



# Sustainability Report 2024



**Dayane Barros**  
Locomotive Engineer

Photo taken in compliance with safe protocols,  
while train was parked at Jundiaí Yard, São Paulo.



# Contents

03	A Message from Leadership	53	Waste Management
05	About This Report	57	Water Management
06	Materiality		
07	2024 Highlights	59	Caring for People
08	Awards & Recognitions	60	Our Workforce
09	About MRS	61	Advancing Diversity & Inclusion
12	Our Operations	73	Health & Safety
17	ESG Agenda	84	Society & Community Engagement
		96	Customer Experience
21	Stewardship of Our Business	98	Supplier Partnerships
22	Corporate Governance		
31	Innovation & Technology	100	Performance Overview
36	Cybersecurity & Information Security	101	Operational Performance
		103	Financial Performance
38	Caring for the Planet	105	Investments & Cargo Diversification
39	Environmental Management System	107	Appendix
45	Climate Strategy & Energy Efficiency	121	GRI and SASB Content Index
52	Energy Management		

# A Message from Leadership

GRI 2-22



The year 2024 was marked by significant progress in our sustainability journey. From a governance perspective, the Sustainability Committee, established in 2023, played an exceptionally relevant role, with active participation from our shareholder representatives, thus strengthening our management model and aligning our practices with major market benchmarks.

Inspired by our shareholders – Vale, CSN, Usiminas and Gerdau – each with their own expertise and excellence across ESG Agenda topics, we advanced in designing and implementing initiatives that helped reduce our learning curve. This collaboration enabled us to set clear, transparent public commitments, with specific targets guiding our sustainable transformation.

We have pledged to reduce the intensity of our greenhouse gas emissions by 15% by 2035. To meet this goal, we are deploying a robust set of actions underway. These include technological advancements, replacing locomotives with more energy-efficient models, increasing the use of renewable fuels and improving our operational processes.

We have also pledged to ensure that, by 2030, at least 34% of leadership roles at MRS are held by women. In 2024, we reached 26.7%. This transformation will require a collective effort across all areas of the company, and we are prepared to move forward—building a more diverse, inclusive environment in line with best practices. While we do not yet have female representation on our Board of Directors, we are fully committed to changing that in 2025.

Our commitment to safety is unwavering: zero loss of life due to occupational accidents and a total recordable incident rate below 1.00 for both employees and contractors. This is a critical challenge, especially during a period of intensive infrastructure work in urban areas across the three states where we operate – Minas Gerais, Rio de Janeiro and São Paulo – driven by the extension of our concession agreement through 2056. This situation involves a substantial number of professionals from various companies, demanding utmost attention to safety measures.

Unfortunately, at the end of 2024, we recorded a severe occupational accident resulting in the death of a third-party worker. We express

## A Message from Leadership

[About This Report](#)
[2024 Highlights](#)
[Awards & Recognitions](#)
[About MRS](#)
[ESG Agenda](#)
[Stewardship of Our Business](#)
[Caring for the Planet](#)
[Caring for People](#)
[Performance Overview](#)
[Appendix](#)
[GRI/SASB Index](#)



our deepest condolences and stand in solidarity with their family, colleagues, and the company involved. This tragic event further reinforces our resolve to continuously improve our safety protocols, training programs, and operational practices, ensuring that everyone returns home safely at the end of each workday.

To ensure that our progress remains consistent, efficient, and aligned with our core values, we have introduced two new policies: Human Rights and Diversity, Equity and Inclusion. These policies outline our guidelines for ethical and respectful conduct, aligned with international standards of equity, dignity, representativeness and justice.

We achieved a significant milestone with total investments exceeding R\$2.8 billion. It was an intense year in terms of deliveries, with the completion of 46 projects. Expanding this volume of projects required close coordination across our Safety, Environmental, Institutional Relations and Community Engagement teams to ensure transparent and effective communication with all stakeholders, from project design through implementation.

Operationally, we set a new record in freight volume, reaching 202.5 million metric tons, a 2.6% increase over 2023. We also doubled our fleet of long-haul, high-capacity trains (with 272 railcars each), generating productivity and energy efficiency gains. Our economic and financial results, detailed in our Annual Report, includes net revenue of R\$7 billion, with notable net income growth of 17.9% compared to the previous year. These figures underscore our commitment to continuous and sustainable growth.

We believe the best logistics solutions involve rail-based transport. Over the next few years, we aim to continue advancing toward integrated logistics, combining different transportation modes to boost efficiency, lower costs and optimize service time for our General Cargo customers, thus enhancing our competitiveness.

We are nearing completion of the Horto Multimodal Terminal in Belo Horizonte, Minas Gerais, designed to meet the region’s expected growth.

In the coming years, we will see increased automation, investments in robotics and digital transformation of

processes with customer experience, automated maintenance facilities, video analytics for operational monitoring and the deployment of sensors to anticipate issues in tunnels, bridges and viaducts, among other initiatives.

All these advancements will create a broad portfolio of new growth opportunities at MRS, driven by innovation, continuous learning and career prospects.

Finally, we recognize that the global ESG debate is evolving faces challenges amid political and economic changes, but our perspective remains firm: sustainability is the foundation of a more resilient, efficient and responsible future. We believe that companies that pursue this path will gain greater strength and relevance. Regardless of external changes, we will continue to strengthen our sustainability practices, because we are increasingly committed to keep doing the right thing.

**Guilherme Segalla de Mello**  
CEO



**A Message from Leadership**

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

# About This Report

GRI 2-2, 2-3, 2-5

We are proud to present the sixth edition of our Sustainability Report – a publication that reaffirms our commitment to responsible management and to building a more ethical and sustainable future. We believe this report is as a valuable strategic tool for transparently communicating the key actions, progress, and challenges along our sustainability journey. This report covers the period from January 1, 2024 to December 31, 2024.

The production process for this Sustainability Report has proven to be a rich learning opportunity, driven by collaboration, integration and the collective effort of a large team. It also provides a holistic view of our organization's dynamics, processes and interfaces.

Transparent disclosure is essential to keeping our stakeholders informed about impacts and our ongoing efforts to mitigate risks while promoting best environmental, social, and governance (ESG) practices. This report highlights the most relevant updates

in our sustainability management and outlines how we identify, mitigate and monitor impacts in line with our priority themes.

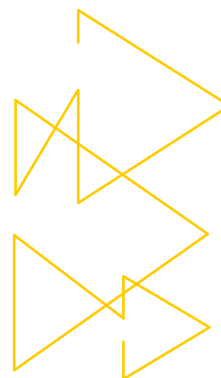
This report has been prepared in accordance with the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) standards. It also integrates the UN Sustainable Development Goals (SDGs), ensuring that our performance indicators are presented in a clear, reliable and comparable manner.

We also adopted the principles of Integrated Reporting (IR), as proposed by the International Integrated Reporting Council (IIRC), emphasizing the synthesis and connection between performance indicators and value creation across short-, medium- and long-term horizons. This model considers six categories of capital: financial, intellectual, human, social and relationship, manufactured and natural. In addition, to align with the expectations of capital market stakeholders we also applied the Sustainability Accounting Standards Board (SASB) Materiality Map to prioritize relevant financial aspects.

All content in this report was reviewed and approved by the company's senior management and has not been subject to external audit.

We invite you to explore the 2024 MRS Sustainability Report—a reflection of our ongoing pursuit of efficiency, innovation and social and environmental responsibility.

**FOR QUESTIONS,  
SUGGESTIONS OR COMMENTS  
REGARDING THE CONTENT  
OF THIS SUSTAINABILITY  
REPORT, PLEASE CONTACT  
US VIA OUR WEBSITE**



Dayane Barros



2024 Sustainability Report



A Message from  
Leadership

About This  
Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

Stewardship of  
Our Business

Caring for the  
Planet

Caring for People

Performance  
Overview

Appendix

GRI/SASB  
Index



Click on  
each icon  
to learn about  
the impacts

# Materiality

GRI 3-1, 3-2

As there were no updates to our materiality assessment during the reporting period, we continue to apply the Impact Materiality Matrix developed in 2021 (full version available on page 108), prepared with the support of an external consultancy. This report highlights the 12 most relevant topics for our business from a sustainability perspective. They were identified through a methodology of active listening to internal and external stakeholders and analysis of internal and external contexts, considering GRI guidelines, assessments by *Sustainalytics*, the Corporate Sustainability Assessment (SAM CSA), the Sustainability Accounting Standards Board (SASB), the Morgan Stanley Capital International (MSCI), the Sustainable Development Goals (SDGs) and the SDG Industry Matrix for

Transportation sectoral study, developed in partnership with KPMG.

## Impact Assessment

A structured and thorough impact assessment enabled us to comprehensively evaluate the positive and negative effects of our operations across environmental, social, and economic dimensions. We sought to better understand the relevance of these topics to both MRS and our stakeholders, as well as the measures in place to mitigate risks or enhance opportunities. The insights from this assessment guide our sustainability strategy, contributing to a solid and responsible decision-making process.





# 2024 Highlights

## +Transportation

Record freight volume  
**202.5** million tons

## -Emissions

**-2.4%**  
absolute emissions  
(Scopes 1 and 2)

Net income  
**R\$1.4** billion

**8.92** gCO<sub>2</sub>e/TKM  
in specific emissions

Net revenue  
**R\$7.0** billion

**Score B**  
in Climate by CDP

EBITDA  
**R\$3.6** billion

Investment  
+  
**R\$2.8** billion

## Women

**26.7%** in leadership positions  
**16.6%** of total workforce

+  
**390,000** training hours delivered

**R\$21** million  
46 incentive-based projects

We also defined our  
Commitment Plan

# Awards & Recognitions

Awards represent external validation of our best practices, innovations and positive impact on the market and society, highlighting our genuine commitment to sustainability and to the growth of the railroad sector.

## The Brazilian Land Transport Regulatory Agency 2024 Highlights Award

The 2<sup>nd</sup> edition of the ANTT 2024 Highlights Award doubled its scope compared to 2023, with 226 projects submitted across six classes and 11 categories, including both road and rail concessionaires.

For the **second consecutive year**, we won the **Gold Trophy** in the Special Class **“Railroad Regulatory Highlights,”** reaffirming our excellence in engaging with the granting authority and strengthening our role as a logistics benchmark.

We also won in three other categories:



**User Experience – Railcar Loading Using Computer Vision:** This project leverages artificial intelligence and camera systems to monitor railcar loading, turning data into dashboards that support decision-making.



**Energy Efficiency – Restructuring of Train Circulation Model:** Focusing on the Ferrovia do Aço, one of the most challenging sections of our network, we implemented an intelligent scheduling system that optimizes energy consumption and improves operational efficiency.



**Internal Management and People Development – Affirmative Internship Program:** Launched in 2024, this program promotes the inclusion of people with disabilities and aligns with our values and best practices of respect for diversity and appreciation of individuals.



## Valor 1000 Award

We won in the “Transportation and Logistics” category of the Valor 1000 Award, organized by the Valor Econômico newspaper. This initiative acknowledges and values leading companies in the Brazilian business scene based on a thorough analysis of performance indicators, innovation, management and sustainability practices.

# About MRS

GRI 2-1, 2-2

We are MRS, one of the world's leading freight railroads, operating in the Southeast region of Brazil. Our 1,643-kilometer railroad network connects the states of São Paulo, Minas Gerais, and Rio de Janeiro – together accounting for half of the country's Gross Domestic Product (GDP). We serve 107 municipalities and connect some of the key industrial hubs, as well as major producers of mineral and agricultural commodities to five of Brazil's main and largest ports. Through multimodal logistics solutions, we transport goods across the entire country and to international markets.

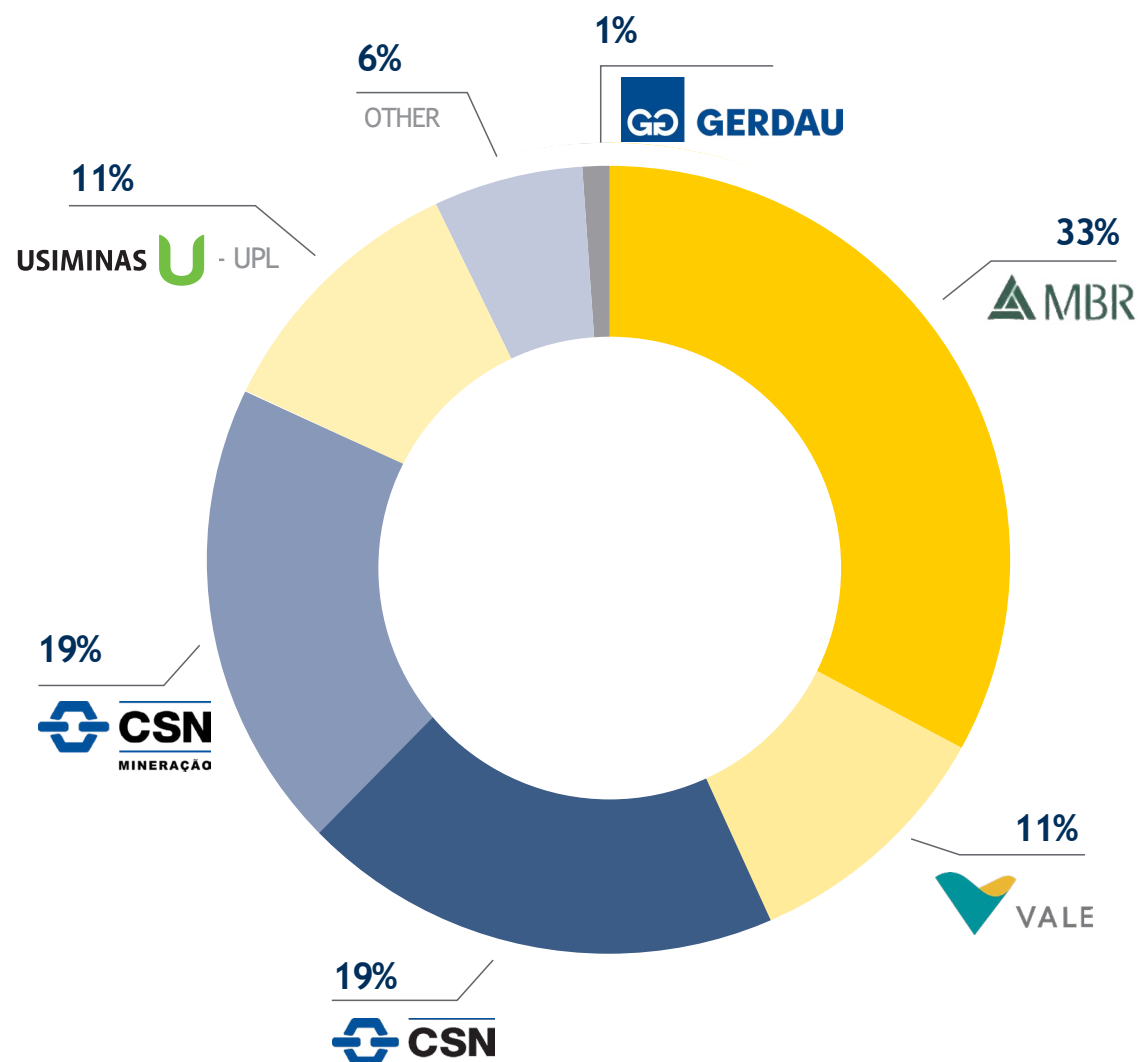
MRS is a publicly traded company listed on B3 with Minerações Brasileiras Reunidas (MBR), Vale, Companhia Siderúrgica Nacional (CSN), CSN Mineração, Gerdau and Usiminas – UPL as major shareholders. Founded in 1996 during the privatization of Brazil's railroad system, we had our concession renewed in 2022 through 2056, boosting new investments and marking the beginning of a new era.

LEARN MORE ABOUT US BY  
WATCHING OUR  
CORPORATE VIDEO



## Shareholding Structure

GRI 2-1, 2-2, 2-15, 201-4





Our Essence

GRI 2-2

Our principles, beliefs, purpose and aspirations shape our identity and guide the way we act. They guide our decisions and determine how we contribute to building a more prosperous, fair, ethical and sustainable society.



### Belief

The best logistics solutions involve railroads. We are essential and have the power to improve society and our surroundings.



### Purpose

To create and operate increasingly competitive and reliable integrated logistics solutions that generate results and well-being for society.



### Aspirations

To be the preferred provider of integrated logistics through more sustainable and profitable solutions. To be recognized and admired for our integrity and positive impact on society and the environment.



### Principles

#### Integrity

Fulfilling commitments, respecting others, and being mindful of their well-being enable us to mitigate risks and build lasting relationships.

#### Safety

A fundamental requirement of our operations. Stable systems and equipment ensure trustworthy relationships with the communities around our railroad and are vital to the long-term success of our business.

#### Excellence

Our ongoing pursuit of higher operational and management standards is key to maintaining our competitiveness.

#### Diversity

Different perspectives are welcome. Greater diversity and inclusion in an environment increases our potential to innovate and overcome challenges efficiently and swiftly.

#### Openness to New Ideas

We value continuous learning. Our constant pursuit of knowledge enables us to innovate and explore new paths.

#### Agility

Agility is a matter of survival. We value simplicity because it streamlines processes, enhances understanding, creates safety and accelerates decision-making.

#### Customer Focus

Every customer is unique. By adopting their perspectives and understanding their challenges, we can exceed their expectations.

#### People

Our engaged employees make the difference. Inspiring, developing and recognizing their contributions empowers our talents to take ownership, collaborate and be capable of achieving higher goals.



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



## Six Agendas, Our Priorities



### Business Transformation

Advance our culture, management model and governance practices



### Customer Solutions & Growth

Become the preferred provider of integrated logistics solutions



### Digital & Technology

Build new capabilities and support business transformation



### Operational Excellence

Achieve sustainable and profitable growth through operational excellence



### New Contract & Regulatory Management

Manage the new concession agreement and its associated regulations with integrity and efficiency



### ESG - Sustainability

Generate a positive impact on the environment and society by consolidating ESG practices and market commitments

## Opportunities and Challenges

With the early renewal of our concession in 2022, we redefined our strategic framework and are fully committed to its implementation through our agendas and strategic objectives.

We have restructured our strategy management model by refining internal processes and establishing an annual validation cycle. This cycle considers implementation status and environmental analysis, allowing ongoing strategic adjustments that ensure sustainable value creation.

## Driving National Growth

We believe in the potential of rail transport to drive national development. We offer competitive,

reliable integrated logistics solutions tailored to our clients' needs.

We continuously enhance our value proposition across different sectors by adopting customized strategies, developing targeted solutions, and implementing technologies that boost competitiveness and operational efficiency.

We remain focused on consolidating operational excellence, pursuing sustainable, profitable growth through continuous process improvement and asset optimization.

Our growth goes hand in hand with our purpose of delivering results and well-being for society. We remain committed to the transparent and efficient execution of our concession agreement and its investment plan. ESG Agenda is fully integrated into our corporate strategy, seeking to generate value for society through our supply chain.

All of this is supported by the implementation of a management model that strengthens our culture, accelerates innovation and integrates technology into our business development, thus enhancing capabilities and preparing us for the future, always with collaboration, diversity, and flexibility at the core.

To ensure that our entire team is aligned and engaged with our global objectives, we have redesigned our variable compensation model through the Profit-Sharing Program (PSP). As of 2025, 70% of the targets are corporate and 30% individual, reversing the previous model, which emphasized individual results. This change aligns us with market best practices and makes performance monitoring and evaluation simpler, more efficient and more agile. It also reflects a new organizational *mindset*, reinforcing the importance of collaboration and collective focus to boost our results.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

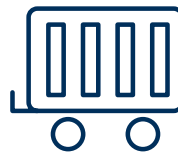
GRI/SASB Index

# Our Operations

GRI 2-6



MRS owns approximately  
**20%** of Brazil's national rail fleet



**+21,000**  
railcars



**+700**  
locomotives

**20%** of everything Brazil exports and  
**1/3** of all rail-transported cargo in the country move along MRS tracks



Direct access to **five major Brazilian ports:**

- Santos (SP)
- Itaguaí (RJ)
- Guaíba (RJ)
- Sudeste (RJ)
- Rio de Janeiro (RJ)

**+90** intermodal terminals in operation

(owned by MRS and third parties, covering General Cargo and Iron Ore)



We operate across three states:

**MG, RJ and SP**



We connect  
**107** municipalities



**1,643 km**  
Length of our rail network

## How We Operate

### Industries Served:

- Mining
- Steel
- Metallurgy
- Construction
- Chemical & Petrochemical
- Paper & Pulp
- Agricultural Commodities
- Containers

### Complete or integrated logistics solutions

Multimodal coordination – door to door transportation (complete cargo transport operation to end customer)



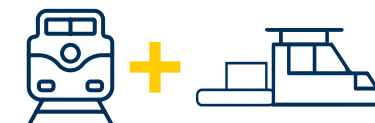
Railroad + Coastal or International Maritime Shipping



Railroad + Road



Railroad + Another Railroad



Railroad + Waterway

Where we are

GRI 2-2, 2-6

RAILROAD NETWORK AND TERMINALS

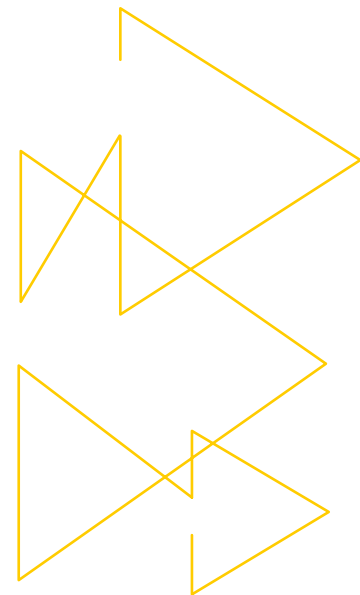
- 1 Ecoporto - Terminal Portuário / Santos - SP
- 2 DP World - Terminal Portuário / Santos - SP
- 3 Santos Brasil - Terminal Portuário / Guarujá - SP
- 4 TERLOC / Cubatão - SP
- 5 AB Terminais / Santo André - SP
- 6 Transnovag / Ipiranga - SP
- 7 Ferrolene / Ipiranga - SP
- 8 Pedrasil - Mooca / São Paulo - SP
- 9 AB Terminais - Mooca / São Paulo - SP
- 10 Pedrasil - Água Branca / São Paulo - SP
- 11 Unimetal / Vespasiano - MG
- 12 CRAGEA - CLIA / Suzano - SP
- 13 TMS / Suzano - SP
- 14 TIJU / Jundiaí - SP
- 15 TERLOC / Várzea Paulista - SP
- 16 Katoen Natie / Paulínia - SP
- 17 Multilift / Sete Lagoas - MG
- 18 Rumo - Brado / Sumaré - SP
- 19 Terminal Intermodal Pederneiras / Pederneiras - SP
- 20 TMI / Itaquaquecetuba - SP
- 21 TMI 2 / Itaquaquecetuba - SP
- 22 JSL / Itaquaquecetuba - SP

- 23 TINAGA / Mogi das Cruzes - SP
- 24 CRAGEA / São José dos Campos - SP
- 25 Etcons / Caçapava - SP
- 26 AB Terminais / Pindamonhangaba - SP
- 27 Pedrasil / Pindamonhangaba - SP
- 28 BASF / Guaratinguetá - SP
- 29 Multiterminais - Itatiaia / Itatiaia - RJ
- 30 IRB Logística / Barra Mansa - RJ
- 31 Multitex / Volta Redonda - RJ
- 32 Ynova / Barra do Pirai - RJ
- 33 Sepetiba Tecon - Terminal Portuário / Itaguaí - RJ
- 34 Terminal Arará - REDEX / Rio de Janeiro - RJ
- 35 Multiterminais - Terminal Portuário / Rio de Janeiro - RJ
- 36 ICTSI Rio Brasil - Terminal Portuário / Rio de Janeiro - RJ
- 37 Multiterminais - Porto Seco / Juiz de Fora - MG
- 38 TCI / Itutinga - MG
- 39 SCOF / Conselheiro Lafaiete - MG
- 40 TIOP / Ouro Preto - MG
- 41 TCS / Sarzedo - MG
- 42 TECAF / Contagem - MG
- 43 TORA - REDEX / Contagem - MG
- 44 TORA - CLIA / Betim - MG



## Efficiency and Competitiveness on Rails

Rail freight transportation plays a strategic role in Brazil's logistics landscape, connecting production hubs to key domestic and international markets. It also offers lower transportation costs per ton transported, especially over long distances, helping reduce clients' logistics expenses, boost their competitiveness, and streamline the movement of commodities such as iron ore and grains, as well as manufactured products to their various destinations.



## Iron Ore: Our Main Cargo

Iron ore, an essential input for the steel industry, represents our largest share of transported volume, accounting for 61.2%. Most of this volume originates in the Quadrilátero Ferrífero (Iron Quadrangle) region in Minas Gerais, one of the world's most important mining hubs, and is exported via the ports of Itaguaí Guaíba, and Sudeste, located in the state of Rio de Janeiro.

Between 15 and 20 iron ore trains are loaded, transported and unloaded each day, potentially exceeding 25 during peak demand periods. This highlights our position as a global benchmark in railroad logistics for this segment.

The operational efficiency of this transport is driven by advanced monitoring technologies and logistics planning systems, enabling shorter train cycle times, increased capacity and reduced operational costs.

## General Cargo: Exploring Multimodal Solutions

The General Cargo market involves the transportation of diverse and higher-value goods, which demand more complex and flexible logistics operations, including specialized railcars for different industrial sectors, door-to-door services, onboard technology for load tracking and damage prevention, and intermodal terminals for integration with trucks and ports. The main types of cargo in this segment include steel products, fuels and chemicals, pulp, fertilizers, agricultural commodities and a variety of containerized goods. Heavy investment in multimodality is part of our General Cargo growth strategy, which currently accounts for 38.8% of our total transported volume.





How we create value

INPUTS

Financial Capital

- + R\$2.8 billion invested (annual CAPEX)
- R\$7 billion in net operating revenue

Human Capital

- 7,154 employees
- 7,016 third-party workers
- R\$16 million invested in training

Intellectual Capital

- R\$2.9 million invested in proprietary innovation projects
- R\$3.8 million secured through calls for innovation proposals
- Ongoing programs for innovation and continuous improvement

Natural Capital

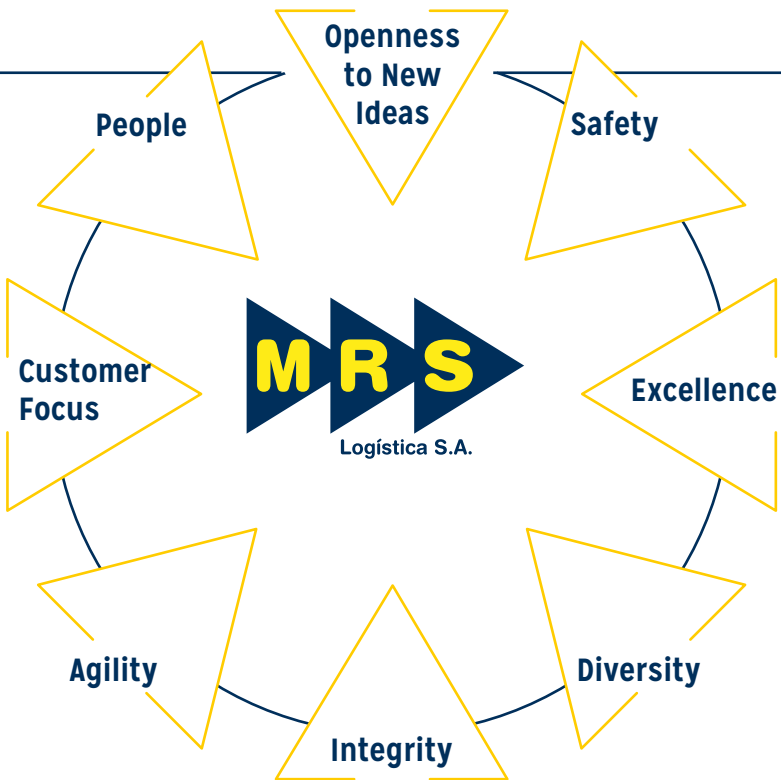
- R\$22.9 million allocated to environmental activities and projects
- Decarbonization Committee
- Total electricity consumption monitored and disclosed

Manufactured Capital

- 1,643 km of railroad network
- + 90 intermodal terminals in operation (MRS and third parties)
- Direct access to five major Brazilian ports
- 20% of the national railroad fleet: over 700 locomotives and more than 21,000 MRS railcars in operation

Social and Relationship Capital

- Operations in 107 municipalities across MG, RJ and SP
- R\$21 million in incentive-based projects
- + 1,200 active suppliers under contract
- + 50 clients served by 2024



OUTPUTS

Financial Capital

- R\$3.6 billion in EBITDA
- R\$1.4 billion in net income

Human Capital

- 26.7% of leadership positions held by women
- Personal accident rate: 0.69%
- + 390,000 hours of training delivered

Intellectual Capital

- R\$6.8 million in tax incentives secured for R&D projects via Law 11196/05, known as “Lei do Bem”
- R\$6.8 million in measurable gains through the Ideias em Ação (Ideas in Action) program
- Ranked 1st place in the Transport and Logistics category of the Valor Econômico newspaper award
- Among the Top 5 logistics companies according to 100 Open Startups

Natural Capital

- Specific emissions of 8.92 gCO<sub>2</sub>e/TKM
- Energy efficiency of 2.474 L/kgTK
- 87.9% of electricity consumed from clean energy sources
- 68% of waste diverted to alternative technologies to landfilling, which are more environmentally sustainable

Manufactured Capital

- 202.5 million tons transported (a company record)

Social and Relationship Capital

- 272 dialogue committees established with local communities and public authorities
- 85% customer satisfaction in the General Cargo segment

Belief

The best logistics solutions involve railroads. We are essential and have the power to improve society and our surroundings.

Purpose

To create and operate increasingly competitive and reliable integrated logistics solutions that generate results and well-being for society.

Aspirations

To be the preferred provider of integrated logistics through more sustainable and profitable solutions. To be recognized and admired for our integrity and positive impact on society and the environment.



## Our History, Our Journey

1996

Creation of MRS

1998

Innovation with the Train Simulator

2006

First Brazilian railroad licensed by IBAMA

2012

Electric locomotives for Serra da Cremalheira  
Implementation of CBTC, one of the world's most advanced train control systems

2014

End of track sharing with CPTM in Vale do Paraíba (SP) (Eastern Segregation)

2020

Unmanned train operation on a specific section

2021

Opening of the Pederneiras Intermodal Complex (SP)

2022

Concession renewal through 2056

2024

Establishment of the ESG Commitments Plan  
Total production record achieved

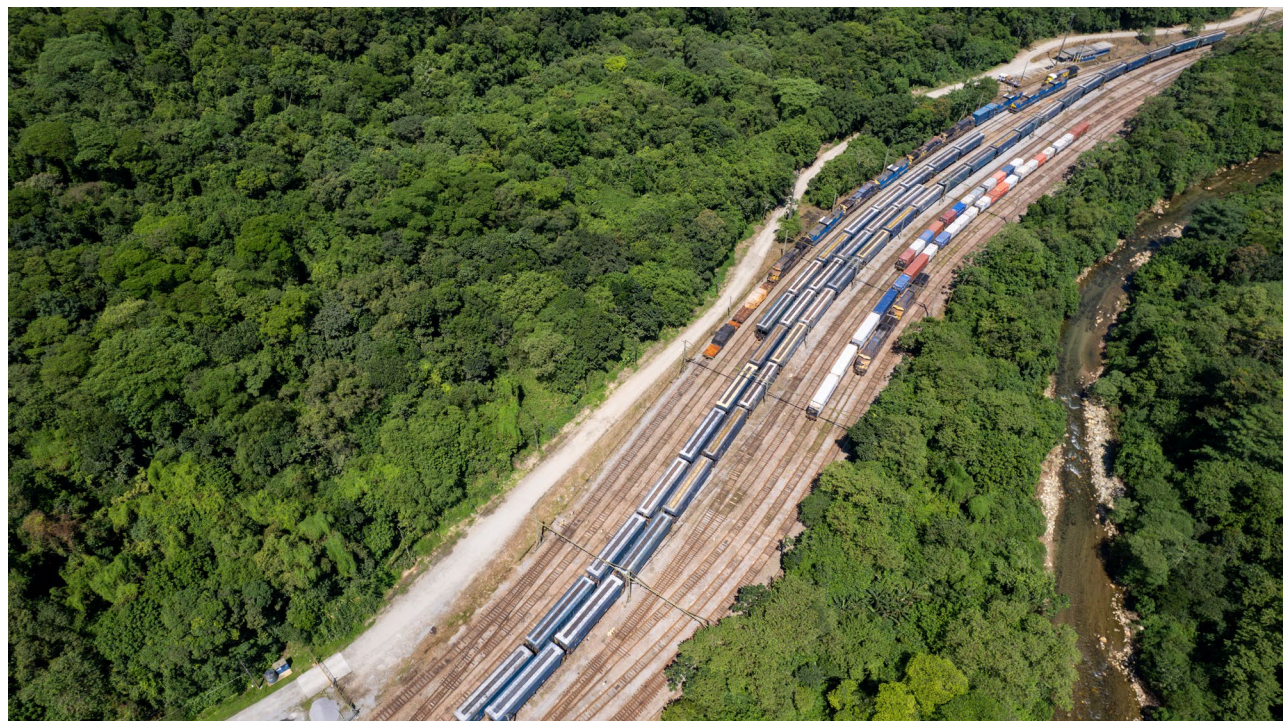
# ESG Agenda

GRI 2-15, 2-24

## Sustainability as Strategy

Sustainability management has become increasingly crucial to our decision-making process by integrating environmental, social and governance aspects into strategic analysis. This approach allows us to identify risks and opportunities beyond traditional financial indicators. We recognize ESG as an ongoing

journey and aim to ensure constant progress aligns with current market demands and global best practices, driving sustainable growth and organizational resilience. We understand our proactive approach contributes to long-term value creation for our stakeholders, while enhancing operational efficiency and innovation.



## Committed to the future

Following extensive research and analysis, considering multiple internal and external scenarios and trends, and with the collaboration of all departments through topic-specific and phased discussions, we established our long-term public ESG commitments. These were submitted to the Sustainability Committee and approved by the Board of Directors.

The starting point for this work, supported by the thematic commissions that drive our ESG agenda (see page 19 for more information), was an assessment of our Materiality Matrix. From the 12 material topics identified, three were prioritized, representing over 40% of the materiality weight: decarbonization, safety, and diversity, equity and inclusion (DEI).

Our benchmarking of best practices included an analysis of public data from more than 90 companies across various sectors and sizes, such as shareholders, railroads, clients, logistics chains, infrastructure providers and ESG leaders. We examined patterns and alignment with our own trajectory, progress and initiatives in recent years. For the environmental agenda, we partnered with *Way Carbon* for expert consulting.

Thus, based on a thorough understanding of the internal context and an attentive view of the external environment, we established a clear set of goals and defined time-bound targets for each of the three prioritized topics.



## Commitment Plan



### Decarbonization

**15% Reduction**  
in emissions intensity by 2035

We are committed to reaching an emissions intensity of 8.10 gCO<sub>2</sub>e/TKM by 2035 (considering scopes 1 and 2), representing a 15% reduction compared to the 2022 baseline index of 9.54 gCO<sub>2</sub>e/TKM.

To achieve this goal, we will continuously implement various initiatives and studies focused on biofuels, more efficient locomotives, and energy efficiency measures.



### Safety

**Zero loss of life**  
due to work-related accidents  
Maintain accident rate  
**below 1.00**

Our commitment to protecting lives is non-negotiable. We will continuously strengthen safety practices for both employees and third-party personnel, as well as for communities along our network.

Our current total recordable incident rate stands at 0.69. To maintain this rate below 1.00, we must reinforce our safety culture and demand the same level of commitment from partners across our value chain.



### Diversity, Equity and Inclusion

Achieve **34% of women**  
in leadership positions by 2030

Currently, 26.7% of our leadership positions are held by women. To reach our 2030 goal, we will focus on improving processes and job structures, adapting workplace facilities and further embedding a diverse, inclusive, and welcoming culture, especially in operations and maintenance areas.

A Message from  
Leadership

About This Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

Stewardship of  
Our Business

Caring for the  
Planet

Caring for People

Performance  
Overview

Appendix

GRI/SASB  
Index



# Challenges

Adopting public ESG commitments aligned with the ESG Agenda presents significant challenges, making leadership and team engagement crucial. We must strengthen sustainability culture in daily operations and actions.

