption	<a href="#">108</a> , <a href="#">110</a> , <a href="#">111</a>					7, 8, 12, 13
GRI 305: Emissions	305-1 Direct (Scope 1) GHG emissions	<a href="#">108</a>   <a href="#">Databook ESG</a>				14.1.5	3, 12, 13, 14, 15
	305-2 Energy indirect (Scope 2) GHG emissions	<a href="#">108</a>   <a href="#">Databook ESG</a>				14.1.6	3, 12, 13, 14, 15
	305-3 Other indirect (Scope 3) GHG emissions	<a href="#">108</a>   <a href="#">Databook ESG</a>				14.1.7	3, 12, 13, 14, 15
	305-4 GHG emissions intensity	<a href="#">Databook ESG</a>				14.1.8	13, 14, 15
	305-5 Reduction of GHG emissions	<a href="#">10</a> , <a href="#">108</a> , <a href="#">110</a> , <a href="#">111</a>				14.1.9	13, 14, 15



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
ECO-EFFICIENCY							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">115</a> , <a href="#">116</a>					
GRI 303: Water and effluents 2018	303-1 Interactions with water as a shared resource	<a href="#">115</a> , <a href="#">116</a>				14.7.2	6, 12
	303-2 Management of water discharge related impacts	<a href="#">115</a> , <a href="#">116</a>				14.7.3	6
	303-3 Water withdrawal	<a href="#">Databook ESG</a>				14.7.4	6
	303-4 Water discharge	<a href="#">Databook ESG</a>				14.7.5	6
	303-5 Water consumption	<a href="#">Databook ESG</a>				14.7.6	6
GRI 305: Emissions	305-7 NOX, SOX, and other significant air emissions	<a href="#">Databook ESG</a>				14.3.2	3, 12, 14, 15
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	<a href="#">102</a>				14.5.2	3, 6, 11, 12
	306-2 Management of significant waste-related impacts	<a href="#">102</a>				14.5.3	3, 6, 8, 11, 12
	306-3 Waste generated	<a href="#">Databook ESG</a>				14.5.4	3, 6, 11, 12
	306-4 Waste diverted from disposal	<a href="#">Databook ESG</a>				14.5.5	3, 11, 12
	306-5 Waste directed to disposal	<a href="#">Databook ESG</a>				14.5.6	3, 6, 11, 12, 15
TAILINGS DAMS AND CO-PRODUCTS							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">99</a> , <a href="#">100</a> , <a href="#">101</a>					



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
GRI 14: Mining Sector 2024	Report the tailings disposal methods used by the organization	<a href="#">102</a>				14.6.2	
	List the organization's tailings facilities, and report the name, location, and ownership status, including whether the organization is the operator.	<a href="#">102</a>				14.6.3	
	Report the number of critical incidents in the reporting period, describe their impacts, and actions taken to remediate them.	<a href="#">82</a> , <a href="#">83</a>				14.15.3	
	Report the percentage of mine sites that have emergency preparedness and response plans in place, and list the sites that do not.	<a href="#">101</a>				14.15.4	
BIODIVERSITY							
GRI 3: Material Topics 2021	3-3 Management of material topics	<a href="#">104</a> , <a href="#">105</a> , <a href="#">106</a>					
GRI 101: Biodiversity 2024	101-1 Policies to halt and reverse biodiversity loss	<a href="#">104</a> , <a href="#">105</a> , <a href="#">106</a>					
	101-2 Management of biodiversity impacts	<a href="#">104</a> , <a href="#">105</a> , <a href="#">106</a>					
	101-4 Identification of biodiversity impacts	<a href="#">104</a> , <a href="#">105</a> , <a href="#">106</a>					
	101-5 Locations with biodiversity impacts	<a href="#">104</a> , <a href="#">105</a> , <a href="#">106</a>   <a href="#">Databook ESG</a>					
	101-8 Ecosystem services	<a href="#">Databook ESG</a>					



GRI Standard / Other Source	Disclosure	Location	Omission			GRI Sector Standard Ref. No.	SDG
			Requirements Omitted	Reason	Explanation		
ADDITIONAL DISCLOSURES NOT INCLUDED IN THE MATERIALITY TOPICS BUT MAINTAINED IN THE REPORT FOR GREATER TRANSPARENCY AND COMPARABILITY							
GRI 201: Economic performance	201-1 Direct economic value generated and distributed	<a href="#">48</a> , <a href="#">49</a>					8, 9
GRI 202: Market presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	<a href="#">76</a>   <a href="#">Databook ESG</a>					5, 8
GRI 206: Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	<a href="#">Databook ESG</a>					16
GRI 301: Materials 2016	301-1 Materials used by weight or volume	<a href="#">Databook ESG</a>					8, 12
	301-2 Recycled input materials used	<a href="#">Databook ESG</a>					8, 12
GRI 305: Emissions	305-6 Emissions of ozone-depleting substances (ODS)	<a href="#">Databook ESG</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="#">76</a>					3, 5, 8
GRI 407: Freedom of association and collective bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<a href="#">85</a> , <a href="#">86</a> , <a href="#">87</a>					8
GRI 14: Mining Sector 2024	Report the number of strikes and lockouts involving 1,000 or more workers lasting one full shift or longer, and their total duration in worker days idle.	<a href="#">Databook ESG</a>				14.20.3	



