



# SUSTAINABILITY REPORT 2023





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# MESSAGE FROM LEADERSHIP

GRI 2-22



## On the sustainability track

A key business premise undertaken at the company is sharing results ethically, clearly, and transparently with all our stakeholders. This is because our operations impact the lives of hundreds of thousands of people. This report materializes this commitment, and we are excited to share our 2023 journey with you.

Viewing sustainability as a journey allows us to carefully plan and structure each step, celebrate victories, learn from mistakes, and not repeat them. It drives us to truly commit to goals and results that will positively impact people, society, and the planet.

In 2023, we made significant progress and took concrete steps on the ESG agenda. Our goal is to establish an increasingly integrated view of processes, making our operation even more efficient and competitive. Above all else, we consider that the railway is already a more sustainable logistics alternative compared to other modes. This path has led us to create a specialized ESG area, under the Finance and Development Department, to leverage the culture of sustainability throughout the company.

On the environmental front, we made significant progress in climate governance and internal, operational, and strategic developments. This led to a 3.7% reduction in specific emissions from the railway fleet, mainly due to our energy efficiency and an increase in the percentage of biodiesel from the national RenovaBio program used.

In our operations, we ended the year with a historical record of transported volume, achieving a growth of 10% compared to 2022. As already reported in our Annual Report, the economic and financial results highlight our EBITDA performance, which exceeded 20% compared to the previous year, demonstrating our commitment to continuous and sustainable growth.

We have recorded significant advances on our social agenda, such as increased female representation in the company, surpassing the milestone of one thousand female employees across various positions and departments. We also remain steadfast in our work towards diversity inclusion, unconditional respect for human rights – explicitly declared through our adhesion to the Global Compact – and close, humanized relationships with the communities within our coverage area. The most alarming data pertains to safety. Despite achieving our best historical rate of workplace accidents, there has been an increase in railway-related accidents involving the community, the main cause of which continues to be the reckless behavior of pedestrians and drivers, unfortunately.

We are becoming increasingly aware that, in sustainability, we must advance collaboratively, engaging in a transformative endeavor that embraces, integrates, and incorporates both people and the planet. Therefore, we will continue to push forward in 2024, operating on the premise that for us to truly thrive as a society, we cannot afford to leave anyone behind.



**In sustainability, we must advance collaboratively, engaging in a transformative endeavor that embraces, integrates, and incorporates both people and the planet.”**

We extend our gratitude for the partnership of each employee, supplier, customer, market agent, and our regulatory body, which stood by us over the past year. We would also like to thank the community with whom we share our territory, reaffirming our commitment to generating shared value. We are counting on your support throughout this journey. Let's move forward together towards a better future.

**Guilherme Segalla de Mello**  
CEO of MRS



# ABOUT THE REPORT

GRI 2-3, 2-5

Since 2019, MRS has been communicating and providing visibility and transparency to its projects, strategies, investments, and key indicators for all its stakeholders through the Sustainability Report. We report the key results of our operations, correlating them with the most relevant material topics for the company according to our materiality matrix, their impacts, and corresponding actions.

As a reference for producing this report, we adopted the standards of the Global Reporting Initiative (GRI), in its most updated version (2021), as well as the indicators of the Sustainability Accounting Standards Board (SASB) and the Sustainable Development Goals (SDGs) of the UN Global Compact. In addition to tracking indicator evolution over the reporting period,

we also report on the management approaches to material topics.

We have utilized the principles of Integrated Reporting (IR) proposed by the International Integrated Reporting Council (IIRC), focusing on synthesizing and connecting performance with value creation over the short, medium, and long term, considering financial, intellectual, human, manufactured, natural, social, and relationship capitals. To ensure effectiveness in meeting the demands of capital markets stakeholders, we have also considered the materiality map of the Sustainability Accounting Standards Board (SASB), focused on financial aspects. The company's senior management has validated the content of this report, which has not been subjected to external assurance.

Matheus de Oliveira and Luiz Felipe Dias at the locomotive maintenance workshop in Barra do Piraí (RJ).



In its fifth edition, MRS's Annual Sustainability Report reflects the company's performance and commitments in financial and ESG (environmental, social, and governance) aspects, covering the period from January 1 to December 31, 2023.



“

This document has been structured to share our strategic vision of sustainability, a journey focused on achieving a balance between present needs and those of future generations, through a culture of innovation that encourages the continuous evolution of best practices for the industry. We believe in building relationships based on integrity, safety, and excellence so that, as stated in our purpose, we can create and operate increasingly competitive and reliable integrated logistics solutions, generating value and well-being for society as a whole.”