In the area of safety, for instance, we are currently undergoing one of the most intense periods of construction activity related to our concession agreement, following the amendment signed in 2022. Managing thousands of third-party workers while ensuring alignment with our safety practices remains a major challenge.

Regarding social commitments, increasing the representation of women in leadership positions, particularly in operations and maintenance, is closely tied to the creation of inclusive environments, initiatives that support work-life balance (including maternity-related policies), and breaking down

stereotypes associated with the rail industry.

On the environmental front, our ongoing internal efforts show a path of continuous improvement and innovation. Testing biofuels and various technologies, while working with in the sector to develop solutions to reduce greenhouse gas emissions at a viable cost is the main challenge, along with potential adaptations to the operating model.

Generate a positive impact on the environment and society by consolidating ESG practices.

\*One of the six priority agendas of the strategic framework



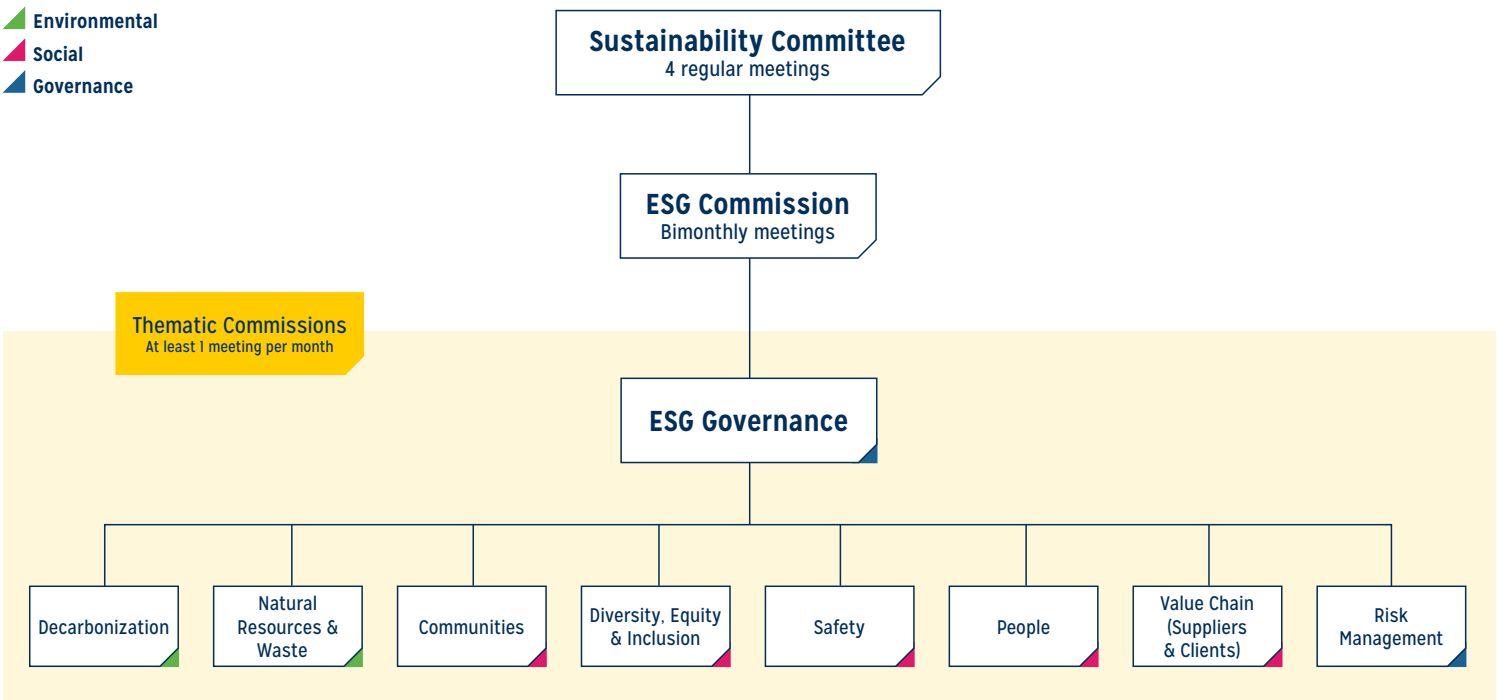
## ESG Governance

Three years ago, ESG became one of our six priority agendas, following the update of our strategic framework. In 2024, we created the General Sustainability/ ESG Management department (incorporating the Sustainability department established the previous year) with the aim of boosting the strategic role of the ESG Agenda,

fostering greater cross-functional collaboration and influence in shaping our corporate strategies focused on this topic.

Our ESG Governance model is structured around thematic commissions composed of multidisciplinary teams and senior leadership. These groups

are responsible for adopting best practices, monitoring market trends, conducting in-depth studies, developing policies and managing ESG indicators. Progress is reported bimonthly to the ESG Commission, which comprises all executive directors and is responsible for monitoring performance and tracking advancement of our agenda.





## Sustainability Committee

This is our highest-level ESG Agenda governance body, responsible for advising the Board of Directors (as detailed on the previous page). It is composed of four executives appointed by the Board, all with proven expertise in sustainability matters.

Throughout the year, five meetings were held to discuss topics such as climate change, diversity, equity and inclusion, safety and ESG-related policies and performance indicators, among other environmental, social and governance issues.



## The Year We Joined the UN Global Compact

In 2024, we formalized our commitment to the UN Global Compact, an initiative that brings together companies committed to promoting sustainable and responsible practices. This milestone reinforces our alignment with the Global Compact’s 10 universal principles in the areas of human rights, labor, environment and anti-corruption.

More than an institutional commitment, this initiative strengthens our governance and ESG strategy, ensuring that our operations are aligned with global best practices. It also reaffirms our ongoing commitment to transparency, ethics and social and environmental responsibility within the logistics sector.

It is worth noting that, while we joined in 2024, we had already incorporated the Sustainable Development Goals (SDGs) into our Materiality Matrix since 2021.

## Commitment from Senior Leadership and the Entire Team

Our senior leadership remains firmly committed to the ESG Agenda, reflected in the internal targets set for 2024. ESG indicators were integrated into the company’s performance metrics, validated by the Executive Board. In addition, variable compensation targets for senior leadership were tied to ESG criteria and approved by the Board of Directors. These targets include objectives related to diversity and occupational and railroad safety, while also considering operations impacts on communities and customer satisfaction, as well as a specific overall sustainability target. We also established an energy efficiency target aimed at reducing greenhouse gas (GHG) specific emissions and their implications for climate change.

## New Policies Published

To formally establish ESG Agenda-related guidance through official documentation, we published two new policies on Human Rights Policy and on Diversity, Equity and Inclusion. These documents are intended for directors, employees and all partners who engage with our company, and are available on our Investor Relations website.

**CLICK HERE TO ACCESS THE NEW HUMAN RIGHTS AND DIVERSITY, EQUITY AND INCLUSION POLICIES**



# Stewardship of our business

22 Corporate Governance  
31 Innovation & Technology  
36 Cybersecurity & Information Security



Corporate  
Governance



Ethics and  
anti-corruption practices

10

REDUCED  
INEQUALITIES



16

PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS



A Message from  
Leadership

About This Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

**Stewardship of  
Our Business**

Caring for the  
Planet

Caring for People

Performance  
Overview

Appendix

GRI/SASB  
Index



# Corporate Governance

GRI 3-3 Material Topic: Corporate Governance | GRI 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-16, 2-17, 2-18, 2-24

We strive for strong and transparent governance, ensuring accurate disclosure of financial, operational, social and environmental information. Our commitment is to provide stakeholders with reliable data, strengthening the company's credibility. Strategic decisions are guided by their impact and the creation of long-term sustainable value.

We have implemented mechanisms to identify and manage financial, operational, legal, reputational, environmental and social risks. In doing so, we ensure ethical conduct, respecting human rights, preserving the environment and generating a positive impact on society. Our governance model is aligned with best practices, supported by well-defined strategies, policies and responsibilities.

## Accountability and Transparency

We value clear and transparent communication with our stakeholders, using a variety of control tools and mechanisms. These include the annual

submission of the Governance Report to the Brazilian Securities and Exchange Commission, detailing actions taken and controls in place over the prior year.

### Other Control Mechanisms

- Annual financial statements and quarterly reviews audited by *Deloitte Touche Tohmatsu Auditores Independentes Ltda*;
- Internal audit, certified with the QA (Quality Assurance) of the IIA (Institute of Internal Auditors);
- Annual Environmental Report submitted to IBAMA;
- Accountability reporting to federal, state (SP, RJ and MG) and municipal (107 cities) agencies;
- Structured governance calendar, with nine ordinary meetings of the Board of Directors and another six extraordinary meetings;
- Sustainability Report, now in its sixth edition;
- As of 2024, our share capital totaled R\$4.0 billion, comprising 337,977,019 ordinary shares (55.39%) and preferred shares (44.61%).

## Related Parties

GRI 2-15

We have a Related Party Transactions Policy that outlines the principles and guidelines to ensure transparency in situations involving potential conflicts of interest, aligned with the procedures defined in our Shareholders' Agreement.

Transactions with controlling shareholders include rail freight transportation services and the purchase of inputs such as rails. These are conducted under market-compatible conditions and terms. These operations generate significant revenue without granting undue benefits to the controlling shareholders.

Vale and CSN are among our main clients, with captive cargo contracts based on an annual fixed-rate pricing model. This ensures predictability for business investments. Most of these long-term contracts (80% under Take-or-Pay conditions) provide protection against

fluctuations in diesel prices and allow for planning in line with demand and investments.

Additionally, information about cross-shareholdings in our governance bodies, second-degree family relations between administrators and controlling shareholders, and any equity interests and related-party transactions are disclosed in the MRS Reference Form. This document also includes details on the existence of a controlling shareholder and the terms of our Shareholders' Agreement.

**ACCESS OUR BYLAWS, POLICIES AND SHAREHOLDERS' AGREEMENT**

Governance Bodies and Instances

GRI 2-9, 2-10, 2-11, 2-12, 2-13,2-14, 405-1

Board of Directors:

Advised by non-statutory committees focused on finance, strategy, sustainability and audit.

Statutory Executive Board:

Supported by non-statutory officers.

According to the Bylaws, the General Internal Audit and Compliance Department reports directly to the Board Chairman. Currently, we do not have a Fiscal Council in place.



Board of Directors

GRI 2-10, 2-17, 2-18

The Board of Directors is our highest governance body, responsible for setting strategic direction and making investment and sustainability decisions across the economic, environmental and social dimensions of the business. It is also responsible for appointing the CEO and executive officers.

Board members are nominated and elected jointly with shareholders, in accordance with the Shareholders’ Agreement. According to our

Bylaws, the Board can have up to 17 members, serving two-year terms and the possibility of reappointment. This structure ensures a diversity of relevant experience and expertise for the company.

Board members are reimbursed only for travel expenses, as their main compensation comes from positions held either within the controlling shareholder companies or at MRS. While there is no formal evaluation process, the governance

model is reviewed annually to identify opportunities for improvement.

The current term of the Board of Directors runs through the 2025 Annual General Meeting. As of the end of 2024, the Board had ten members, nine of whom representing the shareholders and one representing the employees, all male. In July 2024, Board member Alejandro Laiño resigned, and in September, Vitor Soares took up his position.

Member	Position	Age group	Gender	External	Independent	First Term
Marcelo L. Barros	Chairman	50+	M	Y	N	09/12/2019
Luís Fernando B. Martinez	Member	50+	M	Y	N	12/12/2014
Vitor J. M. Soares	Member	30-50	M	Y	N	09/20/2024
Carlos H. Rezzonico	Member	50+	M	Y	N	04/25/2019
João Mario Lourenço Filho	Member	50+	M	Y	N	04/27/2023
Marcelo C. Ribeiro	Member	30-50	M	Y	N	04/29/2021
Murilo Muller	Member	50+	M	Y	N	04/27/2023
Marco Aurélio Brito Braga	Member	30-50	M	Y	N	04/27/2023
Wendel G. da Silva	Member	30-50	M	Y	N	04/29/2021
Júlio Rosa Baptista	Member	30-50	M	N	N	04/27/2023

Number of meetings held in 2024: 15

Attendance rate: 90%





Advisory Committees to the Board of Directors

GRI 3-3



Finance Committee

<b>Evaluates, advises on and issues recommendations regarding:</b> <ul style="list-style-type: none"><li>Operating and capital expenditure budgets (planning and execution monitoring)</li><li>Funding plans, debt management and cash flow</li><li>Allocation of earnings (dividend distribution)</li><li>Financial risk management policy;</li><li>Monitors the company's economic and financial indicators</li></ul>
---

Members	Renewable Term	Number of Meetings	Attendance rate
<ul style="list-style-type: none"><li>1 board member</li><li>4 to 12 members with technical expertise, nominated by shareholders and appointed by the Board of Directors</li><li>Current composition: 3 women and 7 men</li></ul>	August 2023 to April 2025	17	70%



Strategy Committee

Analyzes and issues recommendations on strategic topics that affect the company's medium and long-term direction, including budget guidelines, business plans and corporate targets
---

<ul style="list-style-type: none"><li>4 board members, each nominated by a shareholder and appointed by the Board of Directors</li><li>Current composition: 4 men</li></ul>	April 2023 to April 2025	7	86%
---	--------------------------	---	-----



Sustainability Committee

<ul style="list-style-type: none"><li>Provides technical support for the analysis of sustainability-related topics, with an emphasis on environmental and social issues</li><li>Monitors the progress of MRS's ESG Agenda</li><li>Monitors climate change-related matters</li><li>Oversees the preparation of sustainability reports</li><li>Oversees the development and implementation of social and environmental programs and initiatives</li></ul>
---

<ul style="list-style-type: none"><li>4 members with technical expertise, nominated by shareholders and appointed by the Board of Directors</li><li>Current composition: 2 women and 2 men</li><li>Chairman of the Board and/or other board members may participate as needed</li></ul>	November 2023 to April 2025	5	100%
---	-----------------------------	---	------



Audit Committee

<ul style="list-style-type: none"><li>Evaluates, advises on and issues recommendations on financial statements, the Management Report, MRS's Annual Audit Plan and the methodology for managing corporate, operational and environmental risks;</li><li>Evaluates, advises on and issues recommendations on external auditor, internal audit, and internal controls reports;</li><li>Evaluates, advises on and issues recommendations on bylaws and budget of the General Internal Audit and Compliance Department;</li><li>Evaluates, advises on and issues recommendations on the appointment/dismissal of independent auditors and the Head of Internal Audit and Compliance;</li><li>Supports the Board of Directors in evaluating the performance of the General Internal Audit and Compliance Department and in setting its targets;</li><li>Monitors the progress of MRS Integrity Program and follows up on complaints;</li><li>Evaluates and monitors the company's exposure to risk.</li></ul>
--

<ul style="list-style-type: none"><li>4 full members and 4 alternate members nominated by shareholders and appointed by the Board of Directors</li><li>Current composition: 4 men</li></ul>	August 2023 to April 2025	9	96%
---	---------------------------	---	-----

Note: There are no independent members on the committees

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## Executive Board

GRI 2-12, 2-13

### Responsibilities

- Protecting and enhancing the company's assets.
- Maximizing long-term return on investment.
- Carrying out executive management, proposing initiatives, business plans and policies to the Board.
- Implementing the strategy defined by the Board.
- Conducting day-to-day operations within the limits set out in the Bylaws.

### Composition

**Guilherme Segalla de Mello**  
Chief Executive Officer

**Alexandre Claro Fleischhauer**  
Chief Engineering & Maintenance Officer\*

**Ane Menezes Castro Matheus**  
Chief People Officer

**Daniel Dias Olívio**  
Chief Operations & Information Technology Officer

**Felix Lopez Cid**  
Chief Project & Construction Officer

**Henrique Rocha Martins**  
Chief Finance & Business Development Officer

**Luiz Gustavo Bambini de Assis**  
Chief Regulatory, Institutional, Environment & Community Affairs Officer

**Raphael Steiman**  
Chief Commercial Officer

Statutory Executive Officers: Guilherme Segalla de Mello, Alexandre Claro Fleischhauer and Felix Lopez Cid. According to the Internal Charter, Guilherme Segalla de Mello also holds the responsibilities of Chief People Officer; Chief Operations & Information Technology Officer; Chief Finance & Business Development Officer; Chief Regulatory, Institutional, Environment & Community Affairs Officer and Chief Commercial Officer.

During the reporting period – January 1 to December 31, 2024 – Alexandre Claro Fleischhauer served as Chief Engineering & Maintenance Officer. He left the company in January 2025.

GRI 2,19, 2-20

We follow a fixed compensation policy approved in 2012, with annual bonuses linked to the achievement of performance targets. The policy is reviewed annually by the Strategy Committee, which may recommend adjustments to the Board of Directors.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index





## Ethics and Integrity

GRI 3-3 Material Topic: Ethics and Anti-Corruption Practices | GRI 2-24, 2-25, 205-1, 205-2, 205-3, 206-1

Our Integrity Program, overseen by the Ethics and Professional Conduct Committee and supported by documents approved by the Board of Directors, promotes an ethical and transparent organizational environment. It establishes codes of

conduct and anti-corruption standards that all employees must observe in their activities and in relations with stakeholders. Since 2023, we have adopted Due Diligence as a standard practice when hiring for strategic positions.

### Initiatives in 2024

- **Launch of the Compliance Portal:** A digital platform implemented to manage the Integrity Program
- **Launch of the Support and Guidance Hotline:** Dedicated to assisting potential victims of sexual harassment, sexual misconduct and discrimination
- **Implementation of new training programs:** gifts, hospitality, and entertainment; conflicts of interest; and responding to compliance-related demands
- **Implementation of monitoring for reading and acknowledgment of ethical policies**

- **Implementation of controls and enforcement** of Non-Disclosure Agreements (NDAs) for areas handling sensitive information
- **Mapping of integrity risks** associated with processes that involve interactions with public authorities
- **Implementation of follow-up actions** based on the risks identified in the Integrity Risk Matrix

## Human Rights

We ensure proper working and rest conditions, in compliance with the labor laws and the guidelines of our Code of Ethics and Professional Conduct. Violations of such rights must be reported via the Whistleblower Hotline, in alignment with Human Rights, applicable legislation and market best practices (GRI 412-1). As mentioned on page 20, we have published our Human Rights Policy.

[CLICK HERE TO READ OUR HUMAN RIGHTS POLICY](#)



**98%** of active employees, including executive officers, completed training on the Code of Ethics and Professional Conduct and the Integrity Program.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## Whistleblower Hotline

The whistleblower toll-free hotline, 0800 300 4531, is available to employees, contractors, and the general public, allowing anonymous reports of violations of our ethical commitments.

The Compliance Department team, under the General Internal Audit and Compliance Department, investigates reported cases and, where appropriate, applies penalties in accordance with the Code of Ethics and Professional Conduct and the Disciplinary Regulations.

Quarterly reports on complaints and actions taken are submitted to the Board of Directors and Ethics Committee, which handles more complex cases.

- There have been no records or reports of corruption involving public officials at any level – municipal, state or federal.
- No legal proceedings exist against us or our employees related to corruption cases.

**108**  
cases addressed

**59**  
by the whistleblower investigation team  
(e.g., fraud, workplace harassment and discrimination)

**46**  
dismissals

**7**  
suspensions

**8**  
warnings

**2**  
disqualifications of suppliers

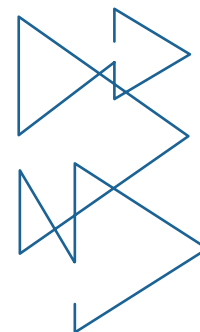


Angélica Gontijo, Lidiane Moreira and Maria Gracielle Pereira

## Support and Guidance Hotline



We created the Support and Guidance Hotline to listen to and assist both direct employees and contractors in situations involving harassment, sexual misconduct and discrimination of any kind (disability, race, religion, gender and sexual orientation). This specialized external toll-free hotline – **0800 591 0516** – is confidential and accessible, ensuring all can report their concerns without fear of retaliation.



We are committed to fostering a safe and inclusive working environment. At MRS, harassment, misconduct and discrimination have no place.



## Among the Best

Every five years since 2013, we have undergone a quality assessment by the Institute of Internal Auditors of Brazil (IIA). This assessment analyzes the compliance of our internal audit activities with the standards and regulations that govern the profession. We received certification in all three assessments conducted in recent years. This attests to our compliance with international standards and the adoption of best practices aligned with the highest global benchmarks, providing stakeholders with assurance regarding our corporate governance.

The work performed by the Internal Audit Department team was recognized by the Institute of Internal Auditors (IIA) at the IIA May 2024 Awards. The recognition highlighted the positive impact of the audit function on organizations, emphasizing continuous efforts to improve processes, the commitment to risk mitigation, and the role of integrity in ensuring business success.

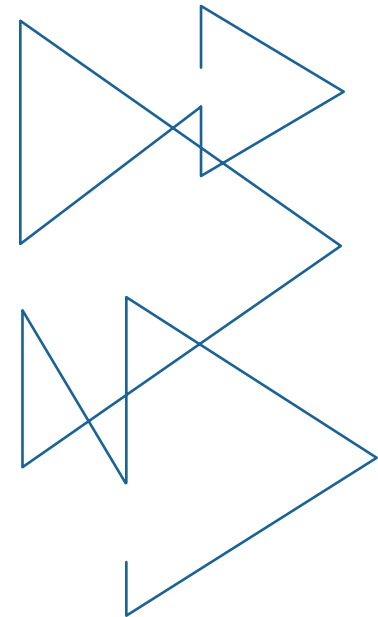
## Initiatives in 2024

- 12 audits across distinct processes, following risk prioritization;
- 1 consultancy;
- 1 review of controls linked to previously implemented corrective actions;
- 5 audits focusing on procurement, management, service measurement, materials and construction processes;
- 1 audit focusing on systems;
- 1 Quality Assurance and Improvement Program (QAIP) assessment – a self-evaluation of Internal Audit’s adherence to the International Professional Practices Framework (IPPF) and the Code of Ethics and Professional Conduct.

## Connected Auditing

We developed an in-house system-based solution for field audits that reports inconsistencies in real time. This facilitates evidence storage, increases productivity and improves stakeholder monitoring.

We also began using robust data analysis tools in our audits, enabling the review of complex databases, increasing productivity, and delivering both efficiency and accuracy in our assessments.



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

### Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



# Risk management

GRI 3-3 Material Topic: Risk Management |  
GRI 2-25, SASB TR-RA-540a.4

Aligned with our cargo and modal diversification strategy, we adopted the Process Safety Management (PSM) – a globally recognized Operational Risk Management system focused on identifying, analyzing and responding to the most critical risks with potential for catastrophic impacts and operational disruptions.

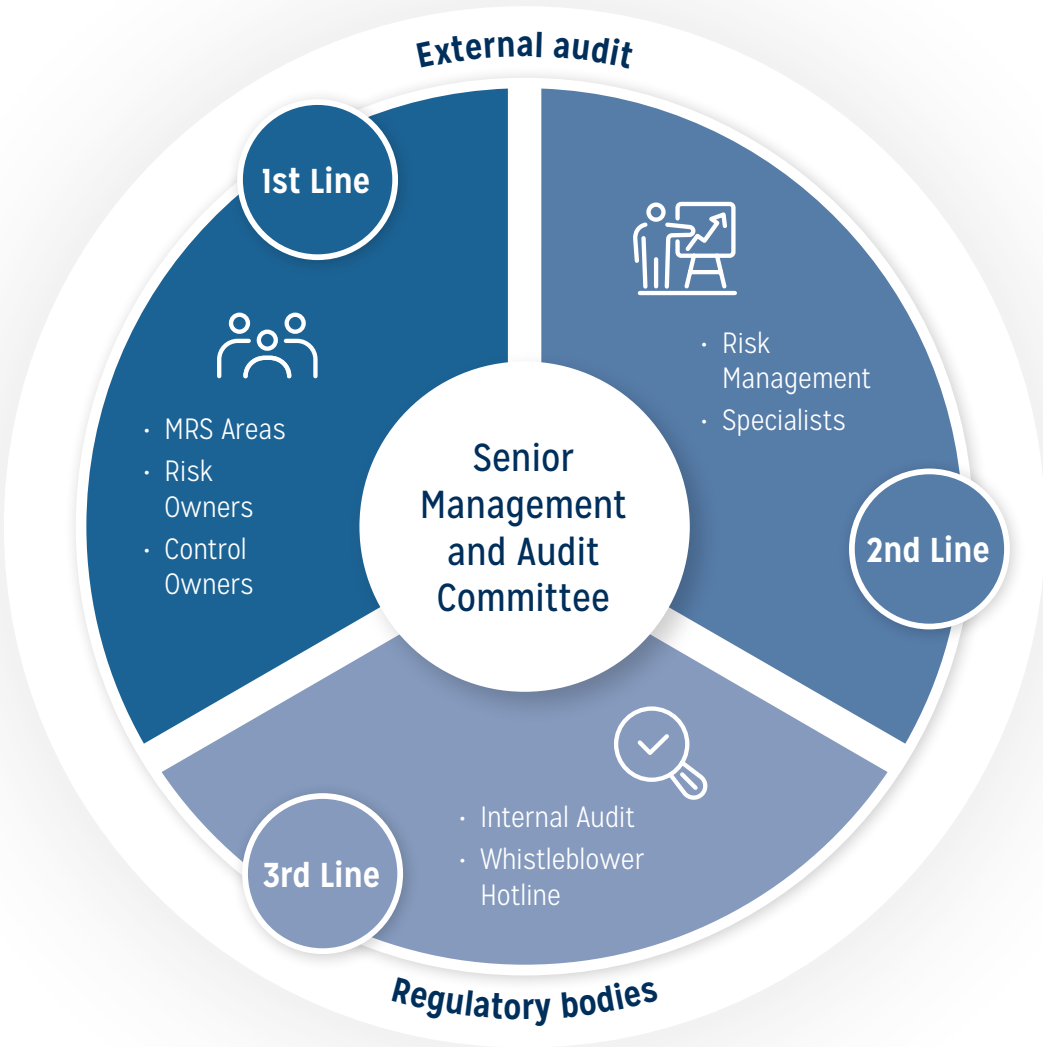
In 2024, the Board of Directors approved the PSM implementation schedule, with the adoption of Hazard Identification and Risk Assessment (HIRA) as one of the main initiatives to identify, analyze and respond to the risks present in MRS operations, starting with the Infrastructure area.

## Key Developments in 2024

We reviewed and published the Risk Management Policy, outlining the process for managing risks, as well as the roles and responsibilities of the areas involved, based on the Three Lines of Defense model and defining key concepts related to the topic.

We also identified improvements in the Integrated Risk Map, including a clearer definition of operational and non-operational risk topics and subtopics to be managed by MRS.

## Three Lines of Defense Model



LEARN MORE ABOUT OUR  
RISK MANAGEMENT POLICY





# Operational Risks

In order to proactively identify operational risks, we use the Autonomous Track Geometry Measurement System (ATGMS) and the Vehicle Track Interaction (VTI), both installed on locomotives, along with road-rail vehicles including the Rail Inspection Vehicle (RIV), Ultrasonic Inspection and TrackStar (TEV). Our road-rail vehicles follow inspection cycles determined by the company’s production volume, while autonomous vehicles (installed on production train locomotives) conduct inspections approximately every three days. After each inspection, the data is processed and overlaid to monitor track degradation, with the goal of optimizing maintenance and reducing operational risks.

In 2024, there were significant advancements in inspection and maintenance practices, with improvements in both technology and methodology, resulting in improved efficiency and productivity.

A change in the ultrasonic inspection model has increased productivity and reduced conflicts with vehicle traffic. Additionally, the expanded use of statistical tools such as the VisioStack RailLinks platform has improved the accuracy of defect detection and forecasting. This strengthens predictive maintenance and optimizes cost management by enabling more targeted and efficient actions.

Parameters	Equipment	2022	2023	2024
Track gauge and Geometry	TEV	1,546	3,674	2,823
Track gauge and Geometry	ATGMS	10,000	43,322	111,786
Surface defects and rail profile	RIV	4,153	2,395	3,575
Ultrasonic testing	US	4,497	4,026	4,701
Vertical track variation	VTI	100,975.60	155,726.00	153,869.70

NOTES: The changes in operational and production aspects between 2023 and 2024 led to the following developments:

**TEV (Track Evaluation Vehicle):** MRS experienced a roughly 23% reduction in production due to changes in the preventive maintenance policy for this equipment and the reallocation of inspection capacity for service sales.

**ATGMS (Autonomous Track Geometry Measurement System):** The effective implementation of inspection process using this system began in August 2023. The use of statistical tools to overlay ATGMS and TEV inspections improved the accuracy and the ability to predict problems before they occur, enhancing preventive maintenance and cost management.

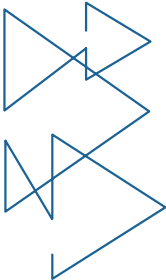
**RIV (Rail Inspection Vehicle):** In 2024, the grinder resumed operations under a new O&M model, which increased the need for equipment inspections.

**VTI (Vehicle Track Interaction):** The acquisition of a second inspection unit in November 2022 significantly increased our inspection capacity starting in 2023, allowing for broader and more frequent coverage of the rail section.

**US (Ultrasonic Testing):** In 2024, production increased due to the transition to a non-stop inspection model. This new approach reduced traffic conflicts with regular operations and improved productivity, allowing for more continuous and efficient inspections.



Leandro dos Santos Rodrigues



# Innovation & Technology

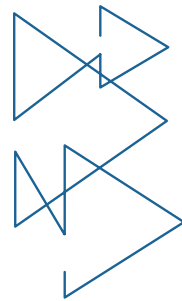
## GRI 3-3 Material Topic: Innovation & Technology

Innovation is crucial in the railroad sector to enhance efficiency in a safe and sustainable manner. By incorporating technologies such as the Internet of Things (IoT), Artificial Intelligence and automation into our processes, we aim to transform our operations through real-time monitoring, predictive maintenance and optimized asset management. We are committed to continuously improving our model to create increasing shared value for our stakeholders.

In 2024, we developed the Strategic Technology and Innovation Plan (STIP), aligned with our overall strategic planning. This provided a structured view of our key technology priorities, such as safety, sensors, Internet of Things (IoT), data, Artificial Intelligence (AI), legacy systems, and a project roadmap to support our strategy.

### Evolving to Achieve

We enhanced our innovation governance model by adopting a more cross-functional approach to demands and priorities, creating an executive committee composed of general managers. This group is responsible for supporting the Executive Board in defining innovation guidelines, priorities, projects and expected outcomes.



We were ranked 5th in the Transport and Logistics category of the 100 Open Startups ranking for the second time (2022 and 2024).

**R\$2.9 million**  
invested in proprietary innovation projects

**R\$6.8 million**  
in tax incentives secured for Research, Development and Innovation (R&D&I) projects via Law 11196/05, known as “Lei do Bem”, the highest amount ever secured in our history

[LEARN MORE ABOUT THE LEI DO BEM](#)



**R\$59 million**  
in estimated returns from projects

**R\$3.8 million**  
secured through calls for innovation proposals (R\$3.5 million of which invested in joint initiatives with partners – sharing costs, risks and returns)

### Innovation Maturity

We adopted Gartner’s Innovation Management Maturity Model, a framework designed to help organizations measure and enhance their innovation capabilities over time. This model provides a structured

roadmap to help companies understand their current level of maturity and develop strategies to advance to higher levels of innovation. The assessment, conducted through a questionnaire and an internal

workshop, involved employees from various areas of the company. The model consists of eight dimensions and will guide us in setting priorities and actions to advance our innovation practices and behaviors.

\* Gartner is a global consulting firm specializing in expert advice and insights that help organizations make decisions about technology, business, digital transformation and innovation.

## Turning Projects into Results

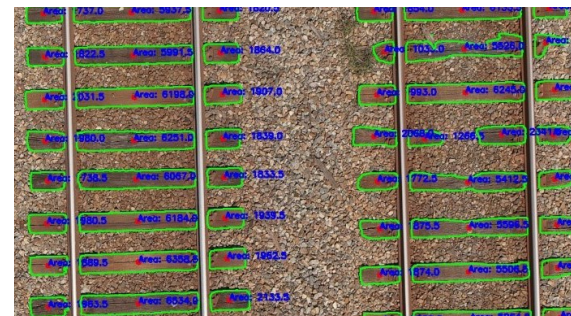
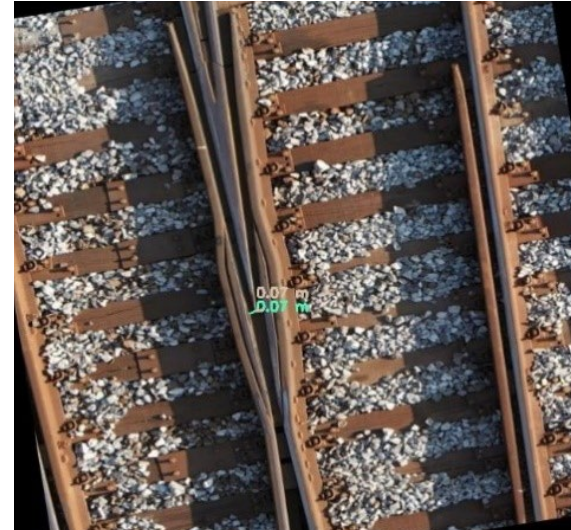
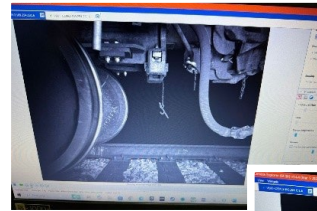


### Computer Vision

We highlight the monitoring project for near-collision and near-miss incidents as well as right-of-way surveillance. Through the use of cameras and AI, we seek to identify risk situations to help determine the most effective control and/or educational measures based on geographic location.

### Inspection Portal

Using cameras and AI, we aim to inspect moving trains for predictive maintenance. The brake shoe project – an algorithm capable of measuring brake shoes to increase the availability of assets (locomotives and railcars) and reduce Train Delay Hours (TDH) – has been integrated into the portal.



### Aerial Imaging

We advanced our use of Artificial Intelligence for drone-based aerial imagery in permanent track inspections in order to detect anomalies. In addition to bolts, clips and plates, we now also assess rail joints, frogs and ties.



### Award-Winning Project

By applying cameras and computer vision, we are now able to monitor several stages that take place during the railcar loading process. By optimizing processes and reducing waste for the customer, we have improved our service, generating greater productivity and reducing costs.

This cargo loading and unloading monitoring project, developed in partnership with client Bracell, received national recognition from the Brazilian Land Transport Regulatory Agency (ANTT) in the “Customer Focus” category at its annual awards, as shown on page 08.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## Internet of Things (IoT)

### Sensors for the Railroad

We have made progress in piloting the Asset Tracking and Smart Train projects (see figures), working alongside partners to develop sensor technology for railroads, using various approaches to data collection and analysis. Although we still rely on multiple data sources for different purposes – such as push/pull force detection, bearing temperature, and empty or loaded status – we have significantly advanced in tracking capabilities, particularly in determining railcar location, direction and speed. We are currently testing a railcar tracking solution developed in-house with a client: the LoRa (an acronym for Long Range) Box (CDL, in the Portuguese version), an IoT device using long range communication technology for extended distances and low energy consumption.



Asset Tracking



Smart Train



LoRa Box

### Digital Wheelset Workshop

This initiative involves the development and implementation of an IoT system to monitor and track production stages within the Wheelset Workshop workflow. The goal is to transition operations to a fully digital environment, eliminating paper use and storage, while enabling easier access to historical data and asset tracking. Technological advancements include integration with the shop floor, real-time production monitoring, equipment health tracking, asset traceability, as well as a process flow guided by computational intelligence.

### Optmove Baixada System

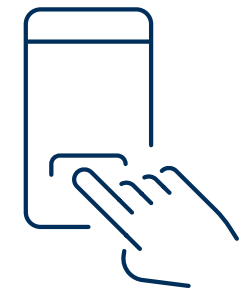
ANTT approved compliance with Phase 3 of Annex 9 our concession agreement amendment, fulfilling a key commitment through successful delivery of the Optmove Baixada system. This automated train scheduling system is used by the Integrated Railroad Cell (MRS, Rumo, VLI and FIPS) to plan optimal rail traffic scenarios in compliance with operational parameters set by ANTT, eliminating potential conflicts of interest while ensuring optimal terminal service.