# SASB Content Index

## Metals & Mining 2023

SASB Disclosure	SASB Code	Metrics requested by SASB	Page
Greenhouse gas emissions	EM-MM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	<a href="#">Databook ESG</a>
	EM-MM-110a.2	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	<a href="#">65, 108, 110, 111, 112, 113</a>
Air quality	EM-MM-120a.1	Air emissions for the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs).	<a href="#">117</a>   <a href="#">Databook ESG</a>
Energy management	EM-MM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	<a href="#">Databook ESG</a>
Water management	EM-MM-140a.1	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	<a href="#">Databook ESG</a>
	EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	<a href="#">115, 116</a>   <a href="#">Databook ESG</a>
Waste & hazardous materials management	EM-MM-150a.4	Total weight of non-mineral waste generated	<a href="#">Databook ESG</a>
	EM-MM-150a.5	Total weight of tailings produced	<a href="#">Databook ESG</a>
	EM-MM-150a.6	Total weight of waste rock generated	<a href="#">Databook ESG</a>
	EM-MM-150a.7	Total weight of hazardous waste generated	<a href="#">Databook ESG</a>
	EM-MM-150a.8	Total weight of hazardous waste recycled	<a href="#">Databook ESG</a>
	EM-MM-150a.9	Number of significant incidents associated with hazardous materials and waste management	<a href="#">Databook ESG</a>
	EM-MM-150a.10	Description of waste and hazardous materials management policies and procedures for active and inactive operations	<a href="#">102</a>
Biodiversity impacts	EM-MM-160a.1	Description of environmental management policies and practices for active sites	<a href="#">104, 105, 106</a>
	EM-MM-160a.2	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	<a href="#">Databook ESG</a>
	EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	<a href="#">Databook ESG</a>



SASB Disclosure	SASB Code	Metrics requested by SASB	Page
Security, human rights & rights of indigenous peoples	EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	<a href="#">Databook ESG</a>
	EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	<a href="#">Databook ESG</a>
	EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	<a href="#">Databook ESG</a>
Community engagement	EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	<a href="#">85, 86, 87, 91, 93, 94, 95, 96</a>
	EM-MM-210b.2	Number and duration of strikes and lockouts	<a href="#">Databook ESG</a>
Labor relations	EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	<a href="#">71, 72, 73, 74, 75</a>
	EM-MM-310a.2	Number and duration of non-technical delays	<a href="#">Databook ESG</a>
Workforce health and safety	EM-MM-320a.1	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	<a href="#">Databook ESG</a>
Business integrity and ethics	EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	<a href="#">Databook ESG</a>
	EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	<a href="#">Databook ESG</a>
Tailings storage facilities management	EM-MM-540a.1	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	<a href="#">Databook ESG</a>
	EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	<a href="#">100, 101, 102</a>
	EM-MM-540a.3	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	<a href="#">100, 101</a>
Activity metrics	EM-MM-000.A	Production of (1) metal ores and (2) finished metal products	<a href="#">Databook ESG</a>
	EM-MM-000.B	Total number of employees, percentage contractors	<a href="#">71, 72, 73, 74, 75</a>   <a href="#">Databook ESG</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.)

Grant Thornton Auditores Independentes Ltda.  
Av. Eng. Luiz Carlos Berrini, 105 -  
12º andar, Itaim Bibi, São Paulo (SP) Brasil  
T +55 11 3886-5100  
www.grantthornton.com.br

To the Shareholders, Directors and Management of  
**CSN Mineração S.A.**  
São Paulo - SP

## Introduction

We have been engaged by CSN Mineração S.A. (the Company) to present our independent auditor's limited assurance report on the non-financial information included in the Integrated Report 2024 of the Company and its respective supplementary contents from attachment ESG Databook, hereinafter collectively referred to as the "Integrated Report 2024" of CSN Mineração S.A. 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 Metals & Mining (EM-MM) sector 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-MM (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 the CSN Mineração S.A.'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-MM (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 - **Chairman**

Marcelo Cunha Ribeiro

Enéas Garcia Diniz

Helena Brennand Guerra

Hisakazu Yamaguchi

Miguel Ethel Sobrinho

Yoshiaki Nakano

Daisuke Hori

## EXECUTIVE BOARD

Carlos Rodrigues de Campos Mello Júnior

**Superintendent Director**

Claudio Musso Velloso

**Chief Production Officer**

Kan Bito

**Chief Strategic Planning Officer**

Pedro Barros Mercadante Oliva

**CFO and Investor Relations Officer**

Otto Alexandre Levy Reis

**Chief Investment Officer**

## GENERAL COORDINATION

### Sustainability, Health, Safety, Environment, and Assets

Helena Brennand Guerra

**Diretora**

Beatriz Candido Alonso

Débora Caroline Sá Meneguetti

Eduardo Guadagnini Lima

Fernando Henriques Salina

Flavia Tranjan Andreotti

Karoline Castro Oliveira Francisco

Lívia Ballot de Miranda

Maria Eduarda Rodrigues da Cunha

Renan Reis

### CSN Inova

Alessandra Steinbruch

Catarina Lagnado

### Institutional

Carlos Miranda Lima

Jeniffer Villapando

Walasse Luiz de Souza Oliveira

## 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.

Published April 2025.