Larissa Santos,  
Sustainability/ESG Manager



# Materiality

GRI 3-1, 3-2

MRS' Impact Materiality, prepared in 2021, with the support of an external consultancy, presents the 12 most relevant themes for the company from the perspective of sustainability, listed based on the analysis of internal and external contexts. The topics considered most relevant when listening to internal and external stakeholders guide the production of this document and the company's ESG agenda

GLOBAL SCENARIO ANALYSIS

INDUSTRY MARKET SURVEY

RATINGS STUDY

LISTENING TO PRIORITY STAKEHOLDERS

Customers, Suppliers, Representatives from communities in the coverage area and Internal leadership

INDICATOR AND OBJECTIVE ANALYSIS AND CROSS-REFERENCING

GRI, SASB and SDG

VALIDATION



RISK  
MANAGEMENT



CORPORATE  
GOVERNANCE



ETHICS AND  
ANTI-CORRUPTION  
PRACTICES



FUEL MANAGEMENT  
AND ECO-EFFICIENCY  
OF THE FLEET



ATMOSPHERIC  
EMISSIONS AND  
GREENHOUSE  
GASES



OCCUPATIONAL  
SAFETY



EMPLOYEE  
TRAINING AND  
DEVELOPMENT



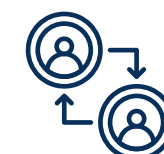
DIVERSITY,  
EQUITY AND  
INCLUSION



RELATIONSHIP WITH  
SURROUNDING  
COMMUNITIES



RAILWAY  
SAFETY AND  
ACCIDENT  
PREVENTION



CUSTOMER  
RELATIONS



INNOVATION AND  
TECHNOLOGY

Led by the Communication and Finance departments, MRS's materiality study was based on GRI guidelines and assessments from Sustainalytics, the Corporate Sustainability Assessment (SAM CSA), SASB, and Morgan Stanley Capital International (MSCI). Additionally, the Sustainable Development Goals (SDGs) and the sector-specific SDG Industry Matrix - Transportation, conducted by the UN Global Compact in partnership with KPMG, were also incorporated into the process. If you have questions, suggestions or comments about the content of this 2023 Sustainability Report, please contact us via the website <https://www.mrs.com.br/fale-conosco/>



## 2023 HIGHLIGHTS

All-time high  
in terms of Volume:

**197.5**  
millions of tons  
↑ 10.8%

Net Revenue

**BRL 6.4 B**  
↑ 15.3%

EBITDA

**BRL 3.4 B**  
↑ 20.5%

Net Profit

**BRL 1.2 B**  
↑ 37.3%



Creation of ESG thematic commissions reporting to the executive board and sustainability committee.

**BRL 21.3 million +**  
allocated to **environmental activities and projects**

↓ 3.7%  
of **specific emissions**  
(best historical index for MRS)  
**9.17 gCO<sub>2</sub>e/TKU**

**89%**  
**clean energy** in the electricity matrix

↓ 15%  
**waste generated**



Best historical rate  
of personal accidents **0.39**



**Women**  
**15.6%** in the  
workforce **23.7%**  
in leadership  
positions



**Employee  
development**  
**452,000+** hours of activities  
**BRL 15+** million invested

**86.6%** customer  
satisfaction,  
best result in  
the historical  
series **77%**  
of community  
demands met **BRL 23  
million**  
allocated to  
67 incentive-  
based projects

## ▶ AWARDS AND RECOGNITION

### Awards from the National Land Transport Agency (ANTT)

#### Special Class: Gold Category “Best Regulatory Practices 2023”

Awarded the Gold Category in the 1st edition of the Regulatory Excellence Award promoted by ANTT.

#### Interaction with Society Award: Relocation and Resettlement in Baixada Santista/SP

This social, urban, and environmental intervention in the city of Guarujá (SP) began in July 2023, and by the end of the year, 250 families were relocated and resettled. In 2024, the project will continue as planned. There has been an improvement in basic infrastructure, access to public services, and job opportunities, while in the vacated area there is already a reduction in the railroad's operational risks for the community.

#### User Attention Award: Anomaly detection in coil loading

The developed solution enabled real-time identification of the displacement of coils transported on flatbed wagons through fixed cameras installed in strategic locations and computer vision software, generating alerts for those responsible for correcting the load. The goal was to maximize the safety and integrity of the loads.

#### Engineering Award: Implementation of Active Signaling Systems at Level Crossings: Integration between Two Railways

From the need to integrate two systems for train detection from two operators and to regulate the overlap of manual control over automatic control, an unprecedented project was initiated at MRS in 2021, with implementation in 2023. The solution guarantees the reliability of the signaling system's operation, allowing authorized persons to inhibit the automatic warning systems during maneuvers without crossing the intersection.



STOP, LOOK, WATCH!