### USE System

Our locomotive engineers now receive their service orders issued by the crew schedulers via a mobile app. The system also provides road transport instructions to crew dispatchers via desktop, making daily operations more dynamic and digital. Key improvements include how crew schedules are created and updated, crew assignments and the delivery of service orders.

### Digital Timekeeping Implementation

This project brought positive changes to the way engineers record attendance, now digitally via a cell phone provided by the company.





## Continuous Improvement

In its fourth year, the Continuous Improvement Groups program – designed to form multidisciplinary teams to address relevant problems using the PDCA (Plan-Do-Check-Act) methodology – reached new milestones in 2024 and continues to consolidate its position as a key tool for process improvement and employee development in operational areas. In 2024, the number of completed projects increased by 36% and participant numbers grew by 33%.



## Grande Encontro (Grand Meeting)

Our railcar maintenance team from the city of Conselheiro Lafaiete, Minas Gerais, won first place in the 5S category at the Grand Meeting, an annual event organized by the UBQ – Brazilian Union for Quality, which aims to promote the sharing of best practices in quality management among major corporations. We also participated in the Lean Quality Control Circles (LQC) and Agile Methods categories.





## Getting Better Every Day

For over 20 years, the Ideias em Ação (Ideas in Action) program has encouraged engagement and fostered a dynamic work environment that values every individual's contribution. The initiative promotes experimentation, drives a culture of innovation, improves processes, and creates value for the company. In 2024, the number of implemented ideas grew by 32.3%.



794

ideas submitted

R\$129.500\*

in awards to eligible employees

750

employees participating

R\$6.8

million\*

in incremental financial  
return: value achieved  
from 12 measurable ideas

86

ideas implemented

Themes include: health, safety,  
environment, productivity, among  
others

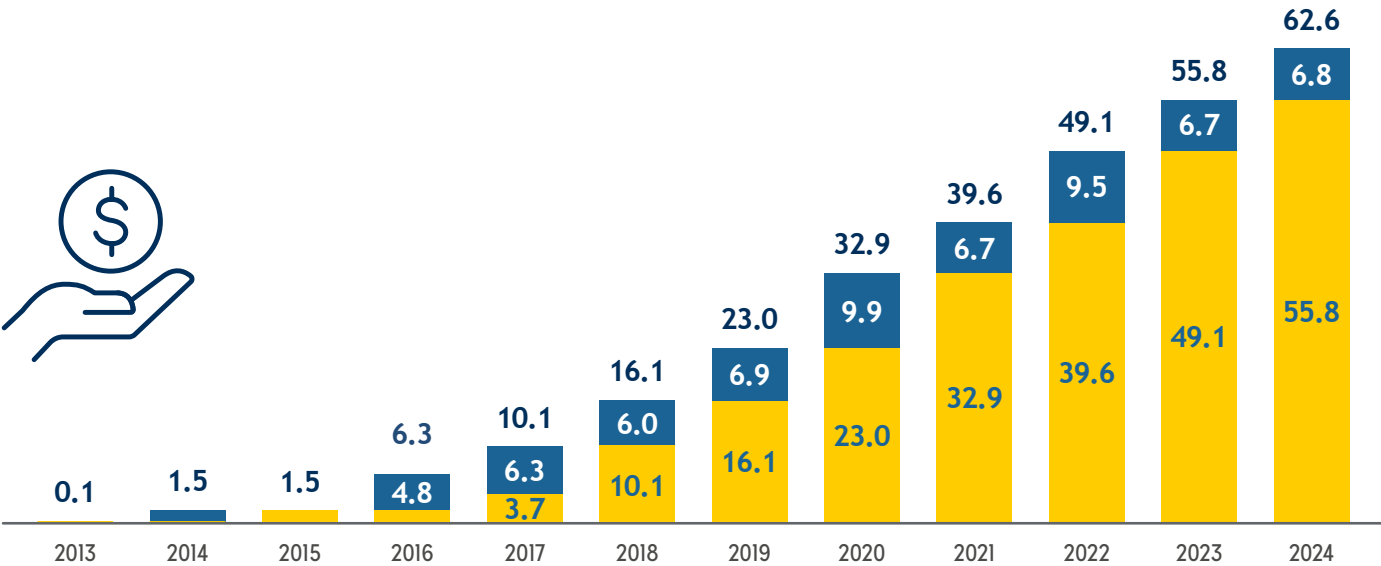
R\$62.6

million\*

in cumulative returns (since 2013)

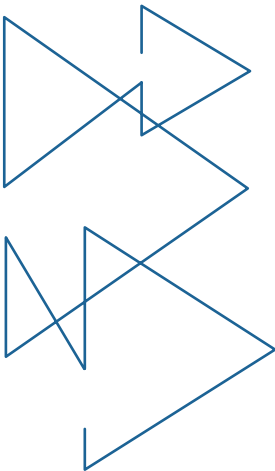
\* Includes annual monetary adjustment based on the IPCA (Brazil's Extended Consumer Price Index) and the perpetuity of ideas (once approved, ideas continue to deliver value in subsequent years).

## Cumulative Financial Result (in R\$ million)



- Annual increases updated by the IPCA
- Accumulated from previous years

- 1) Excluding implementation costs.
- 2) The annual incremental returns shown in the chart refer to the financial return calculated over the first 12 months following implementation of the idea.
- 3) Since each idea modifies a process, the returns extend into future years and are reflected in the accumulated totals, with only monetary adjustment by IPCA (Dec/24 baseline).





# Cybersecurity & Information Security

Protecting business assets through cybersecurity is essential to ensuring operational integrity and our long-term sustainability. In 2024, we faced global cybersecurity challenges, including attacks on supply chain and critical infrastructure with the use of Artificial Intelligence in cyber threats. In response, we have made strategic investments to strengthen our technological infrastructure, reaffirming our commitment to business security and digital resilience.

**80%** participation rate in training programs  
**R\$104 million** invested in technology, of which **R\$ 8 million** in information security, cybersecurity and privacy

## Information Security and Privacy Office

Information Security and Technology Infrastructure Department

MONITORING AND CONTROL	 Security Office		 Privacy Office	
	Information Security Management System	Partner and Third-Party Management	Personal Data Mapping / DPIA	Risk Assessments
	Contracts	Cyber Incident Management	Third-Party Risk and Contract Management	Incident Management
	Identity Management	Generative AI	Policies	Privacy Culture
	Cybersecurity Training	Audits and Risks	Database – Anonymization	Database – Access Monitoring
	Phishing Simulations		Disk Encryption – Notebooks	

## Reinforcement and Proactivity

We strengthened our protection layers by implementing automation and incident response playbooks, while significantly reducing vulnerabilities across our digital environment. We are constantly monitoring market trends and apply proactive controls to enhance our digital security governance.

We have diversified our threat detection approach through penetration testing, threat intelligence monitoring, analysis, and reporting.

All these efforts led to the development of a multidisciplinary team focused on process quality and control monitoring.



## Integrated Management

In order to strengthen synergy and integrated management in response to business challenges, we have unified the Information Security, Privacy and IT Infrastructure departments. This integration has brought multiple benefits, such as a broader process view, stronger alignment across teams, application of various frameworks, compliance with legal requirements and best governance practices, as well as the strengthening of a collaborative work culture.

## Employee Training and Awareness

We updated our information security awareness program, expanding technical training and cybersecurity initiatives. We have introduced phishing simulations, educational videos and e-learning courses, reaching an 80% participation rate among employees.



# Respect for Privacy and Personal Data Protection

Respect for privacy and personal data protection are fundamental to ensuring security, trust and ethical relationships with our customers, suppliers, employees and other stakeholders. In an increasingly digital world, the responsible collection, storage and use of personal information are essential to prevent misuse, avoid data breaches, and comply with legislation such as the Brazilian General Data Protection Law (LGPD, equivalent to EU's GDPR).

In addition to legal compliance, adopting strong privacy practices enhances our reputation, promotes transparency and ensures individual rights are respected. This includes the appropriate use of data, the implementation of cybersecurity measures and the enforcement of clear policies regarding data processing. Recognizing that trust is a valuable asset, we prioritize privacy and data protection, not only to mitigate risks, but also to build stronger, more sustainable relationships with our stakeholders.

We have increased from 81% to

**89%** our Privacy Maturity Index



**86%** of employees trained on the LGPD

We complied with **100%** of the actions set out in our three-year privacy program

We received **92** specific inquiries for privacy ambassadors

We dealt with **193** requests to the Privacy Office

## Challenges

In 2024, following the release of Resolution 18/2024 by the Brazilian Data Protection Authority (ANPD), which regulates the role of the Data Protection Officer (DPO), we needed to appoint an alternate officer. This process was conducted with support from our Privacy Committee. We also held both in-person and online training sessions across departments to reinforce awareness around privacy and data protection.

## National Presence

We participated in the 1st DPO Meeting organized by the ANPD in Brasília (Federal District). The event provided an opportunity to clarify several issues related to the implementation of privacy programs in companies.

## Risk management

We began managing privacy risks by analyzing personal data processing activities mapped in previous years. These risks are automatically assessed by our privacy management tool and reviewed by our team of specialists.

## Due Diligence

We launched a privacy due diligence process for our suppliers to assess the level of compliance with the LGPD among partners with whom we share personal data within our ecosystem.

### Data Protection Officer - DPO

**Email:** [privacidade@mrs.com.br](mailto:privacidade@mrs.com.br)  
**Privacy Policy:** [www.mrs.com.br/aviso-de-privacidade/](http://www.mrs.com.br/aviso-de-privacidade/)  
**Terms and Conditions of Use:** [www.mrs.com.br/termos-e-condicoes-de-uso/](http://www.mrs.com.br/termos-e-condicoes-de-uso/)  
**Cookie Notice:** [www.mrs.com.br/aviso-de-cookies/](http://www.mrs.com.br/aviso-de-cookies/)  
**DPO:** Jorge Carlos Silva de Paula  
**Alternate DPO:** Dayane Miranda da Costa Pinho

# Caring for the Planet

39 Environmental Management System  
45 Climate Strategy & Energy Efficiency  
52 Energy Management  
53 Waste Management  
57 Water Management



Fuel Management  
and Fleet Eco-Efficiency



Atmospheric and  
greenhouse gas emissions

7 AFFORDABLE AND  
CLEAN ENERGY



13 CLIMATE  
ACTION



A Message from  
Leadership

About This Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

Stewardship of  
Our Business

**Caring for the  
Planet**

Caring for People

Performance  
Overview

Appendix

GRI/SASB  
Index

# Environmental Management System

GRI 304-1, 304-3

Our Environmental Management System (EMS) is essential for implementing best practices in environmental program management, risk control and the optimization of operational costs. Through the EMS, we proactively monitor process performance, which significantly contributes to eliminating or minimizing potential environmental impacts. In addition, the system supports the reduction of incidents, improves employee preparedness, ensures effective execution of our environmental strategy, and helps fulfill commitments made to the relevant authorities.

## Improvements to the EMS

In order to optimize our environmental activities and enhance the critical review of our environmental programs, we have developed new indicators and improved existing ones. These enhancements provide even more accurate data to guide strategic decision making in environmental management processes.

## Unified Environmental Licensing

We maintained our unified environmental license with the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), through Operating License LO 988/2010 – 2<sup>nd</sup> renewal – 2<sup>nd</sup> amendment. This license covers railroad operation and maintenance, as well as workshop complexes located in the cities of Belo Horizonte (MG), Jeceaba (MG), São Brás do Suaçuí (MG), Conselheiro Lafaiete (MG), Barra do Piraí (RJ), Santos (SP), Cubatão (SP) and Jundiaí (SP), along with supporting units and activities. By consolidating all our operations under a single operating license,

we have optimized the execution of environmental programs, improved management efficiency and enhanced the synergy between environmental results, assessments and controls.

We reaffirmed our commitment to complying with the legal environmental requirements in force at municipal, state and federal level. All necessary environmental authorizations are kept up to date, including Water Use Permits, Vegetation Removal Permits (VRP) among others, with full adherence to conditions required for proper management and operation.



## Pooling Efforts and Optimizing Resources to Strengthen Partnerships

By integrating the major scopes of the Environmental Management, Environmental Licensing and Social Policies departments under a single general department, we have

strengthened our joint practices and actions, enabling us to advance in identifying and mitigating the social and environmental impacts of our operations.

**R\$22.9 million**  
invested in environmental projects and activities, broken down as follows:



**R\$7.8 million**  
in waste management

**R\$6 million**  
in environmental programs

**R\$4.5 million**  
in Degraded Areas Recovery Plans (PRAD)

**R\$4.6 million** in  
environmental compensation



## Environmental Incident Prevention and Response

Our Environmental Emergency Response Plan, publicly available at [www.mrs.com.br](http://www.mrs.com.br), includes a proactive program to prevent and respond to environmental incidents. Our teams conduct inspections, promote regular safety talks and carry out drills to ensure that all employees are prepared to act when needed and that

all activities of the operating units are conducted in compliance with mandatory environmental requirements. In order to assess compliance and ensure maximum environmental performance in our processes, in 2024 our Environmental Management team conducted over 540 inspections across the railroad network and all units.

## Emergency Response

We maintain environmental emergency kits at strategic points across our operations, each containing more than 15 items. These kits are essential to ensure a rapid and effective response to potential incidents, enabling teams to act promptly, reduce risks and minimize costs.

In addition, we have trailer-mounted kits designed for attachment to

motor vehicles, equipped with over 20 components designed for critical situations. The mobility provided by these trailer kits allows for the quick transport of necessary resources to the emergency site, facilitating containment actions and the mitigation of environmental damage. We also provide specialized kits for lower impact incidents, which are distributed across various locations.

### 24/7 Availability

We maintain a contract with a company specializing in environmental emergency management, which is available 24 hours a day, seven days a week, to handle the most critical incidents.

## Prevention and Corrective Actions

To help prevent environmental damage, we rely on the work of the Environmental Incident Investigation Committee. This committee brings together representatives from several internal departments and is responsible for analyzing events with potential environmental impact and recommending corrective actions and process improvements to prevent recurrence.

### Continuous and Ongoing Learning

Simulating critical situations is fundamental for testing and improving our emergency response capabilities – such as derailments and leaks of hazardous substances. These drills help identify and correct flaws, enhance operational safety and strengthen resilience during crisis situations, preventing social and environmental impacts.

We conducted a large-scale simulation in Jundiaí (SP). Participants responded to a scenario

involving a locomotive and four loaded railcars that had derailed after a collision. The exercise simulated a ruptured fuel storage tank, which caused diesel to leak onto the ground and into drainage networks, represented by water and biodegradable dye. The drill included containing the leak, cleaning the site, preventing cargo theft and caring for the victims. Around 300 professionals took part, including our employees, representatives from other railroads, IBAMA, São Paulo State Environmental Sanitation Technology Company (CETESB), Civil Defense, Military Police, Fire Department and the Brazilian Mobile Emergency Medical Services (SAMU).

## Extending Commitments to Suppliers

We require our critical suppliers to be equally committed to preventive measures and emergency response actions. All contractors involved in infrastructure work are required to maintain environmental emergency kits at their work sites and to periodically train their employees on how to use the equipment properly. These

requirements are formalized in service contracts and specific internal procedures for each supplier category. For example, the company responsible for operating and maintaining our diesel refueling stations – one of our key inputs – is required to submit and keep updated its risk management and emergency response plans.

Biodiversity Protection

GRI 304-1, 304-3

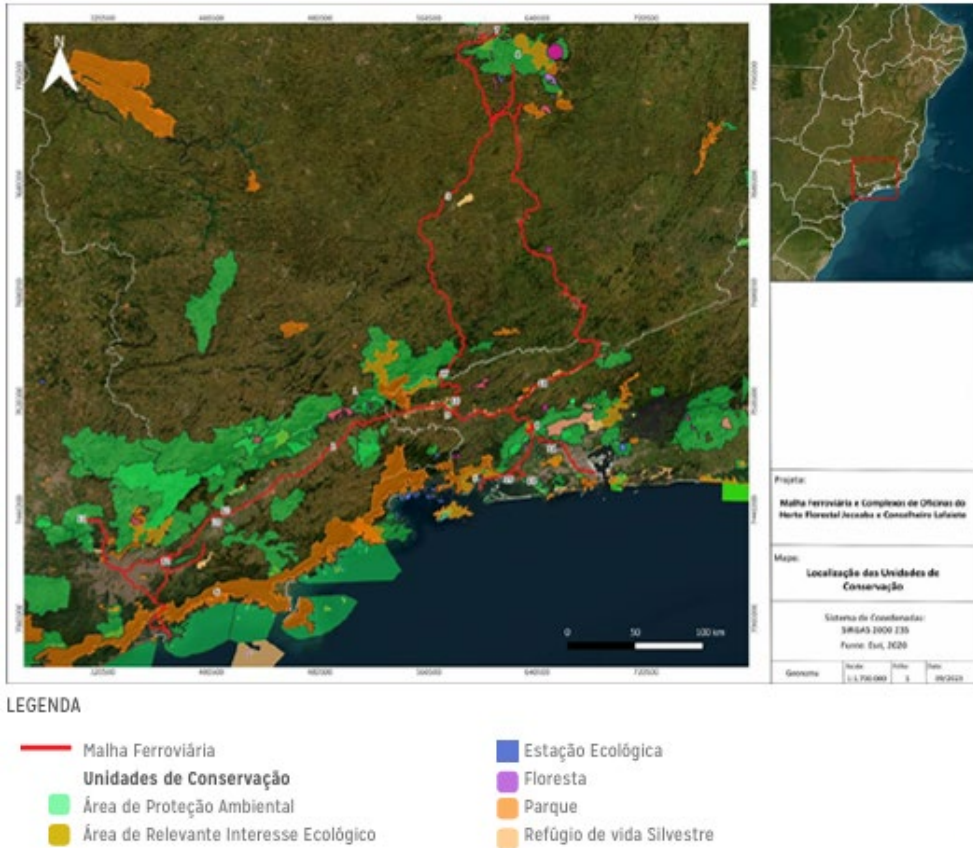
Two of Brazil's major biomes – the Atlantic Forest and the Cerrado – are part of the landscapes crossed by our rail operations and are home to 17 Conservation Units (CUs). For us, the beauty of these daily landscapes goes beyond the visual; it represents a call to action – our commitment to preserving and coexisting harmoniously with these environments. That is why we act with responsibility and dedication, investing in education and awareness-raising initiatives to mitigate the impacts of our activities on local flora and fauna.

Before starting any construction or intervention activities, we seek the appropriate environmental permits from the relevant authorities. In cases that involve tree removal or interventions in Permanent Preservation Areas (APPs), we conduct annual replanting efforts as compensation and monitor these areas until full recovery is achieved.

Erosion, soil degradation and infiltration pose critical challenges to our operations. To address these issues, we carry out continuous inspections and implement preventive measures. The following sections detail the actions and initiatives

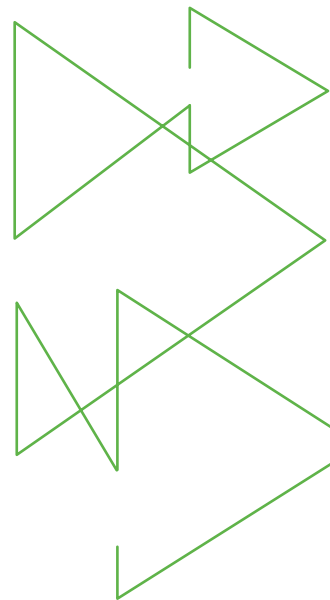
of our Environmental Liabilities Management Program and Erosive Process Management Program, which aim to maintain proper drainage systems and restore and preserve degraded areas.

Conservation Units intersected by the MRS railroad network



## Compensatory Planting

Compensatory planting is a valuable form of environmental offset, as it helps restore ecosystems and create habitats that preserve biodiversity. A significant advancement in this area is the acquisition of two properties earmarked exclusively to environmental compensation initiatives. This undertaking is crucial for enhancing the management of our compensatory plantings and ensuring the success of our efforts. By implementing advanced practices and technologies, we will achieve more efficient control over planting processes, safeguarding the health and diversity of local ecosystems. Looking ahead, we plan to establish a Social and Environmental Education Center to support environmental education for children and the youth.



# R\$3.3 million

invested in the acquisition of a property in the Juiz de Fora region (MG), with approximately 150 hectares, preserving existing native forest and dedicating over 60 hectares to compensatory plantings and habitat recovery/restoration actions in the area.

# R\$380,000

invested to acquire a property within the Serra do Gandarela National Park\*, an area to be used for land regularization compensation and donated to the public authority.

# +24,000

native Atlantic Forest seedlings planted across three sites in Paraíba do Sul (RJ), Conselheiro Lafaiete (MG) and Santana do Deserto (MG).

\*The Serra do Gandarela, located in Minas Gerais, covers parts of the municipalities of Caeté, Itabirito, Mariana, Nova Lima, Ouro Preto, Raposos, Rio Acima and Santa Bárbara. It is part of the Quadrilátero Ferrífero (Iron Quadrangle) – a region rich in iron ore and environmentally significant due to its springs, caves and vegetation characteristic of rupestrian fields and the Atlantic Forest.



## Maintenance of Compensatory Plantings

**14** campaigns

**15.2** hectares

**R\$260,000** invested

**Locations:** Juiz de Fora (MG), Santos Dumont (MG), Piracicaba (SP) and Redenção da Serra (SP)

## New Compensatory Plantings

**18** hectares across three new sites

**R\$712,200** invested

**Locations:** Conselheiro Lafaiete (MG), Santana do Deserto (MG) and Paraíba do Sul/Vieira Cortes (RJ)

Degraded Area Recovery Plans

Recovery efforts in degraded areas involve replanting native vegetation, controlling erosion and revitalizing the soil to enable the reintroduction of local flora and fauna species. We understand

that implementing a robust Degraded Areas Recovery Plan (PRAD) strengthens our environmental responsibility by promoting sustainability through the recovery of ecosystem services.

Maintenance of Previously Recovered Areas

21.3 hectares  
R\$148,800 invested

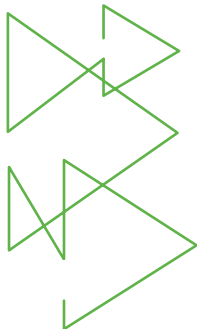
Locations:  
Brumadinho (MG)  
and Quatis (RJ)

New Recovery of Degraded Area

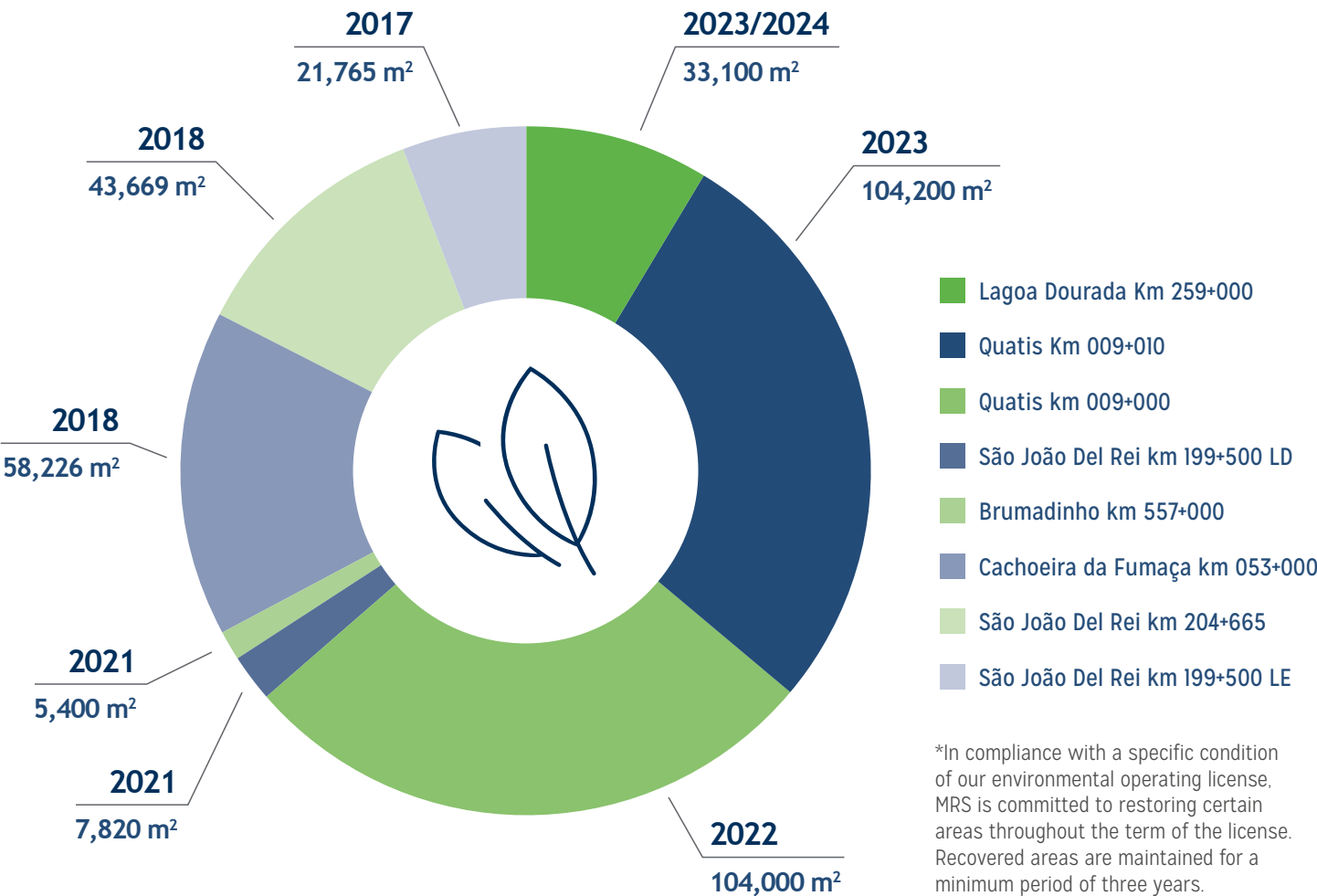
3.3 hectares  
(recovery began in 2023 and was completed in 2024)  
R\$4.3 million invested

Location: Lagoa Dourada (MG)

For the implementation of PRADs, we employed bioengineering techniques that prioritize natural terrain adaptation and minimize the use of concrete. Stabilization was achieved by protecting the exposed soil following earthworks and installation of drainage structures, using plant mesh made from fibrous materials interwoven with biodegradable threads, combined with hydro-seeding with a mix of native seeds. These actions restore the area to its natural state, allowing connection with surrounding vegetation. They also encourage the return of native fauna, enhance biodiversity, and stabilize areas undergoing advanced environmental degradation.



The Lagoa Dourada PRAD project received an honorable mention in the ANTT 2024 Highlights Award, in the Environmental Sustainability category, as mentioned on page 08



## Education in the Present and for the Future

Through educational and participatory initiatives, we train, empower and inform employees and local communities on social and environmental demands and priorities. As part of the Environmental Education Program (PEA) aimed at communities, we carried out multidisciplinary actions involving teams from the Environmental, Social Policy, Environmental Licensing and Institutional Relations departments. These collaborative efforts optimize resources to address social and environmental issues.

Fifty PEA activities were held across 20 municipalities, covering topics such as selective waste collection, fire prevention, conscious consumption, air quality, compensatory plantings, cultural heritage, and railroad safety.

The Environmental Education Program for Workers (PEAT) focused on the responsible use of chemical products, the relationship between railroad safety and the environment, sustainability and the UN Sustainable Development Goals (SDGs). The 149 lectures reached approximately 2,500 employees.



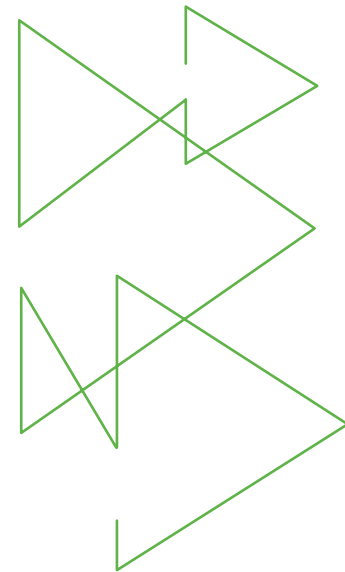
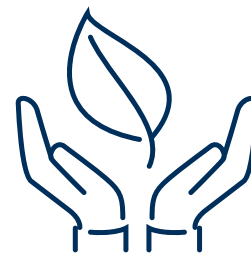
Awareness action in Guarujá (SP), in partnership with other railroads, focused on the Yellow May movement



Community action in partnership with Lilico Daycare, in Paraíba do Sul (RJ). We carried out a symbolic planting activity with the children



Community action at the Railroad Museum of Conselheiro Lafaiete (MG), with the theme Environment & Cultural Heritage, which included the participation of local schoolchildren and former railroad workers.



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

**Caring for the Planet**

Caring for People

Performance Overview

Appendix

GRI/SASB Index



# Climate Strategy & Energy Efficiency

GRI 3-3 – Material Topic Fuel management and Fuel Management and Fleet Eco-Efficiency | GRI 201-2, 305-1, 305-2, 305-4, 305-5, 305-7 SASB TR-RA-110a.1, TR-RA-110a.2, TR-RA-120a.1, SASB TR-RA-110a.3

The railroad sector plays a key role in mitigating climate change in Brazil, as it offers a logistics alternative with lower greenhouse gas (GHG) emissions intensity compared to other modes of transportation. Aware of the need to implement measures that help limit global warming, we included the topic “Atmospheric and Greenhouse Gas Emissions” in our Materiality Matrix and are working across four main fronts to reduce emissions:

- improving energy efficiency;
- conducting studies involving biofuels;
- partnerships with suppliers to develop locomotives with improved fuel consumption performance;
- periodic renewal of part of the fleet.



**Railroad transportation can emit**  
**80%** up to 80% less carbon dioxide (CO<sub>2</sub>) compared to road transportation



**Emissions Calculation**

The multimodal integration between railroad and road transportation delivers sustainable benefits, which can be measured using our proprietary CO<sub>2</sub> Calculator. This tool quantifies the reduction in carbon dioxide emissions compared to logistics flows that rely solely on road transportation.

**LEARN MORE ABOUT OUR CO<sub>2</sub> CALCULATOR**



## Absolute emissions

Our direct and indirect greenhouse gas (GHG) emissions amounted approximately 949,800 tCO<sub>2</sub>e – a reduction of around 4.3% compared to 2023. Regarding Scope 1 and 2 emissions, about 98.7% come from diesel consumption by the locomotive fleet, which saw a 2.4% decrease from 2023, mainly due to an increase in the biodiesel blend, reaching 14% in 2024 compared to 12% in 2023. Additionally, we increased ethanol use in our road fleet, raising its share from 17.8% in 2023 to 47.1% in 2024, positively contributing to this performance.

Scope 2 emissions (related to energy consumption) increased by approximately 37%, due to a higher national emissions factor disclosed by the Ministry of Mines and Energy, since there was a greater share of non-renewable energy sources during the period, such as coal-fired thermoelectric plants.

With regard to indirect emissions (Scope 3), we recorded a reduction of approximately 7.5%, mainly due to a temporary decrease in the purchase of inputs in 2024.

Greenhouse Gas (GHG) Emissions (in tons of CO <sub>2</sub> e)				
Year	Scope 1 (direct emissions)	Scope 2 (energy)	Scope 3 (indirect emissions)	Total
2022	555,769.45	1,508.32	240,630.84	797,908.61
2023	617,918.95	1,260.65	373,777.50	992,957.10
2024	602,536.63	1,731.49	345,550.49	949,818.62

## Specific emissions (Scopes 1 and 2)

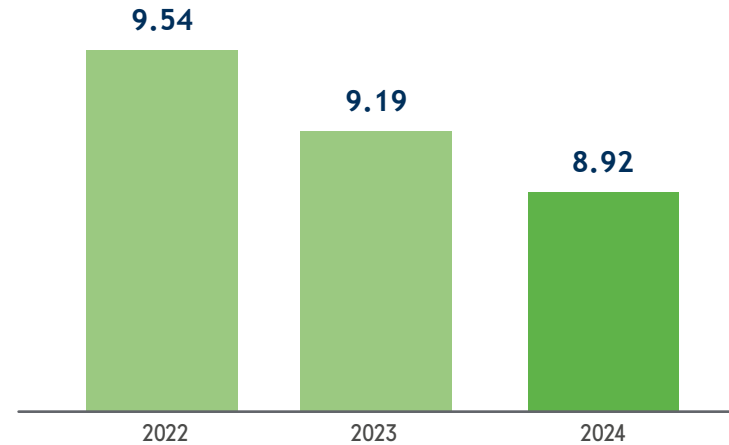
In order to increase data transparency and broaden our GHG emissions intensity indicator, we have expanded our scope to include Scope 2 emissions, in addition to the previously reported Scope 1. This broader perspective allows for more comprehensive analyses and improves comparability with the market. While railroad transportation is already a low-emission mode compared to others, we reaffirm our commitment to further reduce emissions in the sector. We have set a public commitment to **reduce the intensity of our Scope 1 and 2 greenhouse gas emissions (scopes 1 and 2) by 15% by 2035**. This target supports the delivery of low-carbon logistics solutions and reinforces our active contribution to global climate change mitigation efforts.

In 2024, we achieved our best historical performance in specific emissions, recording 8.92 gCO<sub>2</sub>e/TKM. This result reflects the increased proportion of biodiesel in the fuel blend and the implementation of multiple energy efficiency initiatives. More information on this topic can be found in the section “Fuel Management and Fleet Eco-Efficiency.”

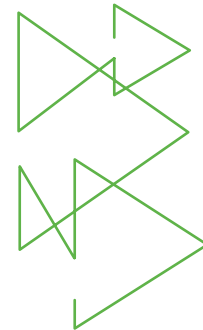
# 8.92 gCO<sub>2</sub>e/TKM

Best specific emissions performance in our history.

### Total Specific Emissions (gCO<sub>2</sub>e/TKM\*)



\*TKM: “Ton-kilometer”, i.e., solely the cargo weight multiplied by distance transported.



For the third consecutive year, we received the Gold Seal from the Brazilian GHG Protocol Program.



### Specific Emissions by Cargo Type (gCO<sub>2</sub>e/TKM\*)



Iron Ore  
**7.16** (-3.8%)



General Cargo  
**16.73** (-2.9%)



Agricultural commodities  
**17.25** (-4.7%)

## CDP Progress



We improved our score from B- to B in the Climate Change dimension of the Carbon Disclosure Project (CDP), one of the world’s main systems for disclosing environmental data. In 2021, our score was D, and this continuous improvement demonstrates to all our stakeholders that we have solid climate management practices in place. We remain committed to climate mitigation by setting clear targets and implementing effective controls, continuously seeking to improve our operations through intensive use of technology and enhanced processes. We are making ongoing progress in integrating environmental guidelines into our business strategy and building resilience to potential climate-related impacts on our operations.

In addition, for the first time, we responded to the Water Security dimension questionnaire and earned a score of C. This result reflects our awareness of the topic’s importance and the adoption of practices aimed at the efficient management of water resources. We remain committed to advancing in this area, strengthening operational best practices and control mechanisms aligned with our strategy.



We achieved, for the first time, a score of B in the Carbon Disclosure Project (CDP).



## Initiatives in 2024

We implemented initiatives and conducted strategic studies to identify opportunities for reducing GHG emissions in the medium and long term. As part of this effort, we acquired three Hedemora turbochargers – key components in our locomotives – which are expected to reduce fuel consumption by around 0.56%. We have also added 13 new ES44 model locomotives to our fleet, which are about 5% more efficient than the AC44i model and have the potential to reduce overall fuel consumption. Also, as part of our ongoing efforts to improve energy efficiency, we have implemented several initiatives, including the operation of locomotive by engineers, updates to traffic operation models, and management of speed restrictions in critical sections, among others. These initiatives are detailed in the section “Energy

Efficiency in Constant Evolution,” on page 49.

We also conducted a static test to assess the reliability of locomotives running on 100% biodiesel (B100) as fuel. The test, conducted at the Horto Florestal unit in Belo Horizonte (MG), analyzed the performance of a locomotive using renewable fuel, gathering essential data to ensure more reliable and efficient future operations.

## Beyond GHG Emissions

We also regularly monitor emissions of particulate matter (PM), NOx and SOx at maintenance workshops and along specific sections of the railroad network. Results have historically remained below the limits set by CONAMA Resolution No. 506/2024 and are regularly reported to environmental authorities. The monitoring of atmospheric emissions is carried out with the support of specialized consulting firms and follows two methodologies approved by the environmental authority:

- Monitoring of the railroad network and maintenance workshops using High Volume Air Samplers, which measures suspended particles.
- Monitoring of railcars during ore transportation.

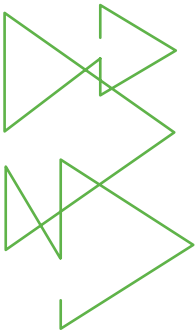
In order to reduce the environmental impact of our operations and improve air quality for communities located near the railroad, we operate four polymer emulsion sprayers in Sarzedo (MG), Jeceaba (MG), Barra Mansa (RJ) and Pindamonhangaba (SP). This technology

minimizes wind-driven dispersion of particles during the transportation of fine-grained materials in open railcars.

In 2024, we sprayed 12,395 trains, ensuring cleaner operations and reducing dust generation from cargo transport. In order to expand the use of this technology, we initiated studies to develop a new sprayer and modernize the equipment in Pindamonhangaba (SP), with the goal of improving its performance and adapting it to current and future demands.



Matheus de Sá



We invested R\$950,000 in air monitoring across the railroad network, maintenance workshops and train consists.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

# Fuel Management and Fleet Eco-Efficiency

GRI 3-3 Material Topic: Fuel Management and Fleet Eco-Efficiency, SASB TR-RA-110a.3

We continue to enhance operations with the 272-railcar model train – twice the size of the standard iron ore train – and have adopted measures to increase its circulation frequency and improve its operation process, focusing on greater operational efficiency. One of the solutions to optimize fuel consumption for this model is the use of technology that allows the operator to independently manage the train’s traction modules. Several

works fronts are underway simultaneously to make this initiative viable, such as yard expansion, modernization of locomotive onboard systems and implementation of telecommunications and safety solutions (Locotrol XA, Wi-Fi and EOT modules). Engineering studies were also carried out to upgrade two train consist assembly yards – one in Minas Gerais (PI-07) and the other in the state of Rio de Janeiro (Santa Rosa).



We acquired seven new Corys simulators for train driving training, which will allow us to increase the frequency and quality of training, making operations even safer and more fuel-efficient. Learn more in the section “Training and Development” on page 68.



We have added 13 new ES44 locomotives to the fleet, which are more modern models and emit around 5% less GHG compared to an AC44. For 2025, we are expecting 15 additional units.



## Energy Efficiency in Constant Evolution

GRI 302-3

We monitor the energy efficiency of our operations by measuring the number of liters consumed to transport one thousand gross tons over one kilometer (liters per thousand GTK).

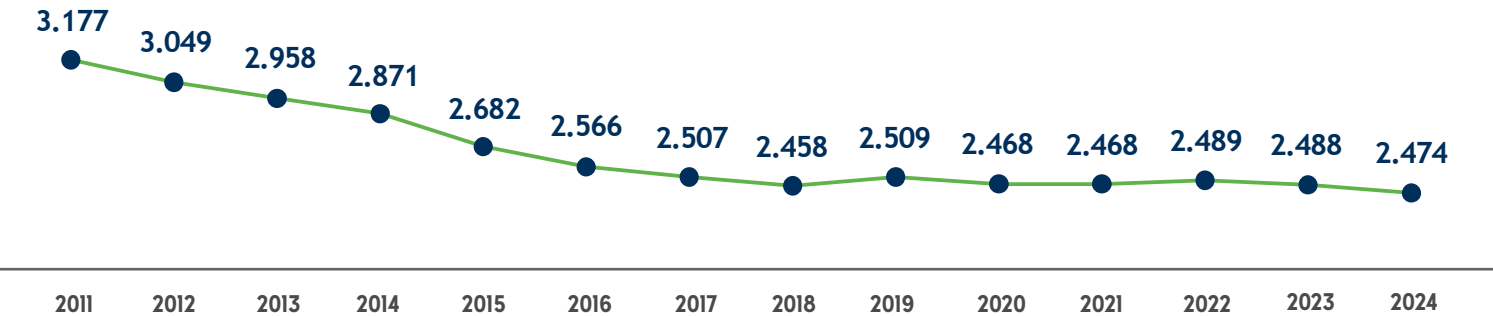
Our overall energy efficiency indicator improved to 2.474 L/kgTK – even with the reduced share of iron ore volume, which has the best energy efficiency among the three cargo groups – within the total mix, declining from 82.5% in 2023 to 81.4% in 2024.



Energy Efficiency

2.474 L/kgTK

### Energy Efficiency (in L/kgTK) Global Evolution



The better our energy efficiency (L/kgTK), the lower our total specific emissions (gCO<sub>2</sub>e/TKM), which makes this a strategic priority for us. That is why, over the years, we have established a robust fuel efficiency program, which comprises a set of measures with direct impact on reducing diesel consumption and, consequently, GHG emissions. These

measures include: driving management, use of distributed power on trains, monitoring improvements to increase authorized speeds, implementation of the Automatic Engine Stop-Start (AESS) system, adoption of optimized circulation models (pacing) tailored to each railroad section and use of new, more modern rolling stock. Given the

different types of cargo we transport and, consequently, the variation between operational models, we track the energy efficiency performance of three major cargo groups separately to ensure more in-depth analysis and comparability. This segmentation enables the development of specific actions to improve our overall energy efficiency.

### Energy Efficiency by Cargo Type

Iron Ore:

2.105 L/kgTK

1.5% better than in 2023

General Cargo:

3.631 L/kgTK

0.7% better than in 2023

Agricultural commodities:

4.169 L/kgTK

1.3% better than in 2023

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



## Key Initiatives by Cargo Type

### Iron Ore

- **Optimization of average train weight** through initiatives developed with key customers, resulting in an average increase of 0.87 net ton per railcar compared to 2023. This improvement enables us to reduce specific diesel consumption in these consists;
- **Restructuring of the train circulation model** in the main iron ore outflow corridor by adopting strategies tailored to train dynamics and the characteristics of the section. This initiative was recognized in the ANTT 2024 Highlights Award – Energy Efficiency. Learn more on page 08;
- **Optimization of operational train driving procedures** in sections where the track profile favors consistent train movement, allowing performance to be maintained with less use of acceleration points;
- **Adaptation of train driving models** in sections undergoing full renovation of the railroad network, aiming to reduce the impact of diesel consumption during construction period by managing optimal travel performance;
- **Management of train stoppages and speed restrictions** in critical sections that are unfavorable to energy efficiency; and
- **Reduction in diesel consumption** by isolating or shutting down trailing locomotives in sections where the profile allows the train to maintain its speed using only the lead locomotive’s traction.

### General Cargo

- **Restructuring of train formation models** with a focus on reducing the number of locomotives required for traction in specific circulation configurations;
- **Optimization of assets with a focus on productivity**, aiming to increase the availability of higher-performance locomotives; and
- **Strategic allocation of locomotives** (cascading) with superior fuel efficiency to higher productivity operations.

### Agricultural commodities

- **Continued implementation of the cascading strategy** by prioritizing the allocation of high-performance locomotives for this flow; and
- **Reduction in diesel consumption** by isolating or shutting down trailing locomotives in sections where the profile allows the train to maintain its speed using only the lead locomotive’s traction.

### Progress and Improvement

We continue to make progress in energy efficiency through data analysis and system integration. Leveraging data from the black box – a device installed on locomotives that records operational driving data – as well as onboard systems and other sources, has proven essential for refining processes and restructuring work models. Thus, by deepening our analysis of locomotive performance and train circulation data, we aim to optimize our asset maintenance strategy and identify further opportunities to enhance train performance.

## Climate Resilience

GRI 3-3 Material Topic: Atmospheric and GHG Emissions, 201-2, 305-1, 305-2, 305-4, 305-5, 305-7; SASB TR-RA-110a.1; TR-RA-110a.2

Mapping climate risks and impacts enhances our resilience to climate change, allowing us to identify vulnerabilities, anticipate threats and adopt preventive measures. In alignment with the TCFD framework, we identified seven critical risks (two physical and five transition related) out of 22 assessed, all with the potential to directly impact our business.



For 2025, we plan to enhance this framework with new studies aligned with SASB/IFRS standards, updating our strategies for governance, management, metrics, targets and resilience in sustainability and climate change.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## A tailored response for each event

Our physical climate risk management plan – focused on extreme weather events with potential business impact – covers responses to both droughts and heavy rainfall, including prolonged or intermittent precipitation that may impact railroad operations. From April to October, during the drought season, we carry out preventive actions to reduce vulnerabilities and prepare railroad infrastructure for the high rainfall period. Between November and March, during the rainy season, we intensify monitoring efforts and implement alerts to enable immediate interventions, when necessary.

## Resilient Infrastructure

Our infrastructure management strategy includes continuous inspections throughout the railroad network, with a focus on areas historically affected by extreme weather events. These inspections guide preventive and corrective actions to mitigate operational impacts, particularly those caused by heavy rainfall.

We also implemented a new tool that analyzes both static and dynamic technical variables – including rainfall data – to identify regions susceptible to extreme weather events. Based on these parameters, we generate data that support decision making processes for preventive investments in asset reliability, ensuring greater safety and operational availability.

Additionally, we have a meteorological monitoring contract that tracks rainfall levels. This service enables the application of operational restrictions in risk scenarios, using an alert scale and mobilizing resources in advance to mitigate potential operational impacts.

- **37** slope containment works;
- **17** Special Engineering Structures (SESS), such as bridges and viaducts;
- **34** culvert works;
- **Around 3,400** inspections of SESSs and routine checks;
- **640 km** of aerial photogrammetric surveys conducted; and
- **Over R\$300 million** invested in maintenance and new infrastructure structures.



### Rain Season Plan

**84**  
meetings held with  
involved departments

**17**  
management  
alignment meetings

**2,190**  
yellow alerts (traffic  
restrictions)

**575**  
red alerts (traffic  
suspension)



### Drought Season Plan

Mowed areas:

**17.1**  
million m<sup>2</sup>

Drainage channels  
constructed:

**16 km**

Drainage channels  
cleaned:

**1,000 km**

Culverts cleaned:

**1,794**  
units

Ditches  
opened:

**67 km**

Chemical  
weeding:

**10,700 km**



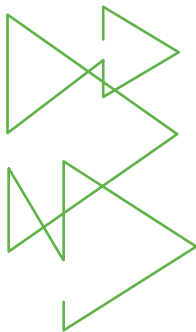
# Energy Management

GRI 302-1, 302-3, 302-4; SASB TR-RA-110a.3

Our commitment to the responsible management of natural resources and the pursuit of sustainable, cost-effective, and strategic energy solutions is reflected in our use of clean energy sources.

**We source electricity from the free market, invest in solar farms, and adopt equipment that consumes less electricity.**

Our electricity consumption increased by approximately 6.5%, driven by the growth in freight transportation along the Rack Railroad section between Cubatão (SP) and Santo André (SP) – a location that operates electric trains – as well as the construction and start-up of two new facilities: the Smart workshop in Jeceaba (MG) and the maintenance shop for track equipment in São Brás do Suaçuí (MG).



87.9% of electricity consumed came from clean energy sources (free market) – an increase of 2.2 percentage points compared to 2023.



## Energy consumption within the organization

(In GJ)  
GRI 302-1

	2022	2023	2024
Diesel oil	8,121,164	9,251,509	9,270,303
Purchased electricity	98,224	107,405	114,377
<b>Total</b>	<b>8,219,388</b>	<b>9,358,914</b>	<b>9,384,680</b>

1 Data has been adjusted in this edition, as the 2023 Sustainability Report presented figures originally reported in the 2022 Sustainability Report.

2 Considering that 1 liter equals 35.5 MJ, according to data from the Brazilian Energy Research Office (EPE).

	2022	2023	2024
Share of renewable energy consumed	85.3%	85.7%	87.9%

1 Purchased electricity data has been revised due to process improvements, including the systematization of control data, which led to greater accuracy and the need to revise 2022 and 2023 figures.

2 In the 2023 Sustainability Report, we presented the percentage of installed renewable energy capacity that could potentially be consumed. As a process improvement, we now report the actual percentage of renewable energy consumed during the period.



# Waste Management

GRI 306-2, 306-3, 306-4, 306-5

We maintain a comprehensive and robust Waste Management Plan across all our activities and facilities. We have contracts with specialized companies that ensure environmentally responsible waste management – from generation to final disposal – operating in Minas Gerais, Rio de Janeiro, and São Paulo. We continuously strive to reduce waste generation and minimize landfill disposal by focusing on segregation and sourcing suppliers that offer alternative final disposal methods. Repeating

the successful results of recent years, 100% of the waste generated in our processes was disposed of in an environmentally appropriate manner.

This demonstrates our commitment to the Brazilian National Policy on Solid Waste (PNRS) and our ongoing pursuit of more environmentally sustainable solutions for waste management.

**3,600 tons**  
of waste generated from company activities were sent to external companies for disposal

**68.6%**  
of waste was allocated to alternatives to landfilling, such as co-processing, physico-chemical treatment and recycling, representing a 16.4 percentage point increase.

**R\$7.8 million**  
invested\*

\*Includes environmental awareness and education initiatives by partner companies, process improvements, waste logistics, disposal technologies and labor.

## Waste management



We implemented a robust software platform for the waste management process, enabling real-time tracking of waste movements, mobilized assets, financial information, destinations, and the processing of approximately 4,000 documents per month.

With an investment of approximately R\$200,000, the system operates in sync with environmental authorities in MG, RJ and SP, consolidating document issuance and increasing process reliability. In addition to optimizing the search for sustainable technologies and logistics, the platform enhances data security, facilitates supplier audits and supports supplier approval processes, ensuring full legal compliance.



## Reverse Logistics of Materials

Reverse logistics is the process through which different types of waste are returned to the manufacturer to enable their reuse in production cycles and/or ensure environmentally responsible disposal. We maintained partnerships in three processes applying

reverse logistics: 168.9 tons of lead-acid batteries were sent for proper disposal; 229 herbicide containers used in chemical weed control were returned; and approximately 2 tons of polypropylene packaging were repurposed for pipe manufacturing.

### Sustainability in the Major Track Intervention Project (GIV)

In 2023, we began replacing wooden railroad ties with concrete ones in specific sections of the railroad. By the end of 2024, over 100,000 concrete ties will be installed. This initiative has delivered several sustainability benefits:

- Concrete ties have a service life approximately six times longer than wooden ones, reducing waste from maintenance needs and minimizing the extraction of natural resources for new materials;
- Potential gains in energy efficiency and safety, by increasing network reliability and raising the maximum authorized speed on certain sections;
- Reuse or recycling of usable materials generated during the project, such as used oil, wood, fasteners, screw spikes, base plates, among others; and
- Active dialogue with communities to identify opportunities to mitigate the project's social impacts.

The number of reapplied railroad ties increased by approximately 30% compared to the previous year, driven by the project's progress, which began in 2023 and generated more reusable ties, particularly wooden ones.

## Reused materials\*

**20,400**  
railroad ties reapplied on the network

**14,000 m<sup>3</sup>**  
railroad ties repurposed by third parties

**50,700**  
tons of scrap metal recycled by third parties

**97%**  
reuse rate for other wood-based materials

**1,000**  
tons of rails reinstated on the railroad network

**475,500**  
liters of oil sent for re-refining by third parties

**168.9**  
tons of lead-acid batteries sold for reverse logistics processing

**99%**  
recycling rate for recyclable waste materials

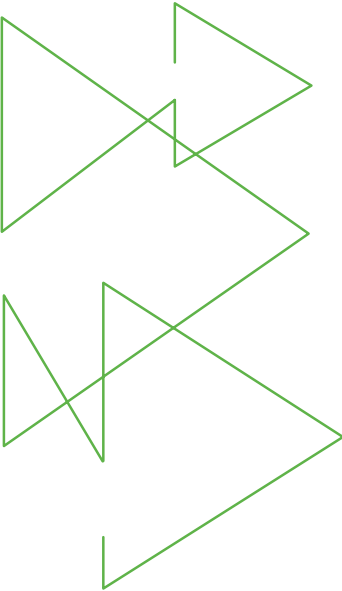
\*These materials were diverted from landfills, avoiding the purchase of new items that would later become waste.



## Train, Educate and Demand

Trained employees at more than 80 sites are responsible for assessing the generation, segregation and storage of waste. They regularly participate in training sessions and Daily Environmental Dialogues (DEDs), conducted by environmental technicians as part of the Environmental Education Program for Workers (PEAT).

All of our suppliers undergo a strict qualification process that includes audits of their procedures, emphasizing environmental licensing and compliance with other legal requirements.



## Environmentally Appropriate Solutions

We sought environmentally preferable alternatives to industrial landfilling for 97.6% of the hazardous waste generated. Following the 2023 trend, the majority of Class I waste (94%) was sent for co-processing – a technology that enables its reuse as fuel or raw material in industrial processes – thereby reducing dependence on landfills and minimizing environmental impacts.

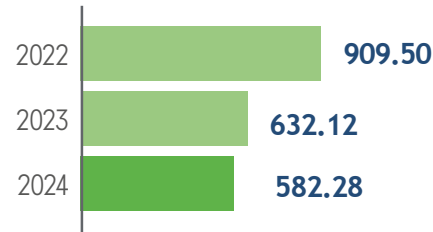
The generation of Class II (non-hazardous) waste increased by 44%, reflecting improved segregation efforts that reduced the amount of hazardous waste, along with specific disposal needs, especially for ore residues from the cleaning of freight cars. 63% of this total was sent to sustainable treatment technologies, notably co-processing (40%) and recycling (18%). This progress over the previous year underscores our commitment to alternatives to landfilling.



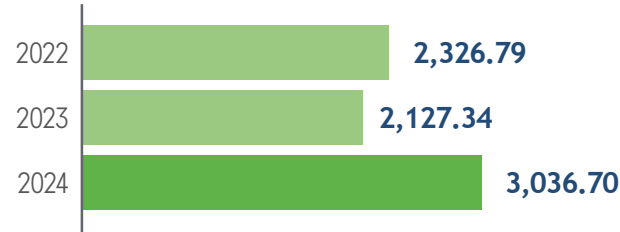
## Waste Generated (in metric tons) by Waste Type

GRI 306-3

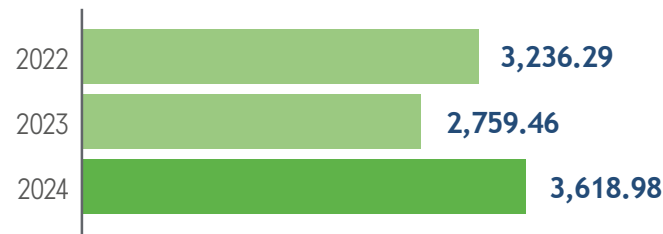
### Class I (hazardous waste)



### Class II (non-hazardous waste)



### Total



Class I: solid waste contaminated with oils and greases, liquid waste (typically mixtures of water and oil from industrial wastewater treatment), among others. Class II: general waste, cardboard, wood, rubber, welding residues etc.

## Waste Reuse: A Positive Example

Waste generated during the cleaning of freight cars was one of the main contributors to the increase in waste volumes in 2024, totaling approximately 1,200 metric tons. This activity intensified due to higher productivity and a greater number of maintenance interventions.

To mitigate this impact and identify sustainable alternatives to landfilling, 78% of this volume was reused in the pelletizing process of a partner company. The material is agglomerated into pellets and reintroduced into the production cycle, reducing the need for binding agents, optimizing energy consumption per ton produced and decreasing the use of natural resources.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



### Everything Transforms

In Jundiaí (SP), we carried out a campaign to recycle uniforms worn by our employees. As a result of the initiative, held in July, 100 items were produced from 15 uniform shirts, including 30 pencil cases, 30 trash bins, 20 coin pouches and 20 cellphone holders.

Waste Not Sent to Landfilling by Waste Type and Recovery Operation (in metric tons)				
GRI 306-4				
	2022	2023	2024	Share
Hazardous waste (Class I)	909.49	632.12	568.48	22.89%
Co-processing	882.55	597.71	547.80	22.06%
Physicochemical treatment	22.41	34.28	20.60	0.83%
Incineration	4.53	0.13	0.08	0.00%
Non-hazardous waste (Class II)	880.68	806.96	1,915.30	77.11%
Recycling	475.20	440.74	534.10	21.50%
Co-processing	405.48	366.22	1,210.00	48.72%
Physicochemical treatment			170.10	6.85%
Incineration			1.10	0.04%
Total Waste Diverted from Landfilling	1,790.17	1,439.08	2,483.78	100.00%

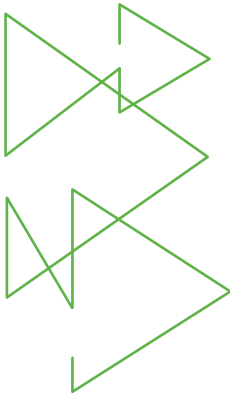
The increase in waste sent for physicochemical treatment reflects the management of sulfur-contaminated water resulting from rain incidents affecting freight cars carrying sulfur residues. Regarding incineration, a significant amount of healthcare waste was generated, such as materials from vaccination campaigns, expired medications, and contaminated packaging, all of which were incinerated due to the risk of biological contamination.

### Waste Sent to Landfilling by Waste Type and Disposal Operation (in metric tons)

GRI 306-5



- Landfilling – Hazardous waste (Class 1)
- Landfilling – Non-hazardous waste (Class 2) + industrial landfill



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



# Water Management

GRI 303-1, 303-2, 303-3

Our operations rely on three water sources: authorized withdrawals (surface or groundwater), public water supply, and water trucks. The latter source is used for railroad maintenance equipment and in units facing water scarcity.

## Real Time Monitoring

We continued to monitor water withdrawal volumes at authorized sites in real time using telemetry equipment. We expanded the number of automated locations with four new installations: three in the sprinkler systems of Jeceaba (MG) and Sarzedo (MG) and one in Barra Mansa (RJ), at yard P2-14, linked to the Major Track Intervention Project (renewal of permanent track), reaching a total of 18 telemetry-monitored sites. This expansion enhances consumption control, supplementing manual monitoring carried out by trained employees. By leveraging technology, we ensure data reliability, legal compliance and identify opportunities to reduce water consumption while promoting awareness campaigns.

## More Treatment Stations

We operate ten water treatment stations across our units to ensure quality and safety to the supply process intended for employee consumption. In 2024, we invested in two additional stations.

A specialized consulting firm provides regular monitoring of water quality in units with water withdrawal for human consumption, including laboratory testing to verify compliance with applicable legal standards.

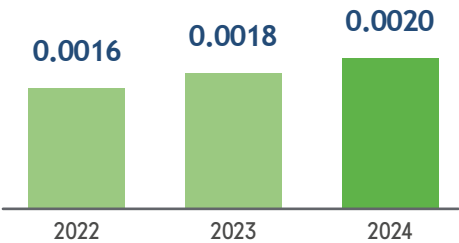
## New Wells



We obtained water withdrawal permits for two new wells to support operational and facility consumption needs related to the Major Track Intervention Project, at yard P2-14 in Barra Mansa (RJ).

One of the wells is already operational and features remote consumption monitoring via telemetry.

## Specific Water Consumption (in L/TKM)



## Water withdrawal (in megaliters):

GRI 303-3

Water withdrawal	2022	2023	2024	Share
Surface water	4.55	4.09	5.88	4.3%
Groundwater	26.54	50.37	59.04	42.7%
Water trucks	11.90	9.50	5.06	3.7%
Third-party sources (public supply)	53.50	56.52	68.12	49.3%
Total	95.11	109.79	138.10	100%

The rail grinder is one of the railroad maintenance machines with the highest water consumption from water trucks. In 2024, due to maintenance-related issues, a partner supplier temporarily operated this equipment and was therefore responsible for its water supply. This explains the reported reduction in consumption from this source.

Water consumption data (both absolute and specific) from public supply was revised due to process improvements. A new data management system was implemented, enhancing accuracy and prompting revisions to the figures for 2022 and 2023.

The increase in surface and groundwater consumption largely reflects the full-year operation of two new sprinklers in Jeceaba (MG) and Sarzedo (MG), which began in May and July 2023, respectively. Additionally,

we tested and implemented new fire prevention systems (SPCI), and experienced pipeline and network leaks that contributed to increased consumption from the public water supply.



# Effluents

GRI 303-4

As in previous years, we treated and properly disposed of 100% of the industrial and domestic effluents generated in our operations, ensuring compliance with current legislation. In locations not connected to a public sewage system, we rely on Industrial Wastewater Treatment Plants (IWWTPs), oil-water separators, and septic tank-filter systems for domestic effluents. We work with specialized consultants for the operation of IWWTPs, laboratory analyses, and periodic monitoring of all effluents we generate. Thus we ensure full compliance with applicable regulations. Our results are monitored by environmental authorities.



In 2024, the new Industrial Wastewater Treatment Plant (IWWTP) in Barra do Piraí (RJ) began operations, enhancing efficiency and reliability in treating industrial effluents generated at the locomotive workshop.

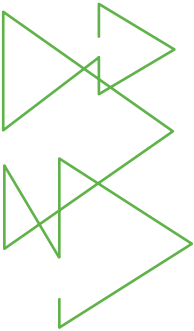
We also installed an IWWTP at the new asset maintenance workshop in São Brás do Suaçuí (MG), ensuring that this new operation is equipped with appropriate treatment for its generated industrial effluents, in accordance with applicable regulations.

## Generation and Treatment of Industrial Effluents (Treated Volume in m³)

Site	Municipality (State)	2022	2023	2024
IWWTP – Locomotive Workshop	Barra do Piraí (RJ)	1,344	1,970	1,771
IWWTP – Locomotive Workshop PI-07	Jeceaba (MG)	1,945	3,470	2,298
IWWTP – HF Rotating Electrical Machines	Belo Horizonte (MG)	498	405	279
IWWTP – HF Locomotive Washer	Belo Horizonte (MG)	908	819	1,058
IWWTP – Locomotive Workshop	Jundiaí (SP)	387	315	161
IWWTP – Locomotive Workshop, Raiz da Serra	Cubatão (SP)	179	207	114
Total		5,261	7,186	5,681

Compared to 2023, there was a reduction in the volume treated at the Industrial Wastewater Treatment Plants (IWWTPs). This decrease occurred mainly at the IWWTP of the locomotive workshop PI-07 in Jeceaba (MG). There was less

contribution from precipitation due to the lower rainfall in the region throughout the year. The other IWWTPs showed minor variations due to fluctuations in workshop maintenance activities.



We also operate industrial effluent treatment stations at our polymer emulsion sprayers. These systems are closed-loop, that is, all water used in the spraying process is treated and recirculated. This setup reduces both effluent discharge and overall water consumption.

# Caring for People

- 60 Our Workforce
- 61 Advancing Diversity & Inclusion
- 73 Health & Safety
- 84 Society & Community Engagement
- 96 Customer Experience
- 98 Supplier Partnerships



Engagement with surrounding communities



Employee Training and Development



Diversity, equity and inclusion

4 QUALITY EDUCATION



8 DECENT WORK AND ECONOMIC GROWTH



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

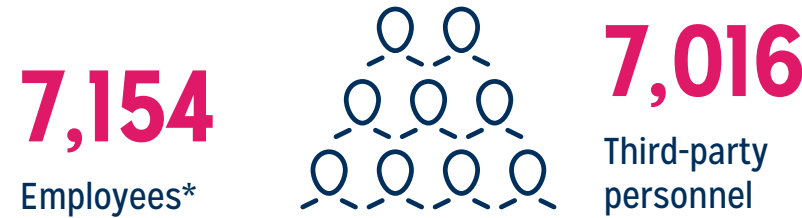
# Our Workforce

GRI 2-7, 2-8, 2-29, 2-30, 401-1, 401-3, 405-1, 407-1, 412-1

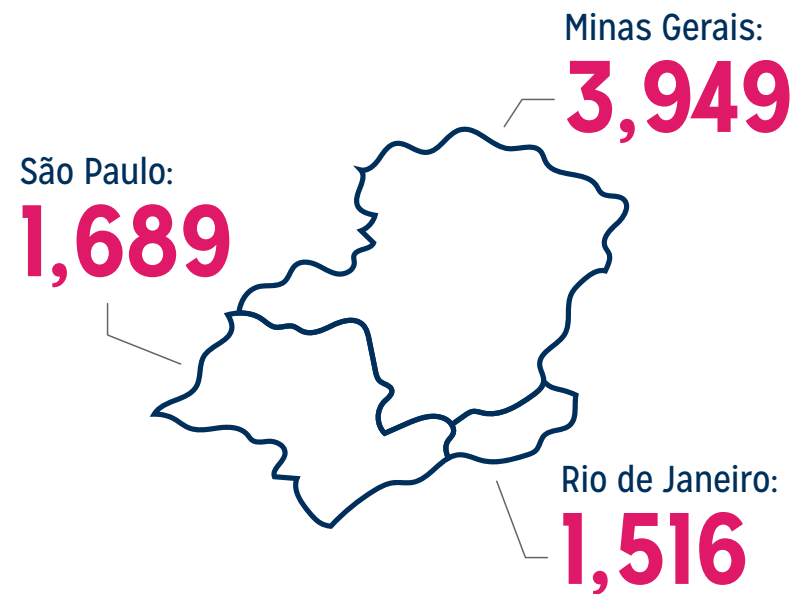
We believe our success is only possible when every individual within the organization feels part of it and works with pride and a sense of belonging. We understand that people are what bring MRS to life. They embody our values in practice, driving and building thriving relationships that allow us to go further every day.

Recognizing and valuing each person's contribution enables us to build a workplace rooted in ethics and integrity, day after day. We believe that acting with transparency and respect strengthens our internal and external bonds. This creates an environment where people feel safe and confident to innovate, grow and collaborate.

Motivated by these beliefs, we have developed policies and practices to ensure we offer a fair, inclusive, and welcoming workplace – one that respects diversity. A unique place to learn, grow and achieve.

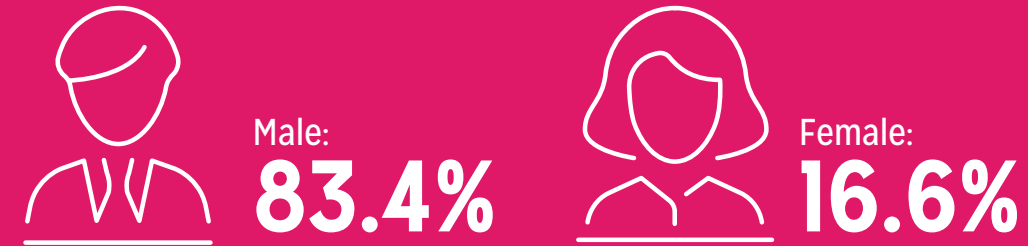


## Employees by state

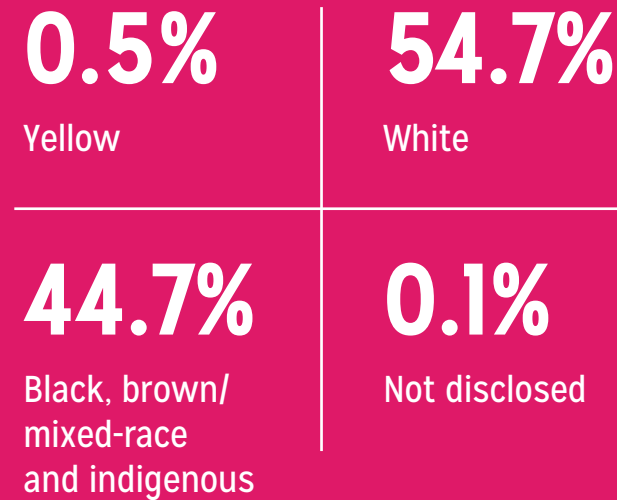


\*This indicator includes permanent and temporary direct employees. Interns and statutory executive officers are not included.

## Employees by gender\*



## Employees by race/color\*



**WATCH OUR  
MANIFEST VIDEO**



A Message from  
Leadership

About This Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

Stewardship of  
Our Business

Caring for the  
Planet

**Caring for People**

Performance  
Overview

Appendix

GRI/SASB  
Index



# Advancing Diversity & Inclusion

GRI 3-3 Material Topic: Diversity, Equity and Inclusion | GRI 405-1, 405-2

Different perspectives hold the power to transform both companies and society. For us, an inclusive approach is key to increasing our attractiveness as an employer and expanding our capacity for innovation. We value diversity in all its forms and are committed to fostering an inclusive and plural environment, free from any form of discrimination.

We aim to build a workforce that reflects diversity in gender, race, sexual orientation, age, physical abilities and worldview. Diversity is one of the principles embedded in our Strategic Framework.

## Diversity, Equity and Inclusion Committee

Since 2021, the Diversity, Equity and Inclusion Committee has been responsible for proposing and deliberating on policies, commitments and actions to promote diversity and inclusion, identifying opportunities for improvement in the company’s processes and work environments. This multidisciplinary group is composed of individuals from various departments and job levels meeting on a monthly basis.

The Committee’s Internal Charter was revised to ensure that its composition includes diverse representatives from all three states where we operate, from different hierarchical levels and from all departments. The Committee now includes up to 25 members, all participating voluntarily – 19 appointed by their departments and up to 6 selected through an open call for proactive individual applications (we received more than 95 applications).

## Diversity Census

We conducted our second diversity census and achieved strong engagement. Based on the input from our employees, we were able to identify the company’s strengths and areas for improvement, which helps us develop more effective strategies to foster a more inclusive and equitable workplace. We reached approximately 80% engagement – an increase of 65% compared to the previous census.

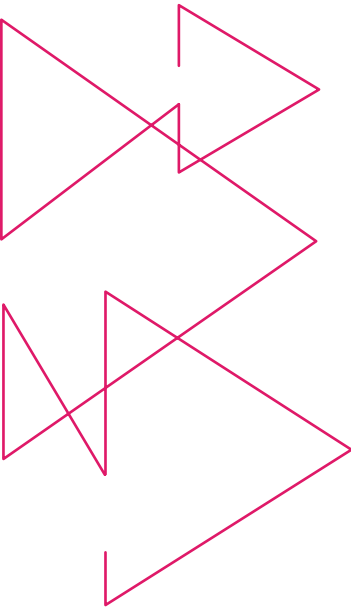
We have a team fully dedicated to this topic (available at [diversidade@mrs.com.br](mailto:diversidade@mrs.com.br)), responsible for promoting internal awareness initiatives, educational content and training on diversity and inclusion topics across the entire company.

Once again, we conducted our diversity census and held the Diversity Week, addressing themes such as ageism, the intersecting effects of racism and Attention Deficit Hyperactivity Disorder (ADHD).

## More Diversity, Equity and Inclusion

We took an important step toward establishing a consistent and sustainable model for diversity and inclusion by developing our Diversity, Equity and Inclusion Policy. This document reaffirms our stance on the subject and sets out the guidelines that steer our actions to promote diversity, equity, and inclusion in the workplace. It also encourages our employees to embed these principles in their work and to uphold them in all relationships with our partners. We also published our Human Rights Policy, as mentioned on page 20.

**READ OUR FULL DIVERSITY, EQUITY AND INCLUSION POLICY AND HUMAN RIGHTS POLICY**



- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet
- Caring for People**
- Performance Overview
- Appendix
- GRI/SASB Index

## Your Style, Your Way

We value diverse perspectives and believe that the authenticity of each employee is essential to our success. We reinforced this commitment by updating our dress code with a new approach that celebrates individual style and self-expression.

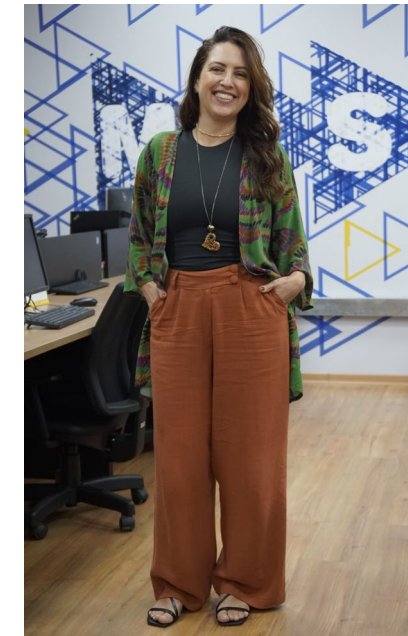
We introduced more flexibility to our dress code for administrative roles, allowing the use of shorts. More than just an update in clothing policy, this change represents another step toward building a work environment that values people beyond appearances and stereotypes. It promotes psychological safety and acknowledges that each person – with their unique voice and perspective – is essential to achieving our goals.



Douglas Cypriano, Gustavo Guimarães and Eduardo Campolina



Guilherme Silva



Cátia Cordeiro



Valdir Soares



Marcela Carrada and Rebeca Costa



Amanda Picorone

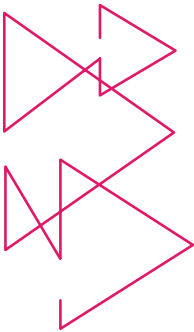


# Inclusion of Black and Indigenous Professionals

GRI 405-1

To promote greater racial equity in upper-level and leadership positions, we have been investing in the development of our black and indigenous talents. In November, we successfully completed our first mentorship program for black (black and brown/mixed-race) and indigenous professionals. In this initiative, a more experienced professional

(mentor) offered monthly career guidance sessions to a mentee seeking professional growth. The sessions covered topics such as career planning and development, financial planning, networking and communication. The program included 14 mentoring pairs.



In 2024, the percentage of Black and Indigenous professionals in upper-level positions rose from 23.6% to 24.5%. In leadership positions, representation increased from 15.3%\* to 17%.

\*This figure was corrected from what was published in the 2023 Sustainability Report due to a system integration error.

## Disability is not a defect

GRI 405-1

For us, the inclusion of people with disabilities is both a right and a fundamental commitment to fostering diversity, equity and accessibility. We recognize and value each person’s potential, regardless of their physical condition. In recent years, we have deepened our efforts on this front to overcome inclusion challenges – improving accessibility in our workshops and administrative units, promoting active listening and empowerment for people with disabilities

and implementing educational initiatives and campaigns to fight ableism.

Upholding our commitment to both safety and diversity, equity and inclusion, we have started incorporating skills assessments into our recruitment processes to identify potential accommodations needed for people with disabilities at our operational sites. We have also developed controlled environments such as the Accessibility Dojo at the Joaquim Murtinho

Yard (MG), which realistically simulate train operation activities and associated risks.

We completed the first cycle of our affirmative internship program for people with disabilities. The program offers a structured development plan featuring both technical and behavioral training, preparing interns to eventually assume specialized roles within the company. As a result, we welcomed 17 new interns to work in various departments.



Our exclusive internship program for people with disabilities was recognized as an innovative practice by the **ANTT Award in the category of Internal Management and People Development**. Learn more on page 08, under Awards & Recognitions.

- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet
- Caring for People**
- Performance Overview
- Appendix
- GRI/SASB Index

## #ElasNaFerrovia

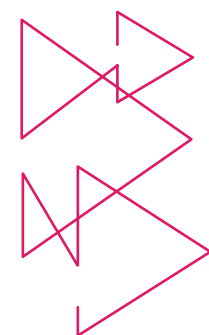
GRI 405-1

To ensure that gender equity is established as a strategic priority, we made a public commitment **to increase the representation of women in leadership positions - from the current 26.7% to 34% by 2030**. Our goal is to make MRS increasingly attractive to women by promoting structured, ongoing initiatives that offer equal development opportunities.

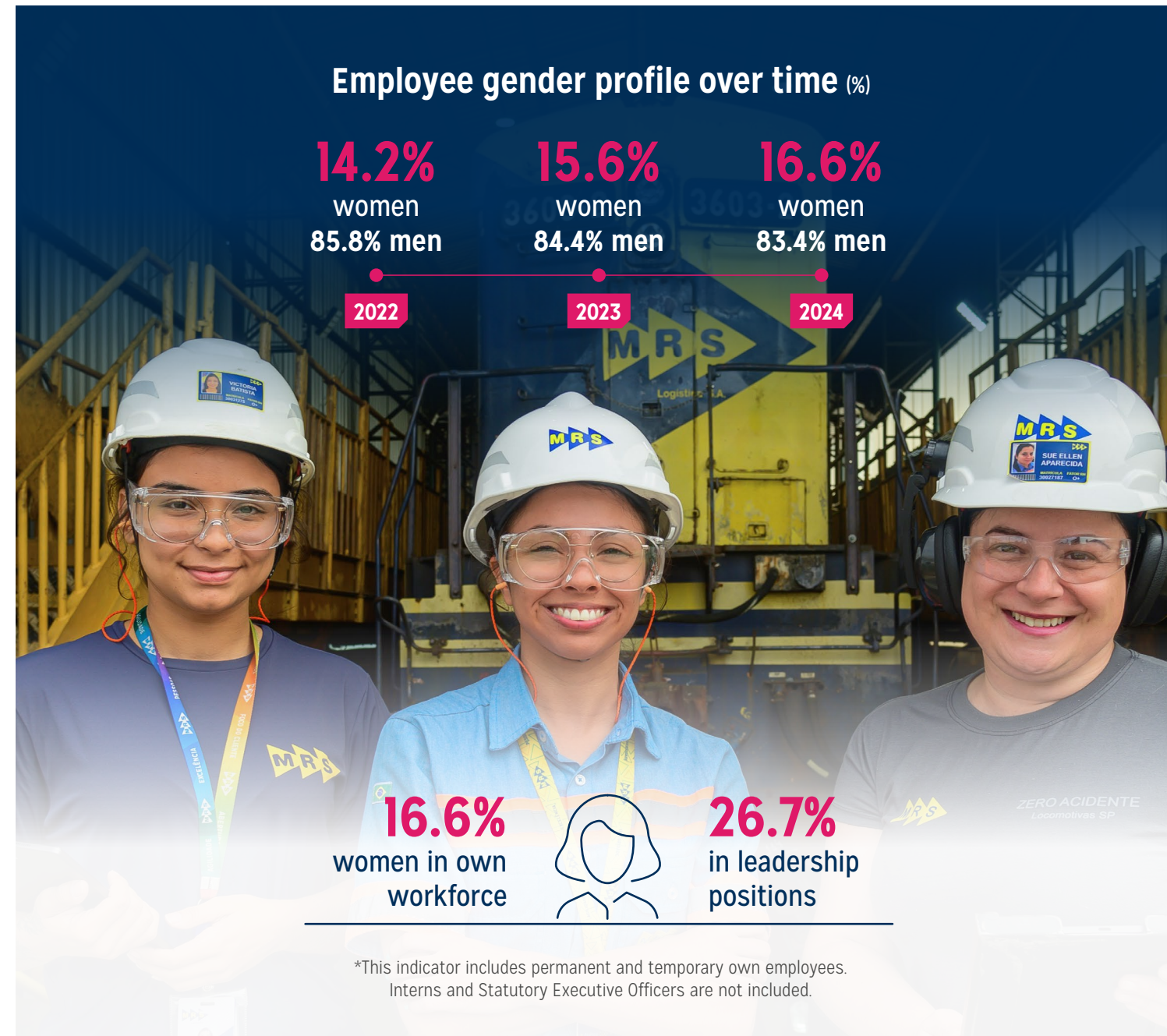
Through the *#ElasNaFerrovia* (“Women in the Railroad Sector”) program, we

launched an affinity group designed to foster a sense of belonging while identifying and addressing challenges so that women can continue advancing in their careers within the company.

We saw an increase of one percentage point in the number of women in our own workforce – from 15.6% in 2023 to 16.6% in 2024. In leadership roles, the growth was more significant, rising from 23.7% to 26.7% in the same period – an increase of three percentage points.



The **#ElasNaFerrovia** connects all our initiatives targeting women – from talent attraction to ongoing support – including professional development opportunities such as mentoring for future leaders, affinity groups, parenting support and special maternity-related benefits.



Victoria Batista, Nágela Rodrigues and Sue Ellen Aparecida



## A Network of Support, Affection and Care

GRI 401-3

Recognizing parental care as a key pillar of professional life contributes to a healthier, more inclusive and productive work environment – strengthening our ability to retain talents.

Aware of the significance of maternity as a decision and lived experience for our female railroad workers, we launched the Mamãe MRS (“MRS Moms”) program,

offering essential benefits to empower our employees to become mothers if, when and how they choose.

These benefits are available to all our employees, regardless of their family structures. We support heterosexual, homosexual, married, single and solo mothers equally, as well as women who choose to postpone motherhood.

### Mamãe MRS

- 180-day maternity leave
- Maternal and child assistance for mothers with young children
- Full coverage for prenatal exams and appointments
- Support for assisted reproduction

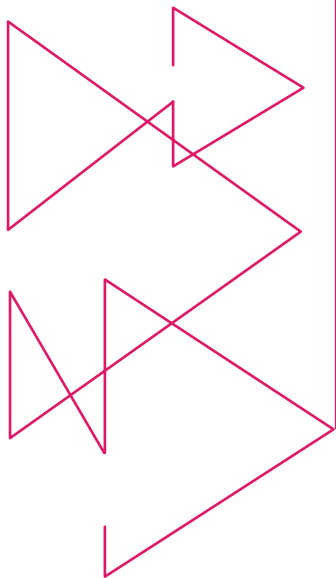


Two key initiatives were added to **#ElasNaFerrovia** in 2024: the extension of maternity leave to 180 days and the assisted reproduction support program. This initiative provides financial support of up to 70% for employees undergoing procedures such as artificial insemination, *in vitro* fertilization (IVF) or egg freezing. The benefit is available to both heterosexual and same-sex couples, as well as individuals choosing to form single-parent families.

## Bebê a Bordo

We believe parenthood goes beyond sexual orientation and marital status. That is why we support all employees, regardless of how they choose to build their families.

The Bebê a Bordo (“Baby on Board”) program, for example, was designed to support employees during the special time of welcoming a child. Group sessions provide valuable information on pregnancy, childbirth, breastfeeding, immunization, child development and first aid. In 2024, the sessions were held every 21 days from May through December, each lasting 90 minutes. The full program offers 15 hours of content and fosters mutual support and social bonding among participants.



### Breastfeeding Support

In 2024, we opened four new breastfeeding support rooms: at the Km 460 Complex in Conselheiro Lafaiete (MG), the Horto Florestal unit in Belo Horizonte (MG) and at locations in Ipiranga (SP) and Santos (SP).

These new spaces joined the one inaugurated in 2023 at our administrative building in Juiz de Fora (MG), bringing the total to five. The rooms offer a private, comfortable, and safe environment for mothers to breastfeed or express and store milk upon returning to work after maternity leave – strengthening the mother–child bond and supporting a healthy balance between work and motherhood.





# Employee training and development

GRI 3-3 Material Topic: Employee Training and Development  
GRI 404-1, 404-3

Investing in employee training and development is part of our strategy to build an innovative, efficient and sustainable company. Continuously improving our team's performance and investing in internal career growth strengthens MRS and has a direct impact on our business success and sustainability.

We believe in the transformative power of education. That is why, through the MRS Academy, we foster the ongoing development of our employees by enhancing both technical and behavioral skills through training and certification programs across different levels and functions.



+390,000 hours of training

+1,000 training sessions, both in-person and live online

48.9 training hours per employee, in average

+R\$16 million invested in training and development initiatives



206 employees supported through education incentive programs

## Career Week

Once again, we held Career Week – a key moment for reflection and for encouraging employees to take ownership of their growth and development. The week focused on career planning and the importance of individual accountability in pursuing personal and professional development. To ensure both corporate and operational teams were engaged, the initiative was structured into five phases:

**HR in the Field:** Career talks addressing professional journeys and reinforcing personal agency and growth opportunities at MRS. 1,300 people engaged across 23 locations, involving 20 HR team members.

Episode 3 – Building a Career at MRS

**Live Session – How to Take Charge of Your Career?**

**Game – “My Career on Track”:** Exploring Career Journeys

**Leadership Webinar:** Expanding knowledge beyond the classroom

**Videocast and video series featuring our employees**

We were able to reach employees and the broader community by publishing the full content on MRS's YouTube channel, along with knowledge clips shared on LinkedIn and Instagram.  
Episode 1 – Global Skills for Success  
Episode 2 – Self-Knowledge and Self-Development



## Leadership Development Program

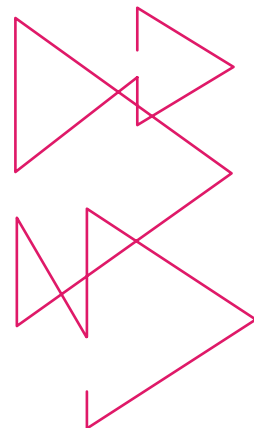
**127** leaders trained through Fundação Dom Cabral (FDC)

Through strategic partnerships with top-tier academic institutions such as FDC and FIA, our leadership development programs are designed to train current and future MRS leaders.

The program aims to train leaders and future leaders in the competencies required for management: leadership, strategy, results orientation and customer focus. Through strategic partnerships with top-tier universities, such as FDC and FIA, the program is fully customized and aligned with the company's critical knowledge areas and principles, which are essential behaviors for carrying out the work. The partner institutions that deliver the course are aligned with the company's strategic framework in order to convey knowledge that is applicable to everyday reality. In addition, at the end of the course, an internal week takes place, during

**77** employees graduated from the Leadership Development Program in partnership with FIA Business School

which MRS departments present how they contribute to the company's core business objective. Participants who attend all modules receive a certificate of completion.



## Specialization in Freight Railroad Transport

**21** employees specialized in railroad transport

The training of MRS's technical career team is strategic and ensures the continuity of specialized knowledge. For this reason, the Specialization Course is held annually, in person, in partnership with the Military Institute of Engineering (IME), with the goal of training professionals in technical railroad concepts: Permanent Track and Track Geometry, Rolling Stock and Traction - Locomotives, Rolling Stock and Traction - Railcars, Railroad Vehicle Dynamics and Wheel-Rail Interface, among others. Participants dedicate themselves fully to the course for one week per month over the course of ten months, totaling 400 hours of instruction, with all costs fully covered by the company. At the end of the course, students present a final project applied to their daily work, supported by guidance from an instructor at the institution.



## Training programs for maintenance areas

With the goal of training specialized and qualified personnel for routine maintenance of the railroad network and for major interventions in the renewal of the permanent track, we designed and developed the Track Equipment Operator Training Program. The structuring and planning of the program took place in discussion forums with experts from technical areas, the Training and Development team, and SENAI (Brazilian National Service for Industrial Training) professionals. The program is an opportunity to train labor and foster community development in the areas where we operate, by training professionals and promoting career opportunities within MRS. With a robust and targeted curriculum, divided into theoretical modules – in partnership with SENAI – and practical modules

at job sites, including Track Equipment Simulators, the program led to the hiring and training of 16 people, who were included in our permanent staff and dedicated themselves to training for six months. The time required to train an operator was reduced by 50%, positively impacting the careers of the newly hired employees.

Another highlight in workforce training is the Technical Course in Roads with a focus on the Permanent Way, a course developed in partnership with SENAI with the goal of providing specific training for permanent track professionals in an innovative manner. The fourth training class included 25 employees.

## New simulators

Since 1998, the MRS Academy has used simulators to train its locomotive engineers, and in 2024, we invested R\$4.98 million and prepared the physical infrastructure for the arrival of new simulators, which were installed to serve the three states: Rio de Janeiro (2), São Paulo (2) and Minas Gerais (3). With the decentralization of the simulators – a project that began in 2022 – we now have the opportunity to offer advanced training focused on regional needs, reflecting the actual routes covered by the locomotive engineers. This allows us to expand the reach of training efforts, improving operational efficiency and safety.

## Our railroad's new generation

### GRI 404-1

Our Internship, Trainee, Apprenticeship and Railroad Operator programs are real opportunities for professional development for those who want to start a career in the railroad industry. Gaining hands-on experience in a corporate environment can become a valuable competitive advantage for their professional future. It also allows participants to build networks and collaborate with experienced professionals, accelerating their learning and development process.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

**Caring for People**

Performance Overview

Appendix

GRI/SASB Index



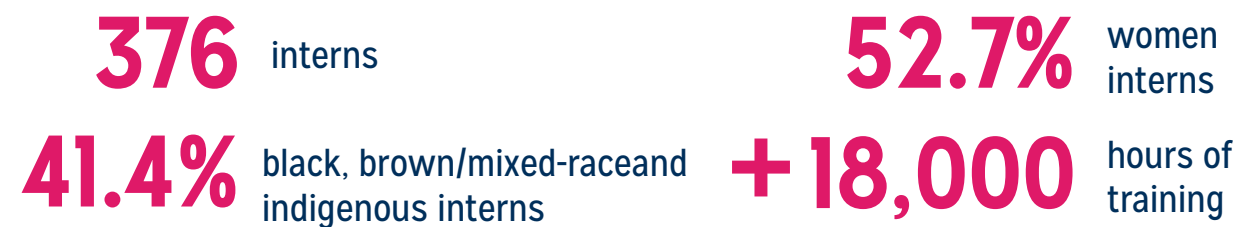
## Apprenticeship Program



The program is designed for young people between 18 and 23 years of age with a high school diploma. It offers a pathway to a solid and promising technical career through guided learning and practical training in various departments. Participants complete the theoretical component in partnership with SENAI and then move

on to the practical phase, where they are mentored by experienced employees trained to support their daily activities. This program serves as one of the main gateways to consolidating a career in the company and contributes to local development by prioritizing candidates who live in areas close to MRS's operating units.

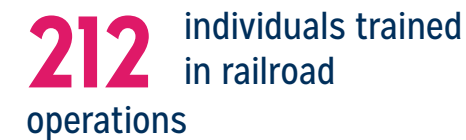
## Internship Program



This program is aimed at technical and higher education students who want to learn, develop their skills, exercise their technical and behavioral abilities and exchange knowledge. Interns are onboarded through immersion activities covering the company and the railroad sector,

followed by a structured development journey focused on behavioral and technical competencies. They also complete a practical project, receive performance evaluations, and participate in monthly support and mentoring sessions.

## Railroad Operators Program

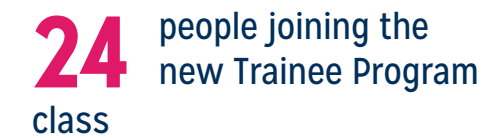


This program prepares professionals to work as Assistant Train Drivers and Yard Operators, welcoming participants who are either entering the field or transitioning careers.

Participants receive comprehensive training in railroad operations, with regulatory, safety, behavioral, theoretical and practical modules. Conducted in partnership with educational institutions, railroad companies and in-house instructors, the program is aligned with industry needs and regulatory standards.

Participants receive benefits such as scholarships, lodging during in-person modules, life insurance, travel reimbursement, meals and learning materials.

## Trainee Program



Focused on both technical and behavioral skill development, the trainee program provides a structured career acceleration path for recent graduates. With a tailored onboarding experience, participants receive training on the company's departments and culture, as well as behavioral training with external partners and technical training conducted by employees.

The program also includes the delivery of a practical project, career mentoring, individualized coaching, job rotation and performance evaluations. Throughout the program, trainees receive close guidance and go through an immersion period in the department where they will be placed.

**#VEMSERMRS - GET TO KNOW OUR PROGRAMS**

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

**Caring for People**

Performance Overview

Appendix

GRI/SASB Index

Benefits and Compensation

GRI 202-1, 401-1, 405-2

A structured compensation policy, aligned with market practices and our values, serves as a strategic tool for attraction, retention and engagement. We promote the creation of a dynamic environment in which employees feel valued, motivated, and committed to contributing to their own development and to the company's growth.

Competitive salaries and benefits are a fair way to recognize work and reinforce our commitment to our human capital. To support our decisions, we regularly engage with specialized consultancy firms.

As of year-end 2024 – with the national minimum wage set at R\$1,412.00 and salary adjustments outlined in the Collective Labor Agreement (CLA 2024/2025, effective as of November 2024) – our lowest nominal salary currently corresponds to 1.37 times the national minimum wage. The overall average nominal salary corresponds to 3.39 times the minimum wage, with the average salary for men at 3.19 and for women at 4.43. There is no pay differentiation (or any other kind) based on gender or race. The difference between men's and women's average nominal salaries is due to the greater concentration of male employees in operational positions.

Average fixed salary by gender (women/men)			
	2022	2023	2024
Managers	5%	2%	-2%
Specialists and equivalent roles	0%	-3%	-5%
Analysts and equivalent roles	-6%	-6%	-5%
Technicians	1%	2%	0%
Assistants	5%	4%	5%
Operational	-7	-9	-9%
MRS Overall	42%	41%	39%

\*Fixed Salary: Considers nominal salary, without any additional payments, in effect as of December of the given year.

\*Positive values (+): Women's salary higher than men's / Negative values (-): women's salary lower than men's.

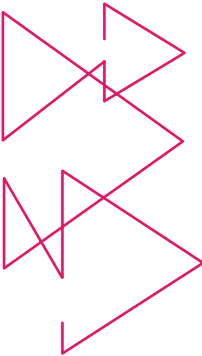
\*The "MRS Overall" line does not represent the sum of percentages by job category. It reflects the total average salary of women divided by the total average salary of men, regardless of job category.

\*Women's salaries appear higher than men's in the "MRS Overall" line because the calculation is based on average salaries by gender and, since women are more heavily concentrated in higher-level positions, their average is higher.

\*Minor variations between Fixed Salary percentages shown above and the Fixed and Variable Salary percentages presented in the Indicator Center are due to differences in individual or departmental target indicators, which are not linked to gender but are included in the Fixed and Variable Salary calculation.

Variable Compensation Programs (Profit Sharing and Bonus)

Our variable compensation programs aim to boost team engagement and motivation in achieving expected results. All employees are eligible, and the programs take into account corporate goals as well as area-specific targets. Evaluation criteria are related to operational excellence, customer satisfaction, business sustainability, safety and commitments aligned with the ESG Agenda, among others.



## Value-Driven Benefits

We provide our employees with a structured and comprehensive fringe benefits package as part of our total compensation, designed to provide access to a variety of support and service offerings, promote quality of life, health, leisure and professional development. Our benefits have a positive impact on engagement and productivity, talent attraction and retention, diversity, equity and inclusion, strengthening both our culture and organizational reputation.



Carolina Spina

### Our Benefits

- Market-leading health plan
- Maternal and infant care assistance
- Dental plan
- Private pension plan (MRSPrev)
- Life insurance
- Wellhub (formerly Gympass)
- New Value discount platform
- Education and development incentive (50% reimbursement for technical and undergraduate courses)
- Partnerships with the Social Transport Service (SEST), the Brazilian Transport Learning Service (SENAT) and the Social Service for Industry (SESI)
- Funeral assistance
- Pharmacy discounts
- Partnerships with language schools
- Base salary supplement for the first 12 months of sick leave when the INSS benefit is lower than the employee's base salary
- Hybrid work model for eligible positions: three days in-person and two days working from home
- Online and accessible Nutrition Counseling Program
- Meal voucher / grocery voucher
- Extra Christmas voucher
- Christmas gift card
- Mental Health Program with online and accessible therapy
- 180-day maternity leave
- Assisted reproduction benefit (up to 70% reimbursement for expenses related to egg freezing, in vitro fertilization – IVF, and artificial insemination), subject to an internal reimbursement table
- Maternal and infant allowance for mothers, fathers with legal custody, or employees with a disabled spouse, granted until the child turns 6 years old – or with no age limit in the case of a disabled child
- Full coverage of prenatal consultations and exams, as well as preventive exams for both men and women, extended to employees and their dependents

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

**Caring for People**

Performance Overview

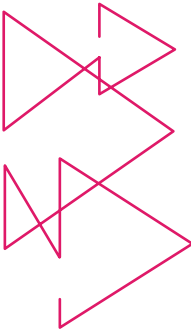
Appendix

GRI/SASB Index

## The Voices of Our Workforce

Identifying factors that impact employee satisfaction, motivation, engagement and performance is essential for climate management and engagement. Through continuous monitoring tools, we assess the organizational climate and identify improvement opportunities, enabling the implementation of initiatives that foster well-being, recognition and a sense of belonging.

This well-established practice has contributed to monitoring the employee experience, aligning it with MRS principles and integrating organizational climate and engagement. The goal is to foster a healthy, inclusive and collaborative work environment that promotes well-being, productivity, innovation and talent attraction and retention.



Our consistent climate monitoring practices have played a key role in building a healthy, inclusive, and collaborative work environment that is aligned with employee expectations and our strategic goals.

## Connection and Satisfaction

Since 2023, we have adopted a new survey methodology and scoring scale (ranging from 0 to 10). The score is calculated based on the average of all ratings provided by employees in response to each question, divided by the number of respondents. Compared to the previous year, we observed a 0.1 percentage point increase, from 8.3 in December 2023 to 8.4 in November 2024. This score surpasses the market average for the logistics and transportation sector, which stands at 8.2, reflecting a positive environment with room for improvement to reach even higher levels of employee connection and satisfaction.

We also assess our Net Promoter Score (NPS) and eNPS (Employee Net Promoter Score). Both indicators remained within the “Quality Zone” according to the defined measurement scale for these tools. The next target is the “Excellence Zone.”



Alexandre Mathias and Victor Corvino

- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet

Caring for People

- Performance Overview
- Appendix
- GRI/SASB Index



# Health & Safety

GRI 3-3 Material Topic: Occupational Health and Safety I  
GRI 403-1, 403-2, 403-5, 403-7, 403-9, SASB TR-RA 320a1

Safety is a non-negotiable priority across all our operations. Our safety management mode – based on ISO 45001:2018 and the Operational Health and Safety Management System – strictly adheres to Brazilian Regulatory Standards (NRs) and is structured around detailed planning, supported by the commitment of every employee, whether direct or third-party. Everyone plays an active role in fostering a safe and sound work environment.



Rafael Xavier

## Pillars of Safety Management





## Occupational Health & Safety

GRI 403-1,403-9

We are currently carrying out large-scale construction works under the investment plan developed for the renewal of the concession agreement through 2056. These projects will deliver numerous benefits to society in the coming years.

We are fully aware that safety in large-scale projects poses a significant challenge, involving multiple risks – from handling heavy equipment to working at heights and exposure to hazardous materials. For this reason, we have made significant efforts to adapt our safety processes to this new reality.

The data presented in this report account for all incidents involving our direct workforce as well as third-party workers. 65% of these involved third-party personnel from contractors.

In 2024, we recorded 20 incidents, resulting in a personal accident rate of 0.69. Unfortunately, one third-party worker lost their life – an unfortunate and deeply saddening event. Every individual is unique and essential to

the sustainability of our business. Each employee has intrinsic value, and the loss of a colleague is never easy. It reinforces our commitment to continuously improve the safety of our team. We express our deepest condolences to the family and friends.

Given that safety is a highly sensitive and material topic – highlighted in our Materiality Matrix – and considering the challenging current landscape, we included two public targets in our Commitment Plan to reinforce our dedication to this issue: **Zero lives lost due to occupational accidents and maintain the accident rate below 1.00.** See details on page 18 of this report.

### Negligence and Inattention

In analyzing critical events, the main contributing factors were negligence and inattention – often linked to low risk perception – which led to noncompliance with established procedures.

Rafael Bressante



### Occupational Safety



**100%**  
of employees underwent periodic health examinations in 2024

**+ 2,900**  
occupational health exams conducted on-site

**+ 13,200**  
occupational health exams performed (including pre-employment, periodic, risk reassignment, return-to-work and termination exams)



## Smart and Agile Management

Over the course of the year, we integrated 6,120 workers into our operations, including 1,320 direct employees and 4,800 professionals from contracted companies linked to the Project and Construction Department (DIP0). Managing contractors in large-scale projects is a complex process that requires close oversight of multiple suppliers, teams, and concurrent activities. Since last year, we have implemented a contractor management software to ensure documentation compliance with regulatory standards, as well as to enhance safety and operational efficiency. Currently, 175 partner companies and 5,014 workers are supported by this new platform.

Among the benefits of this project, we highlight: Faster employee mobilization

stage with initial processing completed within two business days and reanalysis within one business day; unified history and consultation base with supplier scoring; dashboards and analytical reports; ID badges with QR codes and certifications; labor liability reports to support legal compliance and decision making and the possibility of integration with access control systems.

## Safety for All

In order to ensure all contracted workers are aligned with our safety protocols, we have made significant progress in enhancing third-party management by strengthening our practices and processes. This includes dedicated meetings with contractors, targeted onboarding sessions for specific projects and works and a focus on the risks inherent to critical activities.



The “Safety Value” Award was granted to 18 employees in recognition of their commitment to safe practices, adherence to safety regulations, and mutual care on the job.

Andrey Faria

- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet

Caring for People

- Performance Overview
- Appendix
- GRI/SASB Index

Occupational Safety Indicators

GRI 403-9

	2022	2023	2024
Injuries			
Injury rate (IR)	0.06%	0.10%	0.10%
Number of injuries	15	24	26
Occupational illnesses			
Occupational illness rate (OIR)	0.02%	0.03%	0.02%
Number of occupational illnesses	4	9	5
Lost Days			
Lost day rate	1.42%	1.36%	0.84%
Number of lost days	37,143	33,182	38,666
Absenteeism			
Absenteeism rate	3.56%	3.06%	3.13%

Scheduled working hours	15,708,660	16,781,560	17,463,140
-------------------------	------------	------------	------------

Strategy and Action

We created a dedicated Occupational Safety Management department to monitor projects and construction activities, revise procedures, implement preventive technologies and run awareness campaigns. This structure was designed to provide specialized support tailored to the needs of the Project and Construction Department (DIPO).

In 2024, we began digitizing the behavioral audit form, which has optimized processing time, reduced paper usage and enabled instant data collection.

We are committed to integrating theory and practice through on-site orientation sessions that present the risks specific to each location ("Safety Tour").

\*Safety Tour: a proactive and educational tool designed to raise awareness about safety conditions at job sites. It is supported by the leadership of contracted companies and helps identify, communicate and address potential loss-related risks involving processes, people, and the work environment.



We recorded over 13,500 participant engagements in safety orientation and awareness events for all workers.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



### Technology Against Fatigue

Since 2023, we have been developing a project to install cameras in locomotive cabs equipped with advanced artificial intelligence systems capable of continuously and in real time monitoring conductor behavior. The system is designed to detect signs of fatigue and drowsiness, as well as identify possible behavioral deviations and noncompliance with established operational procedures.

Additionally, the solution provides an interactive interface with immediate alerts to the conductor whenever risk conditions or critical situations are detected, enabling a swift and effective response.

The use of fatigue detection devices has contributed to accident prevention and life protection, reinforcing our safety practices by preventing potentially error-prone situations.

### Accident Rate

SASB TR-RA-320a.1

We observed an increase in the frequency rate of accidents, which is attributed to the learning curve resulting from the rise in large-scale construction activities related to the renewal of the concession agreement.

Workplace Accidents			
	2022	2023	2024
Number of accidents	17	14	20
Accident rate / Total Recordable Incident Rate (TRIR)	0.74	0.55	0.69%
LTA (Lost Time Accidents)	14	8	14
with time off	0.61%	0.31%	0.48%
NLTA (No Lost Time Accidents)	3	6	6
without time off	0.13	0.24	0.21
Near Miss Frequency Rate (NMFR)	52.27	62.08	29.73
Fatality rate	-	-	0.03

\*The data in this table, previously presented in the 2023 Sustainability Report, has been revised in this edition. Incidents related to the Project and Construction Division were not previously included in the overall rate calculation, as the division has a unique scope focused on civil construction. Its results were previously reported separately due to its recent establishment and current level of operational maturity.

### Always Communicate

Aware that preventing loss and damage requires identifying and reporting risks, our managers encourage their teams to report 100% of safety-related events.

We provide a range of tools to support reporting by both our own employees and third-party personnel.



#### Risk and Loss Notification (CRP) and Personal Incident Records:

CRP forms are completed online by the individual submitting the report or by a designated employee. Personal incidents are logged in a dedicated system.



#### Right to Work Safely:

Forms are available for employees who feel unsafe performing a task, ensuring their concerns are heard and addressed.



#### MRS Whistleblower Hotline:

Email: [mrs@canaldedenuncias.com.br](mailto:mrs@canaldedenuncias.com.br)  
Phone (toll free): 0800 300 4531 These channels are open to all stakeholders and are publicized on our corporate website, intranet, and official social media channels.

## Initiatives that Transform

Throughout 2024, we carried out a range of initiatives designed to foster experience-sharing and enhance risk awareness among teams, with a view to increasing engagement and promoting alignment in safety practices. These actions included awareness-building through real case analyses, workshops, safety fairs, campaigns, task forces and meetings with contractors.

### Safety Calendar

#### January – March:

- DIPO Workshop – Santos (SP)
- Safety Stand-Down with the Executive Board
- Safety Fair at the Joaquim Murtinho yard (MG)
- Internal Week for the Prevention of Workplace Accidents and Environmental Awareness (SIPATMA)
- 1st Contractors Meeting (photo)

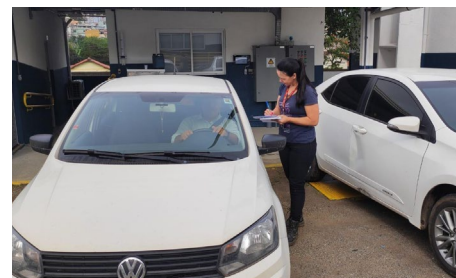


#### April – June:

- Green April – World Day for Safety and Health at Work
- Yellow May – Peace in Traffic campaign
- 2nd Contractors Meeting
- Workshop in Conselheiro Lafaiete (MG)
- Safety Fairs in Belo Horizonte (MG), Bom Jardim (MG) and Conselheiro Lafaiete (MG) (photo)

#### October – December:

- DIPO Workshop
- Safe Driving Campaign (photo)
- 4th Contractors Meeting

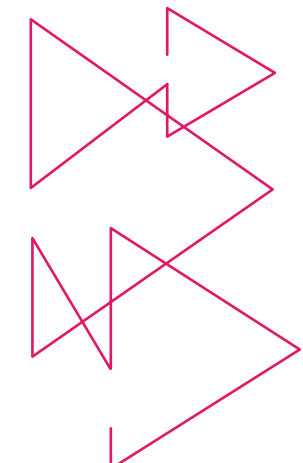


#### July – September:

- Workshops – Ferrovia do Aço (MG), Barra Mansa (RJ) and Belo Horizonte (MG)
- Safety Fairs in Jundiaí (SP) and Barra Mansa (RJ)
- Safety Tour (photo)
- 3rd Contractors Meeting

## Safety Fair

We held six editions of the Safety Fair in 2024, involving both employees and third-party personnel. Participants followed a circuit through multiple rooms. Each room focused on key safety-related topics and these sessions encouraged reflection on the importance of applying tools and preventive mechanisms in everyday work.



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

**Caring for People**

Performance Overview

Appendix

GRI/SASB Index



Outcomes of Our Health Promotion Programs and Initiatives in 2024

Hearing Conservation Program (PCA)

**5,381** hearing tests and audiological evaluations were conducted, in accordance with the criteria set out in Annex II of Regulatory Standard NR7

**Actions:** Lectures, hearing conservation campaigns and interventions during the Internal Week for the Prevention of Workplace Accidents and Environmental Awareness (SIPATMA) and Daily Safety Dialogues (DSDs).

Chronic Disease Prevention and Guidance Program

**2,558** employees identified with abnormal test results received individual guidance during their periodic medical exams, focused on lifestyle changes aimed at improving overall health conditions.

Alcohol and Drug Abuse Prevention Program (DAAPP)

**6,630** tests conducted (breathalyzer and other drug screenings)

**359,007** pre-shift breathalyzer tests for railroad operators and Operational Control Center (CCO) staff – a 6% increase compared to 2023.

Health and Quality of Life Campaigns

**188** initiatives

**Topics:** mental health; sexually transmitted diseases; occupational, household and traffic safety; blood donation; healthy living; cancer prevention; hearing health; dengue prevention; flu vaccination; neurodevelopmental disorders; chronic illnesses; safe driving; alcohol and drug abuse; noise exposure; breastfeeding; ergonomics and first aid.

Nutrition Counseling Program

**1,566** employees have participated in the program, with a total of 1,611 video calls and 1,959 messages exchanged.

Influenza Vaccination Campaign

**4,543** people vaccinated

Internal Week for the Prevention of Workplace Accidents and Environmental Awareness (SIPATMA)

Held from March 4 to 22, SIPATMA retained the same slogan as the previous year: “Safety depends on you.” The program focused on encouraging reflection around safety, health, the environment and accident prevention. Activities included an online lecture titled “Your Life First,” in-person motivational talks, and interactive activities featuring games and simulators. Topics addressed included risk perception, intoxication, fatigue and drowsiness, hearing care, the importance of a balanced diet and environmental issues related to effluent treatment.



Emotional Well-Being Program

2,150 employees have participated in the program, with a total of 6,028 video calls and 3,238 messages exchanged.

Wellhub (formerly Gympass)

**4,765** total enrollments, including 2,940 employees, interns or apprentices and 1,825 family members.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## MRS Games



### Connecting to Strengthen

The MRS Games aim to promote health and quality of life through sports, while strengthening interpersonal relationships, improving organizational climate and fostering collaboration across departments. Held annually, the tournament continues to engage more employees and their families across the three states where we operate. Organized in partnership with SESI, the event benefits from high-quality infrastructure and the technical support needed to ensure the success of the competitions.



**+ 2,100**  
employees registered

**+ 1,000**  
participating family members

**7 sports:**

Field soccer, mixed volleyball, beach tennis, table tennis, women's futsal, swimming and goalball

**367**  
teams

**130**  
days of competition





# Operational Safety and Accident Prevention

GRI 3-3 – Material Topic: Railroad Safety and Accident Prevention | GRI 403-2, 403-7 | SASB TR-RA-540a.1, SASB TR-RA-540a.2

Our operational safety rates remain in line with those of leading Class I railroads in North America. In 2024, we improved our performance compared to 2023, reducing the accident rate from 1.71 to 1.67 per billion gross ton-kilometers (GTK).

We recorded 133 incidents involving the community, a 15% reduction compared to 2023. 46 of these were collisions between trains and road vehicles (level crossing incidents) and 87 were pedestrian strikes. Together, they accounted for 76% of all incidents recorded during the year.

There was an increase in incidents caused by technical failures. However, these were mostly low-severity events, resulting from noncompliance with procedures and primarily occurred within rail yards. They did not impact railroad circulation or transported volume. Corrective actions are underway to prevent recurrence.

## Technology-Driven Solutions

We remain committed to ensuring a safer and more efficient railroad environment by pursuing new technologies, initiatives and strategies to improve operations.

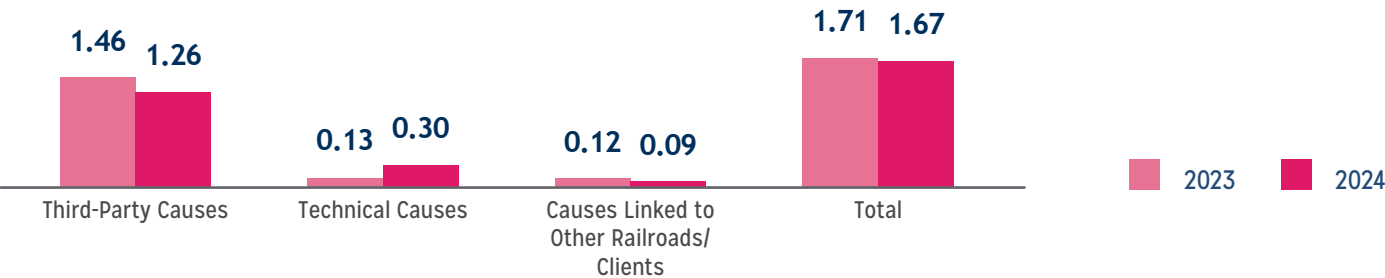
Two key projects already highlighted in this report are the fatigue detection system, designed to prevent incidents caused by human error and the computer vision project, which identifies near-miss events at critical locations in the network, including near collisions and near pedestrian strikes.

## Strong Focus on Awareness to Reduce Accidents

Awareness campaigns targeting communities located near the railroad are vital for safety and life protection. We continue to invest in public education initiatives to highlight risky behaviors and prevent accidents. Our communication strategy includes face-to-face outreach at level crossings, door-to-door campaigns and publications on high-reach media such as radio and TV, as well as digital platforms including Instagram, Facebook and YouTube.

### Accident Rate Trend

(accidents per billion GTK)



**48**  
awareness campaigns conducted at level crossings (both pedestrian and road)

**47**  
actions under the Door-to-Door program, engaging families living near the railroad

**370**  
awareness actions at level crossings to alert drivers about the dangers of reckless or impatient behavior

**2,300**  
interventions by security teams to remove individuals at risk from the railroad right of way

**16,000**  
people approached directly

**292**  
mapped actions across 17 municipalities as part of community immersion efforts to reduce incident rates



# Our Programs and Initiatives

## Safety Perception Survey

In order to understand community perceptions about railroad safety, we conducted a survey with 1,200 residents in Barra Mansa (RJ), Juiz de Fora (MG) and Santos Dumont (MG).

## Railroad Pedestrian Accident Simulation in Juiz de Fora (MG)

More than 90 people were approached during the initiative, and the estimated reach through press coverage was 2.3 million people. On social media, over 50,000 users were reached with the awareness messages.

## Yellow May Movement

In partnership with the Brazilian Land Transport Regulatory Agency (ANTT), we held a special awareness initiative in Barra do Piraí (RJ), setting up the Safety Tent to engage the community in three interactive activities: drunk goggles simulation, attention test and a quiz-style challenge. Over 500 informational booklets and sleep masks were distributed to raise awareness about the importance of adequate rest. We also placed a crashed vehicle atop a tow truck on the city's main street, accompanied by the message: "Your rush is not worth the risk. Don't be the next one." The initiative was covered by TV Rio Sul, a local Globo network affiliate.

## Risk Simulations

We carried out a series of risk simulations along the railroad to raise awareness among employees, instruct them on potential hazards and reinforce the importance of spreading safety messages to family, friends and the community. In October, a large-scale emergency drill was conducted in Jundiaí (SP), simulating a derailment with rollover and a casualty. Learn more onpage 40.

## Focus on Prevention

We trained employees to collect evidence in incidents involving the community, aiming to identify root causes and implement preventive, structural post-incident actions.

## Installation of delineators at the Chaperó Level Crossing - Itaguaí (RJ)

Delineators were installed to improve drivers' spatial awareness and visibility at the crossing, thereby reducing the risk of collisions with trains.

## Community Safety Fair

Held in Juiz de Fora (MG), the fair addressed themes such as the value of life, train-vehicle collisions, pedestrian strikes, alcohol impairment simulation and more. Activities included the display of a crashed vehicle, distribution of safety leaflets, safety quizzes and interactive awareness exercises. Over 180 people participated.

## Safety Guardians

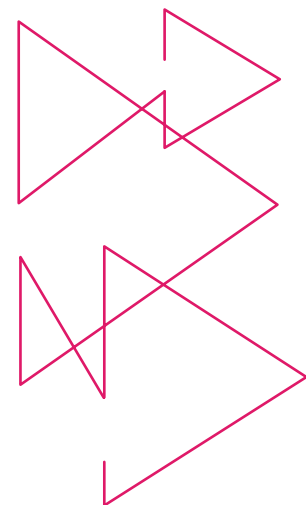
We trained employees to identify risks associated with community interactions along the railroad. These Safety Guardians play a key role in observing, facilitating dialogue, setting a positive example, promoting safe behavior and reporting identified risks.

## Social Media Campaigns

Safety Trend: "I am ... and of course I..." We launched a social media engagement campaign highlighting real images of reckless behaviors observed and reported by our system operators. The internal team was featured in the campaign, helping to raise community awareness through digital content.

## Joining Forces

The Social Policies Department team also carried out several awareness and accident prevention initiatives targeting mapped communities in municipalities with higher railroad accident rates:



**Six actions were conducted during National Traffic Week,** from September 18 to 26, with outreach efforts at level crossings (for vehicles and pedestrians), public squares and other public areas near the railroad.

**Eight activities were carried out under the Luar project,** funded with our own resources, to raise children's awareness of the risks associated with railroad. Materials distributed included an educational booklet, "Train Guardian" button, drawstring backpack, notepad, pencil and bookmark.

**Clean-up drives were held in Taubaté (SP), Caçapava (SP), and Pindamonhangaba (SP)** to raise awareness about proper waste and debris disposal, dengue prevention and distribution of materials publicizing the toll-free hotline for reporting irregular waste disposal and other issues along the railroad right of way.

**We conducted 38 safety campaigns in 20 municipalities,** with an estimated reach of over 5,400 people. The activities followed the events calendar, such as the Yellow May campaign and school holidays and included leaflet distribution, awareness actions and simulations. Some initiatives had the participation of other railroad companies and municipal public agencies.

**In Ibitité (MG), we ran awareness campaigns on improper waste disposal,** involving 150 people. In collaboration with local public agencies, we donated trash bins and our employees distributed informational materials warning about the problems caused by improper waste and debris disposal.



**In Barra Mansa (RJ), the Institutional Relations, Social Policies, Railroad Safety teams and the VLI concessionaire held a level crossing collision simulation at Estação level crossing** – a site with heavy pedestrian and vehicle traffic and newly installed active signaling – to raise awareness of the problems caused when trains are not given the right of way. During the simulation, the fire department and the Brazilian Mobile Emergency Medical Services (SAMU) were mobilized for simulated victim assistance.

# Society

GRI 3-3 | Material Topic: Engagement with surrounding communities | GRI 2-28, 2-29, 202-1, 203-1, 203-2, 413-1, 413-2

Maintaining close, continuous, and quality contact with the communities in our area of influence is an essential part of our engagement strategy with our priority stakeholders.

We have a structured and trained team to act in an ethical and transparent manner with public authorities, civil society organizations, companies, the press and the population of these cities, with a view to minimizing the impacts caused by our operations. Communities located near the railroad receive special

attention from our team. This close relationship strengthens mutual trust, reduces conflicts and promotes local development through sociocultural initiatives that we offer in these areas, in accordance with the guidelines of the Code of Ethics and Professional Conduct and applicable legislation.

## Development wherever we go

We believe in the power of our social contribution through the development of our team and the communities we engage with. By establishing a social cause, we ensure that our corporate practices are aligned with our strategic approach to generate value for society.

Rafael Henrique Carvalho, Alice Costa, Jonathan Bavuso and Samyra Queiroz





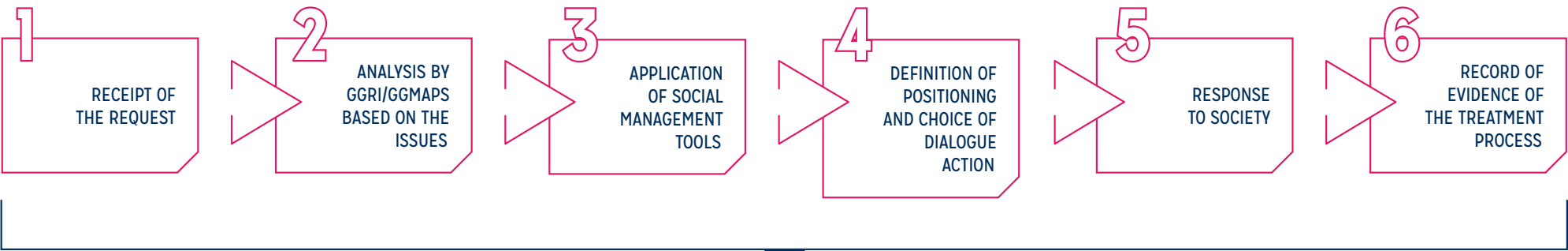
# Social Management Manual

Our Social Management Manual is a comprehensive work plan that takes into account the need for active, continuous, and quality dialogue with communities, especially considering the increase in construction activities due to the renewal of the concession through 2056.

In 2024, we successfully implemented all the actions outlined in the plan: management procedures, dialogue tools, community engagement plan, stakeholder mapping, territorial scenario analysis design and the definition of a dashboard of indicators that will allow us to monitor activities and collect data and information to report to society on how we are addressing social impacts.

We added new procedures to the Social Management Manual: Management of Construction Impacts and Relocation of Vulnerable Populations, and Crisis Management with Communities.

## General flow of social dialogue



### Stakeholders

- Public authorities
- Communities
- Community leaders
- Organizations (organized civil society)

### Entry channels

- Website
- Toll-free Net hotline
- Telephone (team)
- Email (team)
- Official letter
- Personal contact

### Topics

- Operational impacts
- Social and environmental responsibility
- Territorial development
- Involuntary relocation
- Urban mobility

### Dialogue actions

- Toll-free Net hotline
- Committees
- Open Space
- Direct Dialogue
- Public hearings

GGRI: General Management of Institutional Relations | GGMAPS: General Management of Environment and Social Policies

Active Listening

The relationship and dialogue plan provides for accessible and continuous communication with people from impacted communities throughout all phases of the project – before, during and after the completion of works related to the concession renewal – through methodological resources and communication actions to ensure the effectiveness of dialogue strategies.

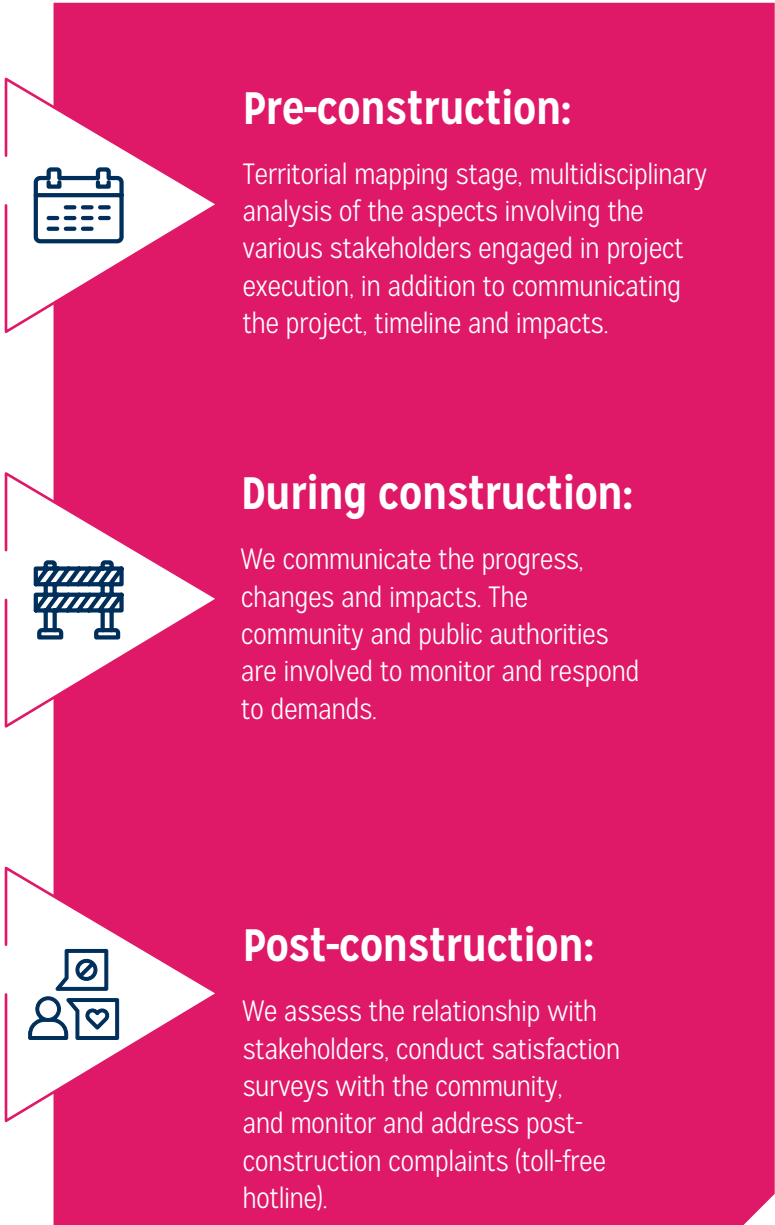
In addition to dialogue actions, the plan includes activities related to the operational routine, in which we address the impacts of our railroad operations and identify risks, together with the communities, in a proactive manner.

These initiatives include routine visits to communities, assessment of complaints submitted through the toll-free hotline, project presentation meetings, public hearings, door-to-door outreach, social service shifts, distribution of communication materials, community forums, WhatsApp groups with local residents and satisfaction surveys.

In 2024, we promoted actions in Belo Horizonte (MG), Barbacena (MG), Carandaí (MG), Congonhas (MG), Sarzedo (MG), Barra do Pirai (RJ), Belford Roxo (RJ), São João de Meriti (RJ), Pinheiral (RJ), Aparecida (SP), Cubatão (SP) and Guarujá (SP).



When and what we communicate



In 2024, we held 272 Dialogue Committee meetings across the three states where we operate.

We hosted three Open Space events with the participation of 115 community leaders to understand and respond to social demands in Santos Dumont (MG), Barra Mansa (RJ) and Aparecida (SP).



Our Engagement Tools



**Dialogue Committees:** With the participation of local leaders, residents and representatives from the public administration, aimed at seeking shared solutions and promoting mutually beneficial actions.



**Meetings with public entities and executive and legislative authorities** to establish partnerships for mutually beneficial actions.



**Complaint and community demand management** through a digital system.



**Open Space:** Dialogue forums to strengthen relationships with local leaders, partners in social projects, community opinion leaders and representatives from the public administration.



**Safety awareness and accident prevention actions:** These initiatives help foster responsible attitudes and safe behaviors, especially among children. In 2024, we promoted 38 campaigns in 20 municipalities, with an estimated reach of more than 5,000 people.



**Investments in accident prevention:** Upgrades to level crossings for both vehicles and pedestrians and the execution of construction works such as overpasses, footbridges, underpasses, public squares, community areas and perimeter fencing.



**Actions to foster dialogue and mitigate negative impacts** from our operations and construction works.



**Sociocultural and sports investments** through tax incentive mechanisms.



**Donations and sponsorships using own funds** to support engagement with community leaders and institutions.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## Handling Complaints and Requests

Our main tool to foster dialogue and the joint development of solutions to reduce the impacts of railroad operations is the 0800NET System, which has been in place since 2012. This system allows us to register, monitor, store and manage the entire process. Our Complaints and Requests Handling Manual integrates procedures from various internal departments, ensuring an efficient and coordinated approach. The document is continuously evolving, through collaborative work between the Institutional Relations and Social Policies departments, ensuring standardization across teams and greater efficiency and effectiveness in the process.

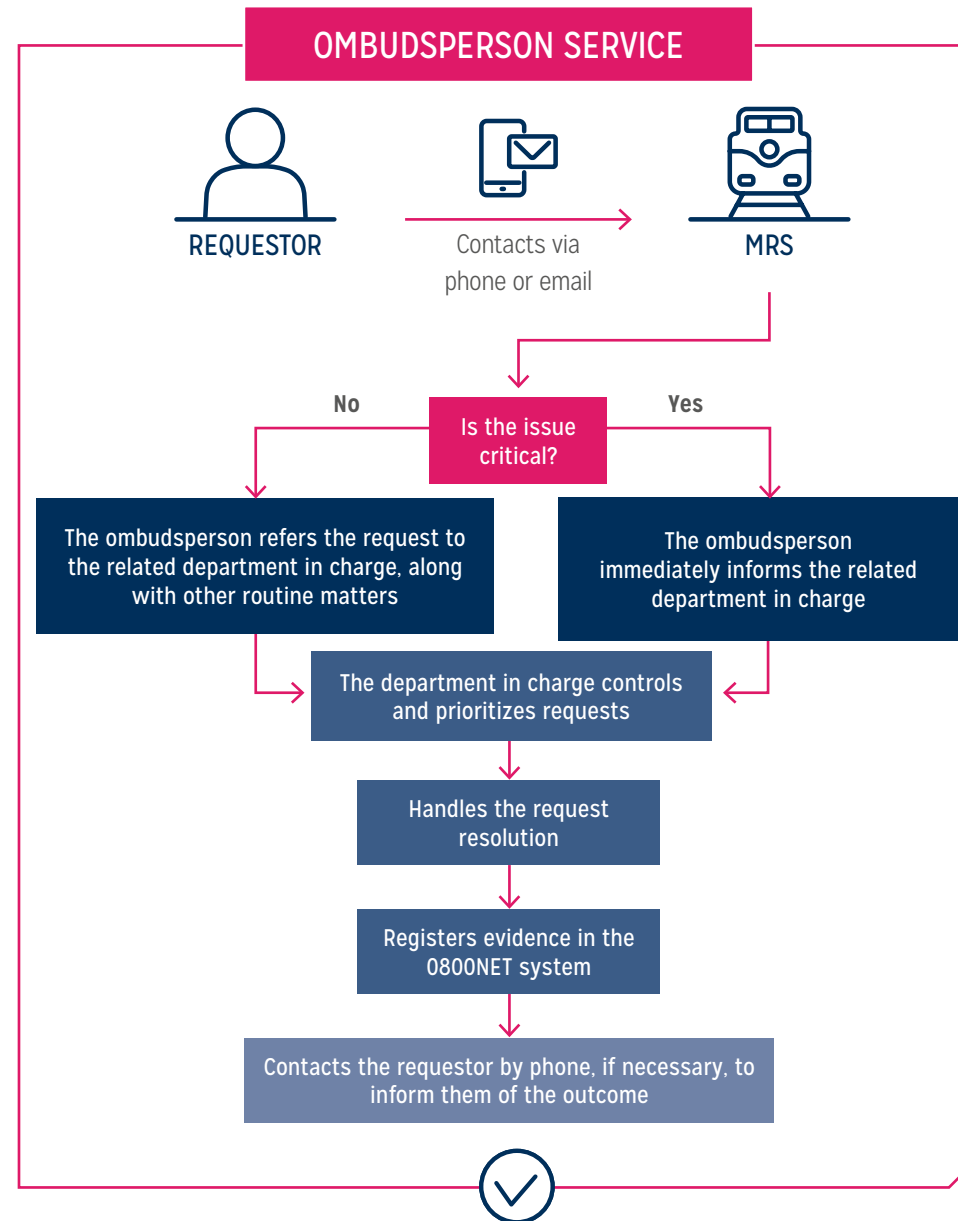
Contact us  
0800-979-3636

## Rights of Indigenous Peoples and Traditional Communities

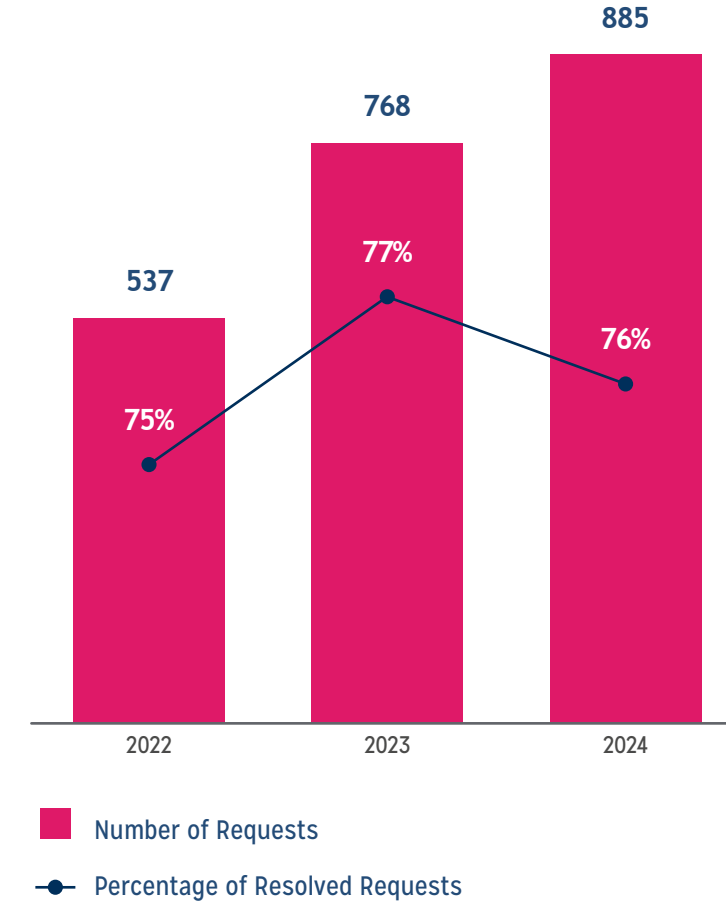
GRI 411-1

Traditional peoples – including Indigenous, Quilombola, riverside dwellers and Caiçara communities – have rights guaranteed by Brazilian legislation and international treaties that recognize their forms of social, cultural, territorial organization and lifestyle habits. We are aware of the presence of such groups in areas near our railroad operations. While they are not directly impacted, we remain alert to any potential interference, in order to strengthen relationships and improve communication through open and transparent dialogue.

## Community Complaint and Request Handling Flow



## 0800 Net



Despite a roughly 15% increase in the number of requests compared to 2023, the percentage of resolved requests remained nearly unchanged. This demonstrates our continued commitment and dedication to meeting community needs, offering solutions related to vegetation management (mowing, weeding and tree pruning), maintenance of the right-of-way, footbridges and level crossings, as well as addressing noise and construction-related impacts.

## Caring for the Common Good

Contributing to quality of life improvements – by forming partnerships that foster collaboration and strengthen our ties – is a key element of our institutional engagement strategy with public agencies, NGOs and community leaders in the municipalities along our railroad network across the three states.

We have allocated our own funds to support entrepreneurship, small-scale renovations and improvements in

schools and public facilities such as parks; and to donate traffic lights, street lighting and construction materials and dumpsters for waste and debris collection. We also show solidarity in times of crisis, such as the floods that affected the population in Rio de Janeiro at the beginning of 2024. In partnership with the social assistance departments of eight municipalities, we donated 100 kits with mattresses, bedding and pillows, as well as 2,200 food baskets.



In 2024, we carried out 36 partnerships and sponsorships. They resulted in over 10,000 donations in the states of Minas Gerais, Rio de Janeiro and São Paulo.

As part of our community engagement efforts along the railroad, we also supported the revitalization of five small public squares in Guaratinguetá (SP) and Três Rios (RJ), located near our right of way.

## Using Our Own Resources

In 2024, we sponsored five projects using our own funds in strategic communities. These initiatives aimed to educate children as “railroad safety ambassadors.” One such initiative is the Luar Project, which offers music, dance and graffiti classes in six public schools – two municipalities per state. In Rio de Janeiro, the cities of Paraíba do Sul and Três Rios were included. In São Paulo, Suzano and Guarujá; and in Minas Gerais, Barbacena and Congonhas.

The Sustainability through Capoeira (SAC) Project serves children living near the railroad in Valença (RJ), with classes held at the railroad station. In Juiz de Fora (MG), the Dubdogz Music School provides free lessons in singing, choir, DJing, flute, guitar and violin for children and teenagers. In São Paulo, entrepreneurship is fostered through chocolate-making and crochet workshops in Cubatão and Suzano, respectively.

## The Magic of Christmas on Rails



Our Christmas Train is an annual initiative that brings holiday spirit to communities. Since 2022, the project has delighted residents who gather to watch the train pass by, drawn to the lights and special decorations of this festive consist. In order to ensure everyone’s safety during the event, we reinforce key messages, such as choosing safe locations to view the train and ensuring that children are always accompanied by an adult.

The initiative, carried out in partnership with the Brazilian Association for Railroad Preservation (ABPF), aims to strengthen our connection with local communities by providing a unique experience and celebrating the holiday spirit on the rails. In 2024, the MRS Christmas Train passed through 34 cities.

EXPERIENCE THE MAGIC OF OUR CHRISTMAS TRAIN. [CLICK HERE](#)

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

## Incentive-Based Projects

We provide opportunities and support to a wide range of individuals by sponsoring projects approved through Brazil's federal tax incentive programs related to sports, culture, the Childhood and Adolescence Fund (FIA), the Brazilian National Oncology Support Program (Pronon), the National Program to Support Health Care for People with Disabilities (Pronas), and the Elderly Fund. Projects may be submitted for sponsorship until September each

year, provided they are carried out in areas where we operate. Incentive-based projects must be approved and published in the Federal Official Gazette (DOU) and have a valid fundraising period through December 30 of the current year.

Between 2012 and 2024, we have allocated over R\$120 million in incentive-based funding through federal laws. In 2024 alone, we invested R\$21 million in 46 projects.

**46** projects sponsored with incentive-based funds

**R\$21 million**

**+ R\$120 million**  
invested since 2012



## Improvements

We improved our incentive-based sponsorship process by reviewing and reassessing each step and identifying priority Sustainable Development Goals (SDGs) based on the initiatives already supported.

We also established parameters and indicators for monitoring project outcomes, including: Number of beneficiaries, gender, age group, race, number of individuals from ethnic and cultural groups and traditional communities, number of people with disabilities, education level, whether the project includes training and what skill is being developed, as well as the number of jobs created directly and indirectly. Gradually, and within a jointly defined adaptation period, project leaders will begin to provide this data, enabling us to better assess the projects' social impact. For newly sponsored projects, these indicators will be requested at the start of the contract.

We also redesigned the sponsorship section of our website, including a new project submission form, and updated our internal management procedures to incorporate the proposed improvements.

**VISIT OUR NEW  
SPONSORSHIP  
APPLICATION PAGE**



A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

**Caring for People**

Performance Overview

Appendix

GRI/SASB Index

# Preserving Railroad Heritage



## Reopening of the Taubaté Station (SP)

This historical site was restored through the Resgatando a História program, a public-private partnership with the Brazilian Development Bank (BNDES), designed to preserve and promote the country's cultural heritage. The station had been closed for over 40 years following the discontinuation of passenger train services. Since then, it had fallen into disrepair. We invested R\$1.62 million in this project.



## Restoration of the Santos Dumont (MG) Station

Founded in 1877, the station previously housed the Railroad Museum, the Municipal Public Archive, and the Paulo de Paula Cultural Center. Following its renovation, it now includes a local crafts store, an exhibition space and serves as the headquarters for the city's Departments of Public Administration and Sociocultural Projects. We invested R\$1.5 million in the project.



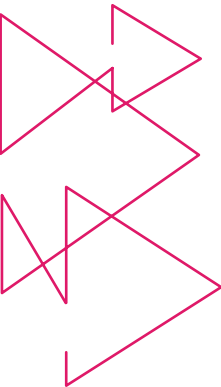
## Restoration of Souza Aguiar Station, in Simão Pereira (MG)

A historic symbol of the region's railroad heritage, the old building now hosts initiatives focused on preserving local history. It is regularly used for cultural activities such as theater performances, dance, storytelling and wellness programs aimed at seniors. Part of this programming is supported by MRS through the Municipal Elderly Fund. Our investment in this project totaled R\$450,000.



## Barão de Sahy Mansion, in Mangaratiba (RJ)

We completed the restoration of the Barão de Sahy Mansion with resources from the Resgatando a História program, supported by the BNDES and the Vale Cultural Institute. The project included structural restoration, improved accessibility (through a panoramic elevator and ramps) and the renewal of the site's museographic design. We invested R\$1.75 million in this initiative.



## Looking ahead to 2025...

In December 2024, we allocated over R\$6 million to begin restoration work at the Paranapiacaba Station Yard and Lyra Serrano Club (both in Santo André, SP), to restore the Jeceaba Station (MG) and to continue renovations of the Armazém da Utopia, located in the port area of Rio de Janeiro (RJ).

We also began selecting projects for the Railroad Heritage Preservation Fund (RPMF) for 2025. This fund, established by the Brazilian Land Transport Regulatory Agency (ANTT), is linked to our concession payments and earmarked for heritage initiatives. Currently under review by ANTT are the restoration project for the Serraria Station, in Santana do Deserto (MG), along with five additional initiatives focused on historical preservation.

## Living Heritage

Protecting and preserving the historical legacy of the railroad means honoring collective memory and acknowledging its role in the country's economic and social development. These structures tell stories, celebrate connections, and reflect how territories have evolved over time. By restoring these facilities, we help ensure their legacy remains alive and recognized, while enabling them to serve new purposes for current and our railroad's future generations. We also take this opportunity to celebrate our contribution and the new chapter we are building – together, here and now.

### Belo Horizonte (MG) Employee gathering area

The former main auditorium of the Horto Florestal complex in Belo Horizonte – once home to a technical school – was transformed into a communal space for employees. The building's façade, volume and roof structure were preserved throughout the renovation.



### Horto Florestal (MG) Warehouse painting

Formerly used to refurbish passenger cars and wooden structures, Warehouse 19 at Horto Florestal was fully revitalized, both inside and out. Work included space improvements, repairs and façade painting, preserving the building's structure and architectural character.



### Belo Vale (MG) Office renovation

Located near the Belo Vale Railroad Station, this office serves as a strategic support site for the railroad maintenance team. Renovation work ensured enhanced functionality, well-being and comfort for its users.



### Juiz de Fora (MG) Platform revitalization

The platform's façade – protected as part of the city's historical and cultural heritage and located on Avenida Francisco Bernardino – is part of the Juiz de Fora Railroad Museum architectural complex. The revitalization project preserved all original features, enhancing local identity and historical significance.



### Taubaté (SP) Administrative station upgrades

The interior of the administrative station building in Taubaté was fully renovated, with improved room layout to optimize space use while ensuring compliance with safety, accessibility and comfort standards. The façade restoration maintained its historic identity, aligned with the heritage status of the Taubaté Railroad Station.



A Message from  
Leadership

About This Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

Stewardship of  
Our Business

Caring for the  
Planet

**Caring for People**

Performance  
Overview

Appendix

GRI/SASB  
Index



## Right of Way and Expropriations

Expropriations are necessary actions in cases such as major infrastructure work related to the renewal of the concession. These projects are expected to benefit thousands of people, despite initially having a negative impact on private properties and constructions within the project area.

In line with our commitment to ethics, transparency and legal compliance, we strictly adhere to all applicable regulations governing expropriation processes – such as the Expropriation Law – and work closely with regulatory agencies, including ANTT. Every step of the process is clearly documented and accessible, ensuring accountability and preventing any form of corruption or conflict of interest. Additionally, we conduct regular audits to ensure our actions comply with the highest standards of corporate governance.

### Expropriations and compensations carried out in 2024:



### Removals and Social Support

Removals of informal settlements from the right of way and expropriations are conducted in a peaceful and humane manner. Measures are adopted to support affected individuals, with decisions guided by social vulnerability assessments and prioritizing resettlement in conditions equal to or better than those prior to the project.



### Socioeconomic Assessment

The creation of the Interference Management and Real Estate Affairs Department in 2022, and the Social Policy Department in 2023,

supported the implementation of a management procedure that regulates the relocation process for people in social vulnerability situation. Since then, socioeconomic assessments have been applied to properties subject to relocation, vacating or expropriation. In cases involving

vulnerable populations, tailored support plans are developed and technical teams provide direct assistance to minimize displacement impacts while monitoring socioeconomic indicators. These efforts include partnerships with public agencies to help provide housing alternatives.

### Prevention

The expropriation process extends beyond the pre-construction phase. Land management also includes mapping and monitoring properties adjacent to the works, aiming to

anticipate risks to both residents and the workers involved in project execution. As part of our impact mitigation strategy, precautionary building inspections are carried out. In 2024, we conducted 170 such assessments.

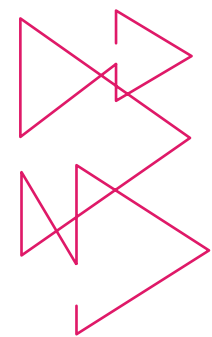
- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet

### Caring for People

- Performance Overview
- Appendix
- GRI/SASB Index

## Right of Way Management

In addition to daily monitoring by field teams, we are investing in new technologies to enhance the protection of the railroad's right of way and the safety of surrounding communities. A pilot project using space-based technology and Artificial Intelligence is underway to analyze satellite and drone images. The new platform detects irregular occupations, waste accumulation and other issues within railroad areas, optimizing right of way management. During vacating processes, we use a criticality matrix to identify priority sections, guiding prompt action and the structured relocation of families.



We are using satellites, drones and Artificial Intelligence to monitor the right of way, making our management more efficient and secure. The technology reduces the need for frequent manual inspections and optimizes field team deployment. By issuing alerts, the system enables preventive action to avoid the consolidation of irregular occupations and constructions. Drones capture high-resolution images to validate the AI alerts in critical areas.

### Stages



## The Varandas Community

A remnant of the former Brazilian Federal Railroad Network (RFFSA), the Varandas Community, located in the Piaçaguera Yard in Cubatão (SP), had been established more than 100 years ago. What remained were seven severely deteriorated buildings with partial collapses, still occupied by families in vulnerable conditions.

Given the extremely precarious situation of the 36 individuals living in the community, isolated within the railroad yard, we opted to resettle the families to new housing units. This decision ensured safe housing, access to essential public services and restored citizenship, through collaboration with public authorities to provide education and training opportunities.

We also acknowledged the historical context of the former buildings, which are part of railroad memory; thus we produced a short documentary capturing the connection between the community and the railroad yard, preserving its story and significance.

The removal of the structures and the careful relocation of the families improved safety in our operations at Piaçaguera Yard. The project was a finalist in ANTT's annual awards.

**WATCH THE TRAILER FOR THE DOCUMENTARY ABOUT THE VARANDAS COMMUNITY AND LEARN MORE ABOUT ITS POSITIVE IMPACT ON THOSE PEOPLE'S LIVES**

## The Casinhas Project

Inherited from the former Federal Railroad Network (RFFSA), the Casas da Rede (Railroad Houses) were residential units formerly used by employees of the defunct company. Today, they were being occupied by individuals with no ties to the railroad. In addition to the risk of accidents, other issues included recurring defaults on rent payments and the generation of liabilities due to the legal obligation to preserve public assets. In 2023, we launched a project to resolve the situation involving these properties. The initiative began by identifying the 101 housing units and defining an approach, with priority given to areas impacted by the track segregation works – Várzea Paulista, Caieiras, Perus and Pirituba. A joint effort among the Real Estate Management, Social Policy, and Legal departments enabled a socioeconomic assessment and the development of an assistance plan for each household, ensuring that vacating was conducted in a humane and financially feasible manner. There were 21 voluntary cases of vacating, involving 62 affected individuals, through amicable agreements that balanced the needs of each household.



## The Prainha Project

Winner of the 2023 ANTT Award in the Societal Engagement category, the Prainha Project was concluded in 2024 following the final 25 vacating cases. Located in the Vicente de Carvalho district of Guarujá (SP), the area housed vulnerable communities living in precarious houses on stilts. In partnership with the local and state governments, we implemented a relocation and resettlement project for families living in risky areas near our railroad network. All families were relocated to housing units under the Vida Digna (Dignifying Life) state program. This joint effort led to the relocation of 580 families.

## The Vira-Lata Community

The Vira-Lata Community is an informal settlement located in the Jaraguá neighborhood, in the northwestern region of São Paulo (SP). The name comes from a former recycling project in the area. The community includes approximately 230 mapped households, of which around 80 need to be relocated to allow for the segregation of freight and passenger train lines. Following a social assessment, we proposed a respectful and coordinated relocation of these families through an assisted and carefully managed resettlement process. We maintained ongoing dialogue with community members to understand their needs. Based on this engagement, we committed to acquiring new homes nearby for the families, minimizing the impact on their daily lives and ensuring safer and more dignified housing conditions.



When you move to a better place, you become a better person.



**Sonia Aparecida dos Reis**  
Community leader

**LEARN MORE ABOUT THIS TRANSFORMATIVE PROJECT. CLICK HERE AND WATCH THE VIDEO**



## Partnerships to Encourage Sector Collaboration



We believe that ethical, transparent, and collaborative relationships with public regulatory agencies and civil society organizations in our sector provide valuable opportunities to establish strong partnerships, foster development in the railroad industry, share knowledge, and continuously improve our quality and safety standards.

## Communicating with Agility, Proactivity and Transparency

Maintaining close ties with the press helps us clearly and publicly communicate our actions to all stakeholders. We apply a proprietary methodology to monitor and evaluate positive and negative media coverage, ensuring balance through the Press Quality Index. In 2024, we achieved the best result in our history: 2.27. For comparison, in 2014, the index was 0.44.

In **93%** of negative news coverage, our version of the facts was considered.

**23.4 million** people reached  
(estimated audience based on media outlet metrics)

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

**Caring for People**

Performance Overview

Appendix

GRI/SASB Index

# Customer Experience

GRI 3-3 – Material Topic: Customer Relations Management | GRI 2-29

In order to create value for our customers, we provide safe, efficient, high-quality transportation services at competitive prices. We are continuously seeking new solutions and opportunities that meet the needs of each segment, exceed expectations and foster long-lasting relationships built on trust and loyalty.

The Customer Experience Program consists of a structured set of actions and strategies aimed at understanding, measuring and enhancing the customer journey. The goal is to increase satisfaction by ensuring that needs and expectations are met – and exceeded.

## a. Technology:

We are finalizing and validating a new app, to be launched on major platforms in 2025, to improve our interaction with customers.

## b. Customer-Centric Culture:

We made progress in standardizing processes to enhance service quality and delight customers. We developed

an immersive visit program at our facilities, giving customers the opportunity to engage directly with our Operational Control and Planning teams, and to observe key operations, such as the Serra da Cremalheira line in the state of São Paulo.

## c. Voice of the Customer:

Committed to our continuous pursuit of excellence, we conduct an annual satisfaction survey to assess the perception of General Cargo customers regarding our performance, identifying strengths and areas for improvement.

As a distinguishing feature that has been validated and approved by our customers, our survey is conducted entirely in person to encourage open dialogue and experience-sharing, allowing for deeper analysis of improvement opportunities.

We achieved a favorability score of 85 points. Despite a slight decrease of 1.6 points compared to 2023, we remain 1 point above the historical average (data

since 2018). We view this result as a reflection of our solid commitment to excellence in customer service.

In addition, we launched a satisfaction survey for Iron Ore customers to

support the growth established with the concession renewal. We also expanded active listening practices through new, targeted surveys with customers using the railroad for container transport. We

interviewed active, inactive (churn) and prospective customers. This approach helps us understand the specific needs of this niche and define growth strategies aligned with market expectations.



## Customer Success Committee

The decline in our favorability score compared to 2023 served as a warning. After individually analyzing survey responses and identifying customer pain points, we established the Customer Success Committee. This structure is built on four main pillars: Operational Performance, Sizing, Communication and Processes. It is organized into seven works fronts that address the key challenges identified:

**Train consist punctuality:** Ensure on-time performance of train consists, minimizing delays and operational disruptions.

**Communication:** Strengthen alignment with customers through more efficient and transparent channels, with technology as a key enabler.

**Lead time:** Shorten total logistics process times, from cargo release to final delivery.

**Slow resolution:** Eliminate bureaucracy and accelerate decision-making and solution implementation.

**Service windows:** Improve service delivery based on customer-agreed timeframes for railcar positioning.

**Performance indicators:** Improve the monitoring of KPIs to ensure well-defined agreements, greater visibility, and continuous improvement.

**Schedule adherence:** Enhance reliability in executing weekly operating plans.



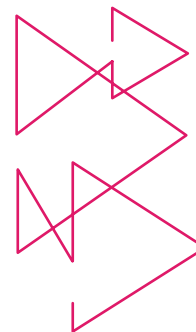
The committee's objective is to sustainably enhance customer satisfaction by delivering efficient, high-quality services through a customer-centric service model – aligned with one of the core principles of our strategic framework.

## Complaint Monitoring via ANTT

We monitor customer perceptions through complaints submitted to the Brazilian Land Transport Regulatory Agency (ANTT). These complaints are reported semiannually, along with the measures adopted to mitigate any identified impacts. Customers can also submit complaints directly through our website.

## New Terminals, New Solutions

As part of our commitment to expanding operations and offering new logistics options, we implemented the Barra do Pirai Steel Terminal (RJ), with a handling capacity of up to 360,000 tons per year. Learn more about our customer service improvement efforts in the “Investments” section on page 105.



We also received the Suzano Valoriza Award, in the Performance category. The initiative by Suzano – one of the world's largest pulp and paper producers – recognizes and celebrates the performance of its suppliers in sustainability related topics.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



# Supplier Partnerships

GRI 2-6, 2-29, 308-1, 414-1

By establishing relationships with suppliers who share our ESG (Environmental, Social and Governance) commitments – such as the guarantee of fundamental rights – we broaden the positive impact of our operations and foster best practices throughout the supply chain.

We manage more than 1,200 suppliers through the Linkana platform and continuously improve our control tools to ensure we select business partners committed to sustainability.

## Our Controls



### Background checks

Before signing contracts or amendments, suppliers undergo a background check process, which includes responding to questionnaires and submitting documents related to compliance, governance, environmental, social matters and financial health. At this stage, we also present our Integrity Program, which includes the Public Agencies Engagement and Anti-Corruption Policy and the Code of Ethics.



### Compliance with legal requirements

The supplier review process includes verification of compliance with all legal requirements, supported by monthly monitoring of social and environmental sanctions at both domestic and international levels. We consult databases such as the Registry of Ineligible Companies, Leniency Agreements, environmental penalties and the list of employers associated with forced labor, ensuring compliance and integrity in the procurement process.



### Contractual requirements

Our contracts require suppliers to comply with the Anti-Corruption Law, uphold ethical and social standards and ensure decent working conditions. Specific clauses address Human Rights, prohibiting forced, compulsory, child and/or slave-like labor practices, with contract termination provisions in the event of violations. These requirements also apply to subcontractors. For services provided within our facilities, we verify all labor-related matters and require regular proof of payment.



### Sanctions

Our background check platform is periodically updated with public compliance records. If any new issues are identified, the supplier is blocked, and no contract or amendment may proceed until the Compliance Department assesses the situation. Severe cases are escalated to the Ethics Committee. Currently, we monitor 100% of our qualified supplier base and 107 companies are currently blocked.



## Significant ESG Advancements

We recorded significant progress, especially with the Linkana system, which monitors public data at every stage – from supplier onboarding and registration to the execution of contracted services. Through this tool, we primarily assess financial health, documents and debt certificates, negative media coverage, legal proceedings, sanctions and penalties faced by suppliers, providing a robust track record.

We also made progress in ESG data collection by applying self-declaration questionnaires to suppliers with active contracts. After extensive use of the tool and process maturation, we identified the need to advance further in ESG supplier management. Last year, we engaged a consulting firm to support the structuring and development of controls and actions aimed at preventing social and environmental risks across our supply chain. The scope of work included supplier segmentation, the development of a Social and Environmental Risk Matrix, opportunity mapping and the creation of audit checklists.

Fernanda Mara

## Risk Matrix

The Social and Environmental Risk Matrix identified the main risks associated with each supplier category and their potential impacts across environmental, social and governance dimensions. The environmental dimension considered GHG emissions, water resources management, natural resources management and waste management. In the social dimension, we considered labor-related human rights, occupational health and safety, working conditions and labor practices. The governance dimension covered ethics and transparency, supply chain integrity, reputational risk and economic standing.

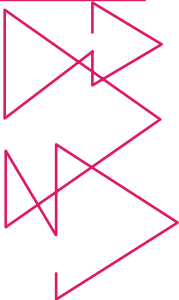
Based on the macro-categories used in the Linkana system, the consulting firm assessed probability and impact, assigning scores that resulted in a risk classification scale, categorizing 32 supplier categories into very high, high, moderate and low risk.

Based on these classifications, we defined actions to mitigate the identified risks:

- Streamlining procurement for services with low social and environmental risk;
- Improving document management per supplier;
- Prioritizing high-risk categories.

### China Mission: Strengthening MRS in the World's Largest Railroad Market

In 2024, MRS strengthened its presence in the Chinese market by organizing its first independent mission to the country. Following the exploratory visit in 2023 – when we witnessed firsthand the remarkable quality, technology and automation of the Chinese railroad industry – we returned the following year with a delegation including representatives from the Procurement and Engineering teams. The focus was on negotiations involving rails, railroad turnouts, forged wheels, and other strategic items, resulting in approximately R\$22 million in savings to date. With broad prospects for new business and developments, this initiative continues to evolve.



# Performance Overview

101 Operational Performance  
103 Financial Performance  
105 Investments & Cargo Diversification

A Message from  
Leadership

About This Report

2024 Highlights

Awards &  
Recognitions

About MRS

ESG Agenda

Stewardship of  
Our Business

Caring for the  
Planet

Caring for People

**Performance  
Overview**

Appendix

GRI/SASB  
Index



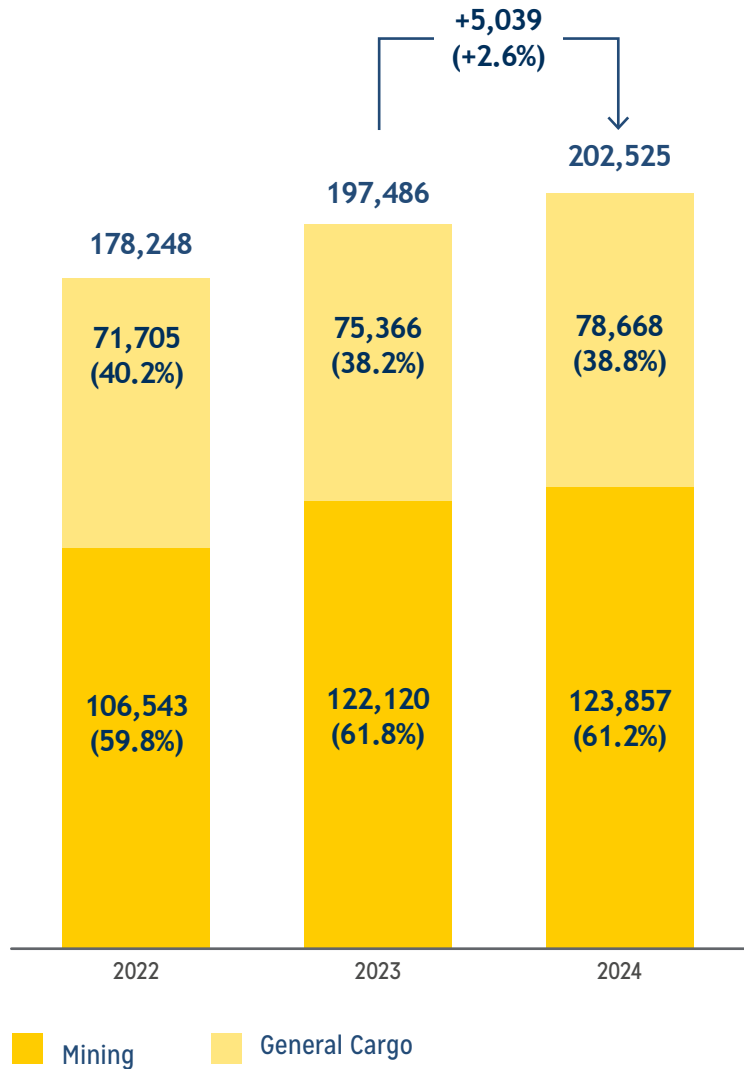
# Operational Performance

In 2024, our total transported volume reached 202.5 Mt, marking the highest result in our history and a 2.6% increase compared to 2023. In the Mining segment, we maintained the 2023 pace, transporting 123.9 Mt. In the General Cargo segment, we achieved another record performance, ending 2024 with 78.4 Mt, a 4.4% increase compared to 2023.

The transported mix remained consistent with 2023 levels: 61.2% from the Mining group and 38.8% from the General Cargo group.



Transported Volume  
TU (thousand units)



Transported Volume					
TU (thousand units)	2022	2023	2024	2024 vs 2023	Share 2024
Mining	106,543	122,120	123,857	1.4%	61.2%
Iron Ore	104,201	119,951	121,540	1.3%	60.0%
Export	90,130	106,881	109,112	2.1%	53.9%
Domestic Market	14,072	13,070	12,427	-4.9%	6.1%
Coal and Coke	2,342	2,170	2,317	6.8%	1.1%
General Cargo	71,495	75,146	78,443	4.4%	38.7%
Agricultural commodities	46,806	50,154	50,407	0.5%	24.9%
Steel Products	6,838	6,636	7,131	7.5%	3.5%
Pulp	5,670	5,591	6,813	21.9%	3.4%
Containers	2,133	2,222	2,576	15.9%	1.3%
Construction Materials	2,450	2,308	2,653	15.0%	1.3%
Other	7,598	8,236	8,863	7.6%	4.4%
Billed Volume <sup>1</sup>	178,038	197,266	202,300	2.6%	
Non-revenue Cargo	210	219	225	2.5%	0.1%
Total Transported Volume	178,248	197,486	202,525	2.6%	

<sup>1</sup> Excludes non-revenue cargo  
<sup>2</sup> General Cargo volume includes cargo transported by other railroads on the MRS network

- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet
- Caring for People
- Performance Overview
- Appendix
- GRI/SASB Index



## Mining

The transport of iron ore, coal, and coke in 2024 grew 1.4% compared to 2023, driven mainly by higher export volumes of iron ore and increased volumes of coal and coke, as detailed below.

### Domestic Market | Iron Ore, Coal and Coke

In 2024, the transport volume of iron ore, coal and coke for the domestic market totaled 14.7 Mt, representing a 3.2% decrease compared to 2023. This reduction was mainly due to production stoppages at our key customers' plants, caused by corrective maintenance in the ore production process, in addition to impacts on the unloading process.

### Iron Ore | Exports

The volume of iron ore transported for export in 2024 totaled 109.1 Mt, representing 88.1% of the total volume transported in the Mining segment and 53.9% of the total volume transported by MRS. This reflects a 2.1% increase over 2023, mainly due to strong performance in the first half of the year for key clients. However, when analyzing Q4 2024 compared to Q4 2023, there was a 20.3% decline, a result of the unfavorable international mining market, falling iron ore prices and increased penalties related to product quality (applied to silica and alumina content).

## General Cargo

The result for 2024 was the best in MRS history, reaching a record 78.4 Mt transported, an increase of 4.4% compared to 2023.

### Agricultural Commodities

The agricultural commodities we transport include soybeans, soybean meal, sugar, and corn, which together accounted for 64.1% of the General Cargo segment. By the end of 2024, sugar and soybean meal showed year-over-year increases of 14.6% and 5.8%, respectively.

### Steel Products

This segment includes outbound transport (to steelmakers' customers), inbound transport (to the steelmakers themselves) and semi-finished steel (slabs). In 2024, total transported volume reached 7.1 Mt, a 7.5% increase over the previous year. Growth was primarily driven by a 75.6% increase in inbound transport due to expanded market share on domestic routes through new terminals and operational

improvements, as well as a 52.5% increase in semi-finished steel transport thanks to MRS securing new import-related business opportunities.

### Pulp

Pulp transport reached a total volume of 6.8 Mt in 2024, up 21.9% from the previous year. This reflects both the maturity of operations for a key client in this segment and improved operational performance.

### Containers

Containers The container transport segment recorded an all-time high in 2024 with 2.6 Mt, a 15.9% increase compared to 2023. This growth was primarily driven by a 16.7% increase in own cargo volumes, fueled by new client acquisitions and expanded share with existing clients.

### Construction Materials

This segment saw 15.0% growth over 2023, mainly due to a 16.0% increase in sand volumes transported following the onboarding of a new client, and a 19.6% increase in bagged cement volumes from one of the segment's main clients, supported by the opening of new terminals.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



# Financial Performance

GRI 201-1

## Results (R\$ million)

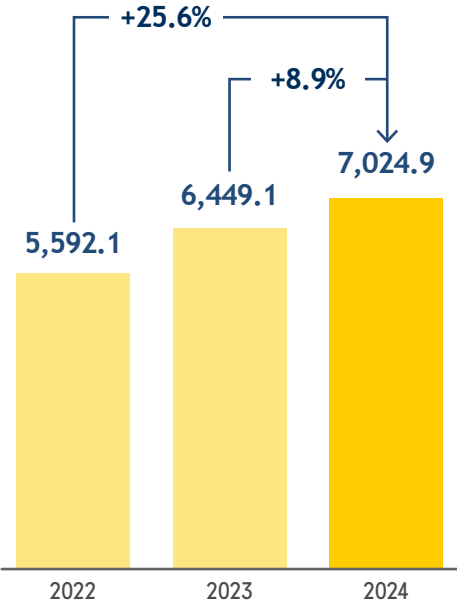
	2023	2024	2024 vs 2023
Gross Revenue from Services (R\$ million)	6,873.0	7,484.6	8.9%
Net Revenue from Services (R\$ million)	6,449.1	7,024.9	8.9%
Costs and Expenses (R\$ million)	(3,079.2)	(3,509.2)	14.0%
Other Operating Inc. and Exp. (R\$ million)	59,4	44,2	-25.5%
EBITDA (R\$ million)	3,429.3	3,559.9	3.8%
EBITDA Margin (%)	53.2%	50.7%	-2.5pp
Net Income (R\$ million)	1,200.1	7,024.9	17.9%
Net Debt/ EBITDA (x)	1.0x	1.3x	0.3x

TO LEARN MORE, CLICK HERE TO ACCESS OUR FULL FINANCIAL STATEMENTS



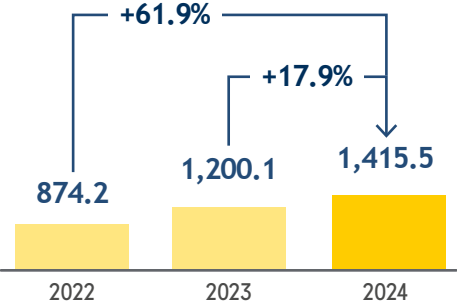
## Net revenue

Net revenue increased by R\$575.8 million in 2024, driven by higher transport volumes and tariff adjustments. Record results in General Cargo transport and resilience in the Mining segment supported the growth in total transported volume.



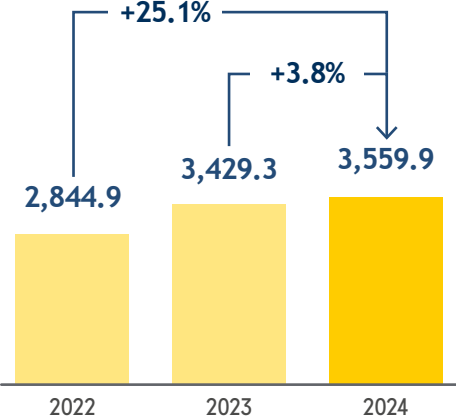
## Net income

We closed 2024 with a Net Income of R\$1,415.5 million, an increase of 17.9%, or R\$215.4 million, compared to 2023. This result primarily reflects growth in business volume and strong operational performance. Additionally, it was influenced by the reversal of provisions previously adjusted for inflation, which positively impacted the financial result.



## EBITDA

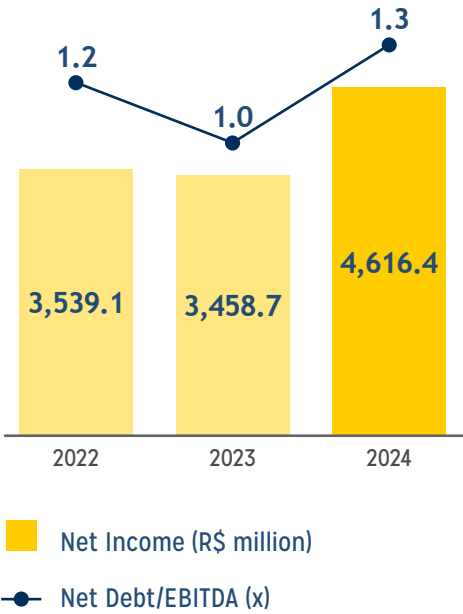
EBITDA reached R\$3,559.9 million, a 3.8% increase compared to 2023. EBITDA margin was 50.7%, a 2.5 p.p. decline from the previous year.





Debt

Our Gross Debt closed 2024 with a balance of R\$8,763.8 million, an increase of R\$ 1,917.0 million compared to 2023. This increase was mainly due to the 12th debenture issuance, totaling R\$2.5 billion. The funding was distributed across three series with maturities of up to 15 years. In 2024, Net Debt reached R\$4,616.4 million, compared to R\$3,458.7 million in 2023. The increase reflects both loan amortizations and new funding raised during the year. The financial leverage ratio, measured by Net Debt/EBITDA, was 1.3x as of December 31, 2024, compared to 1.0x as of December 31, 2023.



In 2024, we sustained the growth of our financial results.

Value Added Distribution

(R\$ thousand)  
GRI 201-1

	2022	2023	2024
Revenue	6,404,539	7,394,303	8,426,193
Inputs acquired from third parties	(2,535,925)	(2,822,152)	(3,493,099)
Gross value added	3,868,614	4,572,151	4,933,094
Depreciation and amortization	(1,054,641)	(911,299)	(1,015,019)
Net value added produced	2,813,973	3,660,852	3,918,075
Value added (received) in transfer	505,644	361,529	1,124,158
Total value added (received) to distribute	3,319,617	4,022,381	5,042,233
Personnel and charges	710,414	819,792	984,315
Taxes, fees, and contributions	655,203	885,619	974,874
Remuneration of third-party capital	1,079,824	1,116,821	1,667,534
Remuneration of own capital	874,176	1,200,149	1,415,510
Total distributed value added	3,319,617	4,022,381	5,042,233

# Investments & Cargo Diversification

GRI 203-1

## 58.5% increase in investments

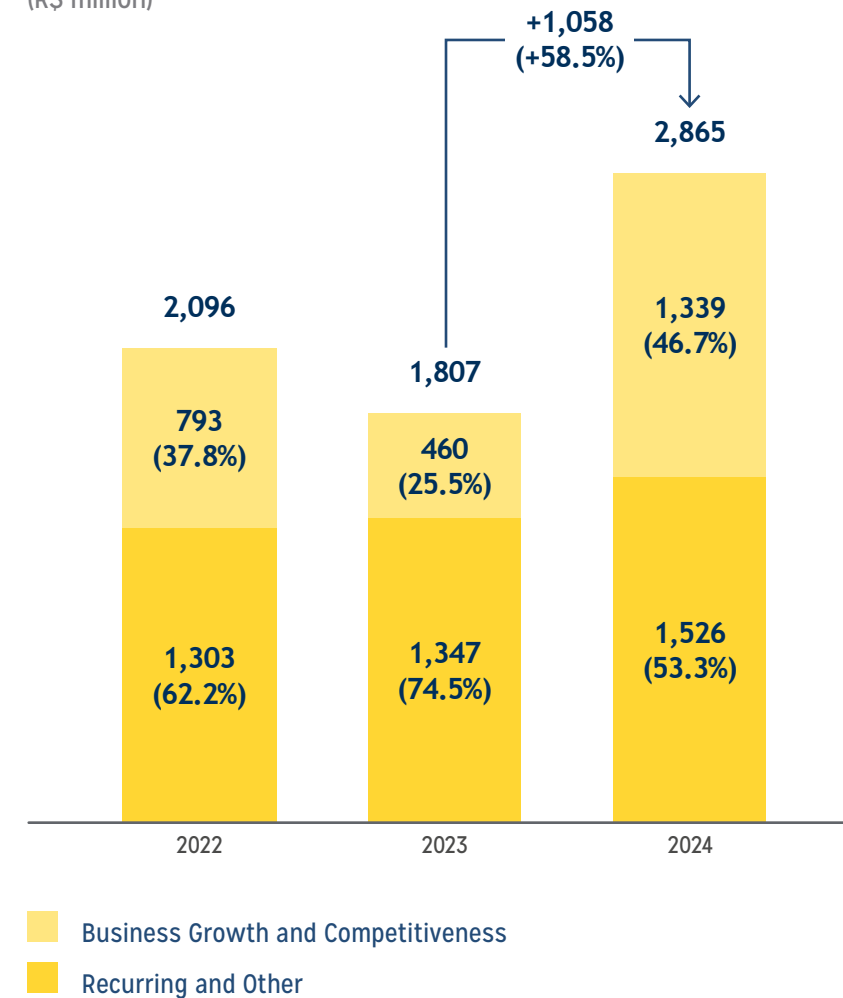
We invested over R\$2.8 billion, representing a significant 58.5% growth compared to 2023. This increase was mainly driven by projects focused on business growth and competitiveness, urban mobility and the Company's sustainability. The investment amount was directed toward ensuring the reliability of railroad

transport and increasing productivity and capacity through the acquisition of new assets, renewal of railroad sections and construction of new yards. In addition, we made progress on investments aimed at improving the well-being and safety of employees and communities surrounding the railroad.

CHECK OUT THIS VIDEO TO SEE SOME OF THE MAJOR WORKS COMPLETED IN OUR SECOND YEAR OF THE CONCESSION



## Investment (R\$ million)





Key Projects

**13 ES-44**  
model locomotives acquired  
(increased productivity and  
improved energy efficiency,  
with lower GHG emissions)

**561**  
new railcars  
acquired to increase  
capacity

**R\$ 308**  
million  
in urban mobility initiatives

**R\$ 362**  
million  
for capacity expansion and  
cargo diversification

Baixada Santista (SP)  
Railroad Remodeling

The railroad line will be remodeled to support increased cargo volume and growing demand from all concessionaires operating in the region. The goal is to double the transported volume in the area. The project includes 98 km of upgrades to the existing line, with the installation of 135 Turnouts (Track Switches).

Vale do Paraíba Freight  
Transfer Center

The project includes the signaling of the Vale do Paraíba branch line, between the Pindamonhangaba Yard and the exit of the Pinheirinho Yard – totaling 133 km of track and 13 yards. The aim is to increase capacity and safety through the automation and control of train dispatching and interlocking between yards.

New Yards

Construction of new regulatory and crossing yards in Baixada Santista – key to increasing rail availability for priority trains and reducing transit time.

New Overpasses

Construction of highway overpasses to cross over the railroad line, improving urban mobility, rail safety and community well-being.

Expansion of the Souza Neschese  
Terminal (FSN)

Completed in 2024, in the Belo Horizonte metropolitan area (MG) Delivery of 3.3 km of track and 7 Turnouts (Track Switches). R\$ 30.7 million investment resulted in a 28% increase in capacity on the Paraopeba branch Eliminating the use of the main line for weighing operations improved productivity

Horto Multimodal Terminal

With a R\$ 61 million investment, operated by MRS in Belo Horizonte (MG), the new Horto Multimodal Terminal will support a 48% projected growth in the region’s steel sector. Integration between the terminal and railroad will enhance logistics efficiency, offering greater flexibility, reducing operational cycle times, and increasing competitiveness. As of 2024, the project reached over 70% completion

Road Complex in  
Barra do Piraí

Construction of a bridge and overpass, along with road upgrades in the Barra do Piraí area, to enhance local urban mobility.

LEARN MORE ABOUT THE  
ROAD COMPLEX PROJECT  
IN BARRA DO PIRAÍ








# Appendix



ESG Agenda

GRI 3-1, 3-2

Materiality and Impacts				
Material topic	Approach	Impacts	GRI; SASB Indicators	SDGs
Risk Management	Refers to the mechanisms used to identify, assess and mitigate risks in a structured way across all areas and processes of the organization.	<ul style="list-style-type: none"><li>• Accident mitigation and prevention (+)</li><li>• Operational interruptions (-).</li><li>• Increased credibility among stakeholders (+)</li><li>• Financial impacts (revenue growth, cost savings, regulatory sanctions etc.) (+)</li></ul>	<ul style="list-style-type: none"><li>• GRI 3-3</li><li>• SASB TR-RA 540a.4</li></ul>	
Corporate Governance	Involves the set of processes and institutions that regulate how MRS is directed and managed.	<ul style="list-style-type: none"><li>• Strategic direction: definition of public ESG targets for the company (+)</li><li>• Improved stakeholders relations and communication, transparent governance and enhanced market perception (+)</li><li>• Risk of conflict of interest (-)</li></ul>	<ul style="list-style-type: none"><li>• GRI 3-3</li></ul>	
Ethics and anti-corruption practices	Refers to fostering a healthy environment in relationships with all stakeholders, in compliance with laws, regulations and anti-corruption and anti-bribery practices.	<ul style="list-style-type: none"><li>• Fostering a positive organizational culture (+)</li><li>• Controlling conflicts of interest (+)</li><li>• Human rights and integrity (+)</li><li>• Ethical corporate behavior (+)</li><li>• Data confidentiality assurance (+)</li><li>• Third-party relationship development (+)</li><li>• Commitment to diversity (+)</li></ul>	<ul style="list-style-type: none"><li>• GRI 3-3; GRI 205-1, 205-2, 205-3; GRI 206-1</li></ul>	
Fuel management and fleet eco-efficiency	Covers the efficient use of fuels in pursuit of excellence in operational performance to ensure sustainability.	<ul style="list-style-type: none"><li>• Better fuel management and fleet eco-efficiency (+)</li><li>• Reduced diesel consumption (+)</li><li>• Increased energy efficiency index (+)</li></ul>	<ul style="list-style-type: none"><li>• GRI 3-3; GRI 302-1, 302-3, 302-4</li><li>• SASB TR-RA 110a.3</li></ul>	

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Materiality and Impacts

Material topic	Approach	Impacts	GRI; SASB Indicators	SDGs
Atmospheric and greenhouse gas emissions	Refers to emissions generated directly and indirectly by the company's activities.	<ul style="list-style-type: none"><li>Increased awareness among the MRS value chain regarding climate change (+)</li><li>Implementation of more efficient hybrid and electric locomotives (+)</li><li>Renewable energy consumption, management of climate risks and opportunities (+)</li><li>Greenhouse gas and particulate matter emissions (-)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3</li><li>GRI 305-1, 305-2, 305-4, 305-7</li><li>SASB TR RA-110a.1, TR-RA-110a.2, TR-RA-120a.1</li></ul>	
Occupational safety	Encompasses workplace accidents and occupational illnesses, as well as the preventive measures adopted.	<ul style="list-style-type: none"><li>Investment in training, qualifications and PPE to promote employee physical and mental well-being (+)</li><li>Encouraging health prevention and treatment (benefits such as health insurance, pharmacy discounts etc.) (+)</li><li>Maintaining hearing health efforts (+)</li><li>Immunization campaigns (+)</li><li>Locomotive engineer health initiatives (+)</li><li>Alcohol and drug abuse prevention programs (+)</li><li>Failure in risk mapping (-)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3</li><li>GRI 403-1, 403-2, 403-5, 403-7, 403-9</li><li>SASB TR-RA 320a.1</li></ul>	
Employee training and development	Refers to the implementation of programs that promote the company's employees training and education.	<ul style="list-style-type: none"><li>Increased employee intellectual capital (+)</li><li>Reduced turnover rates (+)</li><li>Ensured training in critical activities with potential safety impacts (+)</li><li>Higher productivity and engagement from trained professionals (+)</li><li>Skilled workforce for railroad operation positions (+)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3 GRI 404-1, 404-3</li></ul>	
Diversity, equity and inclusion	Involves the development of a plural, diverse and collaborative work environment, contributing to racial and gender equity across the company's departments.	<ul style="list-style-type: none"><li>Establishment of a diverse and collaborative work environment (+)</li><li>Promotion of racial and gender equity (+)</li><li>Greater diversity on the Board and employer brand association with diversity (+)</li><li>Low diversity, equity and inclusion (-)</li><li>Risk of workplace harassment (-)</li><li>Noncompliance with Brazilian Law 8213/1991 on Social Security Benefit Plans (-)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3 GRI 405-1, 405-2</li></ul>	

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Materiality and Impacts

Material topic	Approach	Impacts	GRI; SASB Indicators	SDGs
Engagement with surrounding communities	Refers to the set of actions and engagement practices and dialogue with residents living near MRS operations.	<ul style="list-style-type: none"><li>Engagement and dialogue with residents near MRS operations (+)</li><li>Disruption to community life due to construction activities and noise (-)</li><li>Risk of pedestrians being run over by and vehicle collisions with trains (-)</li><li>Costs related to relocating families living near railroad operations (-)</li><li>Educational and awareness efforts in the community (+)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3 GRI 202-1; GRI 203-2 GRI 411-1; GRI 413-1, 413-2</li></ul>	
Railroad safety and accident prevention	Relates to the maintenance of railroad infrastructure to prevent accidents, as well as communication and awareness efforts.	<ul style="list-style-type: none"><li>Maintenance of railroad transport infrastructure to prevent accidents (+)</li><li>Fines due to noncompliance with laws and regulations (-)</li><li>Reduced repair and construction costs, implementation of containment walls, flow controllers and automatic signaling (+)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3</li><li>SASB TR-RA 540a.1, TR-RA 540a.2</li></ul>	
Customer Relations	Involves improving customer satisfaction, as well as adding value and ensuring safety in transport services.	<ul style="list-style-type: none"><li>Increased customer satisfaction (+)</li><li>Greater value and safety in customer transportation (+)</li><li>Greater social and environmental responsibility (+)</li><li>Improved community relationships (+)</li><li>Improved service quality provided by employees (+)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3</li></ul>	
Innovation & Technology	Refers to the continuous improvement of processes based on experimentation, creativity, new ideas and methodologies.	<ul style="list-style-type: none"><li>Process improvements (+)</li><li>Increased efficiency (+)</li><li>Extended material lifespan (+)</li><li>Development of new production and maintenance methods (+)</li><li>New products and development of MRS intellectual property (+)</li><li>Enhanced employee health, well-being and development (+)</li><li>Potential violations of existing intellectual property (-)</li><li>Lack of accountability in funding (-)</li><li>Relationship challenges with startups (-)</li></ul>	<ul style="list-style-type: none"><li>GRI 3-3</li></ul>	

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Environment

Biogenic emissions (tCO <sub>2</sub> e)		
2022	2023	2024
57,269.15	74,744.80	89,470.57

Climate Resilience, impacts and risks			
Event	Projected change	Potential impacts	Category (type of risk)
Rising average temperatures			
Changes in temperature-related variables, such as increased average temperature (including minimum and maximum) and a higher number of days with temperatures above 25°C	Rising temperatures	<ul style="list-style-type: none"><li>• Equipment losses, rail buckling and infrastructure damage, resulting in financial losses and the need for replacements (-)</li><li>• Higher insurance costs (-)</li><li>• Increased electricity consumption due to excessive use of air conditioning (-)</li><li>• Rising expenses caused by higher prices driven by increasing scarcity of natural resources and raw materials (-)</li></ul>	Physical risks (chronic physical)
Increase in CBIO credits			
Purchase of CBIO credits by fuel distributors to comply with Renovabio targets (National Biofuels Policy)	Increase in fossil fuel prices	<ul style="list-style-type: none"><li>• Greater efficiency compared to road transport: lower diesel consumption, making rail transport more attractive to customers (+)</li><li>• Reduction in GHG emissions (+)</li><li>• Increase in operating expenses due to diesel purchases (-)</li><li>• Sector stigmatization for using fossil fuels (-)</li></ul>	Transition risks (current regulation)

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Climate Resilience, impacts and risks			
Event	Projected change	Potential impacts	Category (type of risk)
Carbon pricing in the transport sector (transport, fossil fuels, mining and industrial sectors)			
Establishment of carbon pricing mechanisms in Brazil for the transport, fossil fuels, mining and industrial sectors	Requirement to pay taxes or purchase credits to comply with legal standards, leading to increased fossil fuel prices	<ul style="list-style-type: none"><li>• Requirement to pay taxes or purchase credits to comply with legal standards, leading to increased fossil fuel prices</li><li>• Adoption of biofuels (+)</li><li>• Use of electricity from renewable sources (+)</li><li>• Higher efficiency compared to road transport and competitive advantage (+)</li><li>• Increased expenses related to fuel consumption and production (-)</li><li>• Sector stigmatization for using fossil fuels (-)</li><li>• Clients shifting operations to areas without carbon pricing mechanisms (-)</li></ul>	Transition risks (emerging regulation)
Fleet replacement due to phasing out of fossil fuels			
Replacement of fossil fuels with alternative energy sources	Replacement of diesel locomotives with electric locomotives. Replacement of combustion-powered equipment and vehicles with electric ones.	<ul style="list-style-type: none"><li>• Reduction in GHG emissions (+)</li><li>• Unplanned investments to renew fleet, equipment and rolling stock (-)</li></ul>	Transition risks (technological)
Removal of government incentives for diesel purchases			
Withdrawal of economic incentives for fossil fuels by the Federal Government	Increase in fossil fuel prices	<ul style="list-style-type: none"><li>• Reduction in greenhouse gas emissions through energy efficiency actions (+)</li><li>• Increased expenses (-)</li></ul>	Transition risks (market)

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Climate Resilience, impacts and risks

Event	Projected change	Potential impacts	Category (type of risk)
Increase in the severity and frequency of extreme weather events			
Changes in precipitation-related variables, such as more consecutive rainy days and more days with rainfall above 25 mm	Increased occurrence of floods and windstorms	<ul style="list-style-type: none"><li>Higher expenses for damage recovery (-)</li><li>Rising insurance costs due to extreme weather events (claims) (-)</li><li>Increased costs caused by higher prices driven by increasing scarcity of natural resources and raw materials (-)</li><li>Financial losses due to operational shutdowns during heavy rain (-)</li></ul>	Physical risks (acute physical)
Changes in precipitation patterns and extreme variability in climate patterns			
Changes in drought-related variables, such as reduced rainfall and a higher number of consecutive dry days	Increased occurrence of droughts	<ul style="list-style-type: none"><li>Development of climate adaptation plans for such events (+)</li><li>Higher energy prices during drought periods (-)</li><li>Decrease in company revenue due to lower demand (-)</li></ul>	Physical risks (chronic physical)

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Social

Total employees by gender

GRI 2-7

	2022	2023	2024
Men	5,609	5,836	5,968
Women	930	1,079	1,186

Total number of employees by region

GRI 2-7

	2022	2023	2024
Minas Gerais	3,713	3,867	3,949
Rio de Janeiro	1,361	1,462	1,516
São Paulo	1,465	1,586	1,689
Total	6,539	6,915	7,154

Note:

1. The table of employees by gender and region does not include interns or Statutory Executive Officers.
2. During the reporting period, the number of direct employees remained stable, with no significant variations. However, it is worth noting an approximately 10% increase in the number of female employees, highlighting the effectiveness of initiatives aimed at promoting diversity and inclusion within the organization.

Total number of third-party personnel

GRI 2-8

	2022	2023	2024
Administrative	2,580	3,566	4,187
Operations Control Center	65	74	69
Stations, Yards and Terminals	147	150	157
Rolling Stock Maintenance	136	137	159
Permanent Track Maintenance	1,776	1,779	2,057
Signaling, Telecommunications, Electrical	132	165	89
Traction, Train Dispatch, and Movement	251	267	298
Managerial	0	0	0
Total	5,087	6,138	7,016

Note:

1. The data presented in the 2023 Sustainability Report has been corrected, as we are now including third-party personnel serving the Project and Construction Department (DIP0). Thus, the entire third-party workforce is now presented.

A Message from Leadership
About This Report
2024 Highlights
Awards & Recognitions
About MRS
ESG Agenda
Stewardship of Our Business
Caring for the Planet
Caring for People
Performance Overview
Appendix
GRI/SASB Index



% of employees by job category, by gender				
GRI 405-1				
		2022	2023	2024
Analysts and equivalent roles	Women	47.3%	47.0%	52.7%
	Men	52.7%	53.0%	47.3%
Assistants	Women	49.0%	49.1%	45.5%
	Men	51.0%	50.9%	54.5%
Specialists and equivalent roles	Women	21.4%	24.1%	24.6%
	Men	78.6%	75.9%	75.4%
Managers	Women	22.0%	23.7%	26.7%
	Men	78.0%	76.3%	73.3%
Operational (Functional)	Women	4.1%	5.2%	6.9%
	Men	95.9%	94.8%	93.1%
Technicians	Women	5.9%	5.7%	5.7%
	Men	94.1%	94.3%	94.3%

- Note:
- The employee tables by job category do not include apprentices, interns or Statutory Executive Officers.
  - The data presented in the 2023 Sustainability Report has been corrected due to an integration issue with the new system and is now accurately presented in the table.

% of employees by job category, by age group				
GRI 405-1				
		2022	2023	2024
Analysts and equivalent roles	Under 30 years old	36.0%	36.6%	36.6%
	30-50 years old	57.2%	5.7%	58.0%
	Above 50 years old	6.8%	57.7%	5.4%
Assistants	Under 30 years old	39.7%	41.4%	4.9%
	30-50 years old	55.4%	53.4%	86.5%
	Above 50 years old	4.9%	5.2%	8.6%
Specialists and equivalent roles	Under 30 years old	8.5%	6.9%	9.2%
	30-50 years old	74.1%	77.4%	76.5%
	Above 50 years old	17.5%	15.7%	14.2%
Managers	Under 30 years old	4.0%	4.7%	3.0%
	30-50 years old	86.2%	86.8%	89.3%
	Above 50 years old	9.8%	8.4%	7.7%
Operational (Functional)	Under 30 years old	24.7%	25.9%	27.1%
	30-50 years old	67.1%	65.5%	64.3%
	Above 50 years old	8.2%	8.6%	8.7%
Technician	Under 30 years old	16.1%	16.2%	16.2%
	30-50 years old	71.0%	72.3%	73.7%
	Above 50 years old	12.9%	11.5%	10.0%

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



% of employees by job category, by color

GRI 405-1

		2022	2023	2024
Analysts and equivalent roles	Yellow	0.4%	1.0%	0.9%
	Brown/mixed-race	18.8%	20.1%	20.6%
	White	74.5%	70.5%	70.5%
	Not disclosed	0.2%	0.2%	0.2%
	Black	5.0%	7.3%	7.7%
	Indigenous	1.1%	1.0%	0.0%
Assistants	Yellow	0.4%	0.2%	0.4%
	Brown/mixed-race	30.8%	30.1%	28.8%
	White	55.9%	57.9%	58.1%
	Not disclosed	0.0%	0.0%	0.0%
	Black	12.4%	11.4%	12.7%
	Indigenous	0.6%	0.4%	0.0%
Specialists and equivalent roles	Yellow	0.6%	0.5%	0.6%
	Brown/mixed-race	20.1%	20.4%	20.7%
	White	75.9%	75.2%	74.3%
	Not disclosed	0.0%	0.0%	0.0%
	Black	3.4%	3.9%	4.5%
	Indigenous	0.0%	0.0%	0.0%

% of employees by job category, by color (continued)

GRI 405-1

		2022	2023	2024
Managers	Yellow	0.0%	0.0%	0.5%
	Brown/mixed-race	13.2%	12.7%	14.2%
	White	83.9%	84.7%	82.5%
	Not disclosed	0.0%	0.0%	0.0%
	Black	2.9%	2.6%	2.7%
	Indigenous	0.0%	0.0%	0.0%
Operational (Functional)	Yellow	0.2%	0.4%	0.4%
	Brown/mixed-race	34.4%	35.0%	35.6%
	White	49.6%	48.2%	47.6%
	Not disclosed	0.1%	0.0%	0.1%
	Black	15.4%	16.1%	16.3%
	Indigenous	0.4%	0.3%	0.1%
Technicians	Yellow	0.2%	0.2%	0.2%
	Brown/mixed-race	30.3%	32.4%	34.1%
	White	57.8%	55.5%	52.8%
	Not disclosed	0.2%	0.0%	0.0%
	Black	11.4%	11.6%	12.7%
	Indigenous	0.2%	0.3%	0.2%

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Apprentices and Interns by Gender

Apprentices				Interns		
	2022	2023	2024	2022	2023	2024
Women	35.9%	37.4%	34.7%	55.2%	55.1%	52.7%
Men	64.1%	62.6%	65.3%	44.8%	44.9%	47.3%

Apprentices and Interns by Color

Apprentices				Interns		
	2022	2023	2024	2022	2023	2024
Yellow	1.3%	1.0%	2.0%	1.4%	1.2%	1.6%
Brown/mixed-race	38.6%	43.7%	39.3%	25.9%	28.3%	28.2%
White	32.0%	35.0%	33.7%	57.8%	57.4%	58.2%
Not disclosed	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%
Black	26.1%	19.4%	25.0%	9.8%	9.3%	11.7%
Indigenous	2.0%	1.0%	0.0%	4.3%	3.8%	0.3%

Note: 1. The data presented in the 2023 Sustainability Report has been corrected due to an integration issue with the new system and is now accurately presented in the table above.

Apprentices and Interns by Age Group

Apprentices				Interns		
	2022	2023	2024	2022	2023	2024
Under 30 years old	96.2%	98.0%	98.5%	90.8%	88.0%	87.2%
30-50 years old	3.8%	1.5%	1.5%	9.2%	11.7%	12.2%
Above 50 years old	0.0%	0.5%	0.0%	0.0%	0.3%	0.5%

Note: 1. The data presented in the 2023 Sustainability Report related to 2023 has been corrected due to an integration issue with the new system and is now accurately presented in the table above.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



New hires

GRI 401-1

2022			2023		2024	
	number	rate	number	rate	number	rate
By gender						
Women	223	25.5%	221	22.1%	241	21.6%
Men	673	12.2%	653	11.4%	715	12.2%
Total	896	14.0%	874	13.0%	956	13.7%
By age group						
Under 30 years old	489	32.6%	466	28.9%	505	30.0%
30-50 years old	392	9.1%	392	8.7%	419	9.0%
Above 50 years old	15	2.6%	16	2.6%	32	5.2%
Total	896	14.0%	874	13.0%	956	13.7%
By region						
MG	476	13.2%	480	12.8%	496	12.8%
RJ	181	13.7%	172	12.2%	171	11.7%
SP	239	16.4%	222	14.4%	289	17.7%
Total	896	14.0%	874	13.0%	956	13.7%

Turnover (dismissals)

GRI 401-1

2022			2023		2024	
	number	rate	number	rate	number	rate
By gender						
Women	74	9.3%	93	9.9%	125	11.8%
Men	437	8.1%	451	8.0%	583	10.1%
Total	511	8.3%	544	8.3%	708	10.4%
By age group						
Under 30 years old	127	8.8%	152	9.8%	196	11.9%
30-50 years old	338	8.1%	341	7.8%	430	9.4%
Above 50 years old	46	8.1%	51	8.6%	82	13.4%
Total	511	8.3%	544	8.3%	708	10.4%
By region						
MG	267	7.6%	316	8.6%	380	10.0%
RJ	90	7.0%	87	6.4%	130	9.0%
SP	154	11.0%	141	9.4%	198	12.5%
Total	511	8.3%	544	8.3%	708	10.4%

Note:

1. The data reported in the tables above has been adjusted in relation to the 2023 Sustainability Report, disregarding apprentices due to their temporary nature. Interns, apprentices and statutory executive officers are not included.
2. In order to calculate the rate of new hires, the number of new hires per category divided by the total number of employees in the category is taken into account.
3. In order to calculate the dismissal rate, the number of employees dismissed / total number of employees is taken into account.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index



Turnover, by gender			
	2022	2023	2024
Women	18.6%	16.7%	17.3%
Men	10.3%	9.8%	11.2%
Total	11.4%	10.8%	12.2%

Note:

1. The data reported in this table has been adjusted in relation to the 2023 Sustainability Report, disregarding apprentices due to their temporary nature. This indicator includes permanent direct employees. Interns, apprentices and statutory executive officers are not included.

2. The rate is calculated as the number of [(employees hired + employees dismissed)/2] / total number of employees.

Average hours of training per employee, by job category						
GRI 404-1						
	2022		2023		2024	
	total hours	average hours	total hours	average hours	total hours	average hours
Analysts and equivalent roles	32,573.74	57.15	23,375.20	34.99	21,169.68	38.56
Assistants	28,539.05	57.31	23,965.19	44.22	14,509.41	28.23
Specialists and equivalent roles	22,222.71	39.75	21,919.25	31.95	22,603.41	31.31
Managers	25,284.17	67.60	14,996.05	39.26	34,713.52	83.25
Operational	233,995.67	57.65	311,507.41	73.75	249,758.05	57.13
Technicians	37,227.63	58.53	33,210.32	48.48	25,117.69	39.68

Note: This table does not include apprentices, interns or Statutory Executive Officers.

Average hours of training per employee						
	2022		2023		2024	
	total hours	average hours	total hours	average hours	total hours	average hours
Women	73,537.15	56.74	72,967.01	50.18	78,844.07	51.10
Men	326,897.74	53.19	379,058.11	59.23	312,240.71	48.39

Note: This table includes all direct employees.

A Message from Leadership
About This Report
2024 Highlights
Awards & Recognitions
About MRS
ESG Agenda
Stewardship of Our Business
Caring for the Planet
Caring for People
Performance Overview
Appendix
GRI/SASB Index



Maternity / paternity leave

GRI 401-3

Men				Women		
	2022	2023	2024	2022	2023	2024
Total number of employees entitled to maternity / paternity leave	5,609	5,836	5,968	930	1,079	1,186
Total number of employees who took maternity / paternity leave	120	116	153	36	30	47
Total number of employees who returned to work after taking maternity / paternity leave	120	116	153	31	34	39
Total number of employees who returned to work after taking maternity / paternity leave and remained employed twelve months after their return	98	110	101	19	28	29
Return-to-work rate of employees who took maternity / paternity leave	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Retention rate of employees who took maternity / paternity leave	90.74%	91.67%	87.07%	82.61%	90.32%	85.29%

<sup>1</sup> As of 2024, MRS has adjusted the return rate calculation methodology, which now reflects that all employees who do not request termination return to work, resulting in a 100% return rate.

<sup>2</sup> The retention rate now considers only employees who returned from leave in the previous year, comparing how many were still with the company 12 months later. This change ensures that the full period is properly evaluated.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix

GRI/SASB Index

# Content Index

## GRI and SASB

### Statement of Use

Additional GRI Disclosures - indicators not included in the material topics, but reported by MRS to maintain historical series and comparability



# GRI and SASB Content Index

MRS has reported in accordance with the GRI Standards for the period from January 1, 2024 to December 31, 2024.

Content General Disclosures The organization and its reporting practices			Chapter/Response
GRI 2: General Disclosures 2021	2-1	Details of the organization	About MRS
	2-2	Entities included in the organization’s sustainability reporting	About This Report
	2-3	Reporting period, frequency, and point of contact	About This Report
	2-4	Restatements of information	MRS has reviewed how some indicators are calculated and presented in order to improve the quality and standard of its accountability. Indicators related to employee turnover, maternity leave, among others highlighted throughout the document, have been revised.
	2-5	External assurance	About This Report
ACTIVITIES AND WORKERS			
GRI 2: General Disclosures 2021	2-6	Activities, value chain and other business relationships	Our Operations
	2-7	Employees	Our Workforce & Appendix
	2-8	Workers who are not employees	
GOVERNANCE			
GRI 2: General Disclosures 2021	2-9	Governance structure and composition	Governance Bodies and Instances
	2-10	Nomination and selection for the highest governance body	



Content			Chapter/Response
GRI 2: General Disclosures 2021	2-11	Chair of the highest governance body	Governance bodies and instances
	2-12	Role of the highest governance body in overseeing the management of impacts	
	2-13	Delegation of responsibility for impact management	
	2-14	Responsibilities of the highest governance body for sustainability reporting	Governance bodies and instances
	2-15	Conflicts of interest	Related parties
	2-16	Raising critical concerns	Corporate Governance
	2-17	Collective knowledge of the highest governance body	Board of Directors
	2-18	Evaluation of the Performance of the highest governance body	
	2-19	Remuneration policies	<p>By composing overall compensation with a fixed amount plus a variable amount, MRS aims to ensure market competitiveness while promoting the achievement of short-term results and aligning the executive team with the Company’s medium and long-term goals. Compensation also includes direct benefits such as health insurance, life insurance and a private pension plan (MRSPrev). Compensation amounts are defined with the support of KornFerry/HayGroup, benchmarked against the general market.</p> <p>STATUTORY EXECUTIVE BOARD</p> <p>(i) 12 fixed monthly fees, equivalent to a pro-labor payment; (ii) direct benefits, including health insurance, periodic medical check-ups, life insurance and private pension plan; and (iii) variable compensation consisting of an annual performance-based bonus.</p> <p>NON-STATUTORY EXECUTIVE BOARD</p> <p>(i) 13 fixed monthly fees; (ii) direct benefits, including health insurance, periodic medical check-ups, life insurance and private pension plan; and (iii) variable compensation consisting of an annual performance-based bonus.</p>
	2-20	Processes for determining remuneration	

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix



Content			Chapter/Response
GRI 2: General Disclosures 2021	2-21	Ratio of annual total compensation	In 2024, the ratio between the highest individual annual total compensation and the average annual total compensation of all other individuals was 51.49, representing a 0.5% reduction compared to the previous year.
	2-22	Statement on sustainable development strategy	A Message from Leadership
	2-23	Policy commitments	The Company’s commitments are aligned with labor and environmental legislation, in addition to the regulatory standards applicable to MRS’s activities.  In 2024, we published new policies on Human Rights and on Diversity, Equity and Inclusion.
	2-24	Integration of policy commitments	Corporate Governance, Ethics and Integrity
	2-25	Processes to remedy negative impacts	Ethics and Integrity
STRATEGIES, POLICIES AND PRACTICES			
GRI 2: General Disclosures 2021	2-26	Mechanisms for advice and raising concerns	If an individual needs guidance on how to implement the organization’s policies and practices for responsible business conduct at MRS, they can contact the Company’s Support and Guidance Channel.
	2-27	Compliance with laws and regulations	There were no significant cases of fines or sanctions applied during the reporting period.
	2-28	Membership in associations	Partnerships to encourage sector collaboration.
STAKEHOLDER ENGAGEMENT			
GRI 2: General Disclosures 2021	2-29	Approach to stakeholder engagement	MRS understands that structured dialogue with stakeholders is essential for conducting ethical and sustainable business. Accordingly, the Company adopts practices and routines to identify, engage, and maintain dialogue with its stakeholders. These include: shareholders and investors, customers, internal audience, local communities, suppliers, regulatory agencies, government and public entities, and organized civil society (NGOs, associations). The engagement strategy with these various audiences is detailed in the chapter “Caring for People.”
	2-30	Collective bargaining agreements	100% of employees are covered by collective bargaining agreements.

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix



Content			Chapter/Response
MATERIAL TOPICS			
GRI 3: 2021 Material Topics	3-1	Material topic definition process	Materiality
			To develop MRS’s Materiality Matrix in 2021, the following steps were taken: global scenario analysis, sectoral market research, rating assessments, consultation with key stakeholders (clients, suppliers, representatives from communities within the coverage area, and internal leadership), analysis and cross-referencing of indicators and objectives (GRI, SASB, and SDGs), and validation.
	3-2	List of material topics	Materiality & Appendix
RISK MANAGEMENT			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Risk Management
SASB: Critical incident risk management	TR-RA-540a.4.	Frequency of internal railway integrity inspections	
CORPORATE GOVERNANCE AND TRANSPARENCY			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Corporate Governance
ETHICS AND ANTI-CORRUPTION PRACTICES			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Ethics and Integrity
GRI 205: Anti-corruption practices 2016	205-1	Operations assessed for risks related to corruption	
	205-2	Communication and training on anti-corruption policies and procedures	
	205-3	Confirmed cases of corruption and measures taken	
GRI 206: Anti-competitive behavior	206-1	Legal actions for anti-competitive behavior, anti-trust and monopoly practices	

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix



Content			Chapter/Response
FUEL MANAGEMENT AND FLEET ECO-EFFICIENCY			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Climate Strategy & Energy Efficiency
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Energy Management
	302-3	Energy intensity	Energy efficiency in constant evolution
	302-4	Reducing energy consumption	Energy Management
SASB: Greenhouse gas emissions	TR-RA-110a.3	Total fuel consumed, percentage renewable	Energy Management
ATMOSPHERIC AND GREENHOUSE GAS EMISSIONS			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Climate Strategy & Energy Efficiency
GRI 305: Emissions 2016	305-1	Greenhouse Gas (GHG) emissions, direct (Scope 1)	
	305-2	GHG emissions, indirect (Scope 2) GHG from purchased energy	
	305-4	GHG emissions intensity	
	305-5	GHG emissions reductions	
	305-7	Emissions of NOx, SOx, and other significant atmospheric emissions	
SASB: Greenhouse gas emissions	TR-RA-110a.1	Total Scope 1 emissions	Climate Strategy & Energy Efficiency
SASB: Greenhouse gas emissions	TR-RA-110a.2	Discussion of short and long-term strategies or plans to manage Scope 1 emissions, emission reduction targets, and performance analysis against targets	
	SASB TR-RA-120a.1	Atmospheric emissions of the following pollutants: (1) NOx (excluding N2O) and (2) particulate matter (PM10)	

A Message from Leadership
About This Report
2024 Highlights
Awards & Recognitions
About MRS
ESG Agenda
Stewardship of Our Business
Caring for the Planet
Caring for People
Performance Overview
Appendix



Content			Chapter/Response
OCCUPATIONAL SAFETY			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Health & Safety
GRI 403: Occupational Health & Safety 2018	403-1	Occupational health and safety management system	Occupational Health & Safety
	403-5	Training of workers in occupational health and safety	Health & Safety
	403-9	Workplace Accidents	Occupational Health & Safety
SASB: Employee health and safety	TR-RA-320a.1	(1) Total recordable incident rate (TRIR), (2) Fatality rate and (3) Near miss frequency rate (NMFR)	Accident Rate
EMPLOYEE TRAINING AND DEVELOPMENT			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Employee training and development
GRI 404: Training and Education 2016	404-1	Average hours of training per year, per employee	
	404-3	Percentage of employees receiving regular performance and career development reviews	In 2024, the company adopted a strategy to postpone the start of performance evaluations to the first four months of 2025, in order to develop a calendar that better meets the company's management needs. As of the date of this report, the final data was not yet available.
DIVERSITY, EQUITY AND INCLUSION			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Advancing Diversity & Inclusion
GRI 405: Diversity and Equal Opportunity 2016	405- 1	Diversity in governance bodies and among employees	Governance bodies and instances and #ElasNaFerrovia
	405 -2	Ratio of basic salary and compensation received by women to those received by men	Benefits and Compensation

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix



Content			Chapter/Response
ENGAGEMENT WITH SURROUNDING COMMUNITIES			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Society & Community Engagement
GRI 202: Market presence 2016	202-1	Ratio of entry-level wage to local minimum wage, broken down by gender	Benefits and Compensation
GRI 203: Indirect Economic Impacts 2016	203 -2	Significant indirect economic impacts	Society & Community Engagement
GRI 411: Rights of indigenous peoples 2018	411-1	Cases of rights violations involving Indigenous peoples	Rights of Indigenous Peoples and Traditional Communities
GRI 413: Local communities 2016	413-1	Operations with local community engagement, impact assessments and development programs	Society & Community Engagement
	413-2	Operations with actual or potential significant negative impacts on local communities	
RAILROAD SAFETY AND ACCIDENT PREVENTION			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Operational Safety and Accident Prevention
GRI 403: Occupational Health & Safety 2018	403 -2	Hazard identification, risk assessment and incident investigation	
GRI 403: Occupational Health & Safety 2018	403 -7	Prevention and mitigation of occupational health and safety impacts directly linked to business relationships	Operational Safety and Accident Prevention
SASB: Accident and safety management	SASB TR- RA-540a.1	Number of accidents and incidents	
	SASB TR- RA- 540a.2	Number of (1) accidental spills and (2) non-accidental releases (NARs)	

A Message from Leadership
About This Report
2024 Highlights
Awards & Recognitions
About MRS
ESG Agenda
Stewardship of Our Business
Caring for the Planet
Caring for People
Performance Overview
Appendix



Content			Chapter/Response
CUSTOMER RELATIONS MANAGEMENT			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Customer Experience
INNOVATION & TECHNOLOGY			
GRI 3: 2021 Material Topics	3-3	Management of material topics	Innovation & Technology

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix



Additional GRI Disclosures – indicators not included in the material topics, but reported by MRS to maintain historical series and comparability

Content			Chapter/Response
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	Financial Performance
	201-2	Financial implications and other risks and opportunities arising from climate change	Climate Resilience & Appendix
GRI 203: Indirect Economic Impacts 2016	203-1	Investments in infrastructure and support for services	Investments & Cargo Diversification
GRI 303: Water and effluents 2018	303-1	Interactions with water as a shared resource	Water Management
	303 -2	Management of impacts related to water discharge	
	303 -3	Water withdrawal	
	303 -4	Water discharge	Effluents
GRI 304: Biodiversity 2016	304 -1	Owned, leased or managed operational units located within or adjacent to protected areas and areas of high biodiversity value outside protected areas	Biodiversity Protection
	304 -3	Protected or restored habitats	
GRI 306: Waste 2020	306 -2	Management of significant impacts related to waste	Waste Management
	306-3	Waste generated	
	306-4	Waste not sent for final disposal	
	306-5	Waste sent for final disposal	

A Message from Leadership

About This Report

2024 Highlights

Awards & Recognitions

About MRS

ESG Agenda

Stewardship of Our Business

Caring for the Planet

Caring for People

Performance Overview

Appendix



Content			Chapter/Response
GRI 308: Supplier environmental assessment 2016	308 -1	New suppliers selected based on environmental criteria	Supplier Partnerships
GRI 401: Employment 2016	401 -1	New hires and employee turnover	Appendix
	401-3	Maternity / paternity leave	Appendix
GRI 414: Supplier social assessment 2016	414 -1	New suppliers selected based on social criteria	Supplier Partnerships
GRI 415: Public policies 2016	415 - 1	Political contributions	The Company does not make contributions or donations to political parties, as the current legislation prohibits private sector financing of political campaigns. The Policy on Sponsorships, Partnerships and Donations prohibits support for events or activities of a political-partisan nature and partnerships related to electoral movements.

Corporate information

Address (head office): Praia de Botafogo, nº 228, sala 707, Botafogo, Rio de Janeiro (RJ)

Credits

Coordination: General Sustainability Department/ESG | GRI Consulting: BH Press Comunicação e Sustentabilidade | Editorial, graphic design and content production: BH Press Comunicação e Sustentabilidade | Images: MRS collection

- A Message from Leadership
- About This Report
- 2024 Highlights
- Awards & Recognitions
- About MRS
- ESG Agenda
- Stewardship of Our Business
- Caring for the Planet
- Caring for People
- Performance Overview
- Appendix



DECLARAÇÃO DE CONFORMIDADE

Conformity Declaration

DECLARAÇÃO DE VERIFICAÇÃO

Nº 367.034/25

Esta **Declaração de Verificação** documenta que o Organismo de Verificação (OV) citado abaixo realizou atividades de verificação de acordo com as *Especificações de Verificação do Programa Brasileiro GHG Protocol* e a norma ABNT NBR ISO 14064-3:2007.

Organização Inventariante (OI)
Nome da OI: MRS LOGISTICA S/A
Responsável pelo Inventário: Milton Brovini
E-mail: milton.brovini@mrs.com.br
Organismo de Verificação (OV)
Nome do OV: Associação Brasileira de Normas Técnicas – ABNT
Verificador Líder: Thiago Ernani Guinancio Milagres
E-mail: thiagoguinancio@gmail.com

As emissões de gases de efeito estufa (GEE) informadas pela Organização Inventariante em seu inventário de emissões, de 1º de janeiro até 31 de dezembro de **2024**, são verificáveis e cumprem os requisitos do Programa Brasileiro GHG Protocol, detalhados nas *Especificações do Programa Brasileiro GHG Protocol de Contabilização, Quantificação e Publicação de Inventários Corporativos de Emissões de Gases de Efeito Estufa (EPB)*.

Nível de Confiança

O Organismo de Verificação (OV) atribuiu o seguinte nível de confiança ao processo de verificação:

☒ Verificação com nível de **confiança limitado**

“Não há indícios de que o inventário de gases de efeito estufa da Organização Inventariante para o ano de **2024** não esteja materialmente correto, não seja uma representação justa dos dados e informações de GEE e não tenha sido preparado de acordo com as EPB.”

Os limites do processo de verificação foram:  
Análise de dados secundários.

ABNT Associação Brasileira de Normas Técnicas

Av. Treze de Maio, 13 – 28º Andar – Centro – **Rio de Janeiro – RJ** – CEP 20031-901  
Rua Conselheiro Nebras, 1.131 – Campos Eliseos – **São Paulo – SP** – CEP 01203-002

ABNT NBR ISO/IEC 14065



OVV 005

Declaração de Verificação



ABNT NBR ISO 14064-1



DECLARAÇÃO DE CONFORMIDADE

Conformity Declaration

Descrição do Escopo da Verificação

O inventário do ano de **2024** da Organização Inventariante foi verificado dentro do seguinte escopo:

Limites Organizacionais	Limites Operacionais
<input checked="" type="checkbox"/> Controle Operacional	<input checked="" type="checkbox"/> Escopo 1
<input type="checkbox"/> Participação Societária	<input checked="" type="checkbox"/> Escopo 2 – Abordagem baseada em localização
	<input type="checkbox"/> Escopo 2 – Abordagem baseada em escolha de compra
	<input checked="" type="checkbox"/> Escopo 3

☒ Foram excluídas da verificação: N/A

Instalações visitadas

Lista de todos os locais visitados durante a verificação e a data de cada visita.

Nome do Local	Relação do Local com a holding	Endereço	Data da Visita
MRS LOGISTICA S/A	Matriz	Avenida Brasil, 2001 - Centro, Juiz de Fora/MG	03 e 04/04/2025

Total de emissões verificadas em toda a organização, segundo a abordagem de Controle Operacional

Emissão de GEE em toneladas de CO <sub>2</sub> equivalente (tCO <sub>2</sub> e)				
GEE	Escopo 1	Escopo 2 Abordagem baseada na localização	Escopo 2 Abordagem baseada em escolha de compra	Escopo 3
CO <sub>2</sub>	592.749,980	1.731,493	-	344.408,927
CH <sub>4</sub>	1.234,583	0,000	-	560,520
N <sub>2</sub> O	8.552,070	0,000	-	581,047
HFCs	0,000	-	-	0,000
PFCs	0,000	-	-	0,000
SF <sub>6</sub>	0,000	-	-	0,000
NF <sub>3</sub>	0,000	-	-	0,000
TOTAL	602.536,633	1.731,493	-	345.550,493
CO <sub>2</sub> Biogênico	89.024,915	-	-	445,656

Comentários Adicionais

Exclusão das emissões decorrentes de extintores de CO<sub>2</sub> e efluentes por terem significância menor que 0,01% nas emissões totais.

ABNT Associação Brasileira de Normas Técnicas


Av. Treze de Maio, 13 – 28º Andar – Centro – **Rio de Janeiro – RJ** – CEP 20031-901  
Rua Conselheiro Nebras, 1.131 – Campos Eliseos – **São Paulo – SP** – CEP 01203-002

ABNT NBR ISO/IEC 14065



OVV 005

Declaração de Verificação



ABNT NBR ISO 14064-1



DECLARAÇÃO DE CONFORMIDADE

Conformity Declaration

Conflitos de Interesse (CDI)

Eu, Thiago Ernani Guinancio Milagres, certifico que nenhum conflito de interesse existe entre Organização Inventariante e o Organismo de Verificação, ou qualquer dos indivíduos membros da equipe de verificação envolvidos na verificação do inventário, conforme definido no capítulo 3.2.1 das *Especificações de Verificação do Programa Brasileiro GHG Protocol*.

Thiago Ernani Guinancio Milagres  
(Verificador Líder)

15/04/2025  
Data

☒ Reconhecimento de assinatura digital¹

Conclusão do Verificador sobre o Inventário de Emissões de GEE

Como responsáveis pelas atividades de verificação do inventário de GEE da Organização Inventariante, atestamos que as informações contidas neste documento são verdadeiras.

Thiago Ernani Guinancio Milagres  
(Verificador Líder)

15/04/2025  
Data

☒ Reconhecimento de assinatura digital¹

Fabiane Governatori Silva  
(Revisor Independente)

15/04/2025  
Data

☒ Reconhecimento de assinatura digital¹

Autorização

Eu, Milton Brovini, aceito os resultados desta declaração de verificação.

Milton Brovini

Data

☐ Reconhecimento de assinatura digital¹

Rio de Janeiro, 16 de abril de 2025.

  
Guy Ladvocat  
Gerente de Certificação de Sistemas

ABNT Associação Brasileira de Normas Técnicas

Av. Treze de Maio, 13 – 28º Andar – Centro – **Rio de Janeiro – RJ** – CEP 20031-901  
Rua Conselheiro Nebras, 1.131 – Campos Eliseos – **São Paulo – SP** – CEP 01203-002

ABNT NBR ISO/IEC 14065



OVV 005

Declaração de Verificação



ABNT NBR ISO 14064-1

¹Ao marcar a caixa "Reconhecimento de assinatura digital", concordo que esta declaração de verificação seja considerada "feita por escrito" e "assinada" para todos os fins e que quaisquer registros eletrônicos serão considerados "feitos por escrito". Ressalto expressamente a todo e qualquer direito de negar a integridade jurídica, a validade ou a incorruptibilidade desta declaração de verificação e de quaisquer documentos a ela relacionados com base em que tenham sido elaborada a conclusão eletronicamente. Esta declaração é suportada por controle de atendimento à norma e procedimentos da ABNT, sendo válida somente assinada pelo Gerente de Certificação de Sistemas. Sua validade pode ser confirmada no seguinte endereço eletrônico: [www.abnt.org.br](http://www.abnt.org.br). Para informações adicionais: [assessoria@abnt.org.br](mailto:assessoria@abnt.org.br). CNPJ: 33.402.892/0001-08



[www.mrs.com.br](http://www.mrs.com.br)