Click here and check out the 1st Edition of the ANTT Award 2023



## We won in three categories in the 2023 edition of the Revista Ferroviária Award

- ▶ Best Operator with Investment in Railway Preservation
- ▶ Best Logistics Operator
- ▶ Standard Freight Railway, with Francisco Rosa de Lima



In the center, Freight Standard Railwayman Francisco Lima, alongside his manager, Rebeca Costa, and Operations Director Daniel Dias







WE ARE MRS



# ABOUT US

GRI 2-1, 2-2

We are MRS – one of the best freight railways in the world, operating in the Southeast region of Brazil. Our 1,643 km rail network covers the states of São Paulo, Minas Gerais and Rio de Janeiro, which together account for half of Brazil's gross domestic product (GDP). We link 107 Brazilian municipalities and connect the main industrial parks and regions producing mineral and agricultural commodities to the country's largest ports. Over the last few years, we have further explored and expanded our borders and created access routes, through Minas Gerais and São Paulo, to the state of Mato Grosso do Sul (MS), in the Midwest region, offering integrated and more sustainable logistics solutions for the transportation of general cargo to the ports of Rio de Janeiro (RJ) and Santos (SP).

We are a public company, listed on the B3 over-the-counter market, with capital stock made up of common and preferred shares. Our main shareholders are Minerações Brasileiras Reunidas (MBR), Companhia Siderúrgica Nacional (CSN – UPL), CSN Mineração, Usiminas, Vale and Gerdau. MRS was created in 1996 when the federal government transferred the management of the national railway system to the private sector. Its concession was renewed in 2022, with a term until 2056, beginning a major expansion phase with investments and works throughout its coverage region.



STOP, LOOK, WATCH!



Click here and learn much more about us by watching our institutional video.

Train made up of ore transport wagons at the Horto Florestal plant, Belo Horizonte (MG)





# OUR ESSENCE

GRI 2-1

Our Strategic Framework, called Essência MRS, inspires and guides our business strategy:



## Belief

The best logistics solutions travel by rail. 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, generating 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 attentive to their well-being allows us to mitigate risks and build lasting relationships.



### Safety

Precondition of our operation. Stable systems and machinery guarantee reliable relations with the railroad's surroundings and are essential for business continuity.



### Excellence

The constant pursuit of improving our operational and management standards guarantees our competitiveness.



### Diversity

Different perspectives are welcome. The greater the diversity and inclusion in an environment, the greater the potential to innovate and overcome challenges with efficiency and agility.



### Open to the New

Continuous learning. The constant pursuit of knowledge enables us to innovate and explore new paths.



### Agility

Agility is a question of survival. We value simplicity because it makes things simpler and easier to understand, creates security, and speeds up decisions.



### Customer Focus

Every customer is unique. By taking their perspectives and understanding their challenges, we will be able to exceed their expectations.



### People

Our engaged people make a difference. Inspiring, developing, and appreciating their contributions enables our talents to become more prominent, collaborative, and achieve higher goals.



IN 2023, WE BROKE DOWN OUR STRATEGY INTO SIX AGENDAS THAT TRANSLATE INTO PRIORITY ACTIONS THAT WILL LEAD MRS TO ACHIEVE THE ASPIRATIONS OUTLINED IN OUR STRATEGIC FRAMEWORK, REVISITED IN 2022.



**BUSINESS  
TRANSFORMATION**

**Evolve** the culture, management model and governance



**SOLUTIONS FOR  
CUSTOMERS AND GROWTH**

Be the preferred provider of **integrated logistics**



**OPERATIONAL EXCELLENCE**

Grow **sustainably and profitably** through operational excellence



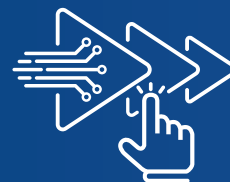
**NEW CONTRACT AND  
REGULATORY MANAGEMENT**

Manage the New Concession Contract and its surrounding regulations with **integrity and efficiency**



**ESG • SUSTAINABILITY**

Generate **positive impact on the environment and society** through consolidation of the ESG practice and commitments to the market



**DIGITAL AND TECHNOLOGY**

Create new skills and support the **transformation**



Weverson Silva and Ângela Maria at the locomotive maintenance workshop in Belo Horizonte (MG).



## ▶ OUR OPERATIONS

GRI 2-2, 2-6

MRS holds about  
**20%**  
of the national railway fleet

More than **20,000** railway cars  
More than **670** locomotives

**20%** of everything  
Brazil exports and  
**1/3** of all cargo  
transported by trains in  
the country travels over  
MRS tracks.

More than **100**  
intermodal terminals in  
operation (MRS and third  
parties, including General  
Cargo and Iron Ore).

Direct access to **five major ports** in the country:

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



We operate across  
**3 states:**  
**MG, RJ e SP**



We connect  
**107**  
municipalities



**1,643 km**  
Railway network  
length



## CUSTOMER SEGMENTS SERVED BY MRS

- Mining
- Steel
- Metallurgy
- Construction
- Chemicals & Petrochemicals
- Paper & Pulp
- Agricultural Commodities
- Containers, Shippers & Logistics Operators



## COMPREHENSIVE OR INTEGRATED LOGISTICS SOLUTIONS

Coordination between various modes – door to door transport (complete transportation operation from the cargo to the final customer)



Railroad +  
Cabotage or International Maritime



Railroad +  
Other Railroad



Railroad +  
Highway



Railroad +  
Waterway



# OUR OPERATIONS

GRI 2-2, 2-6

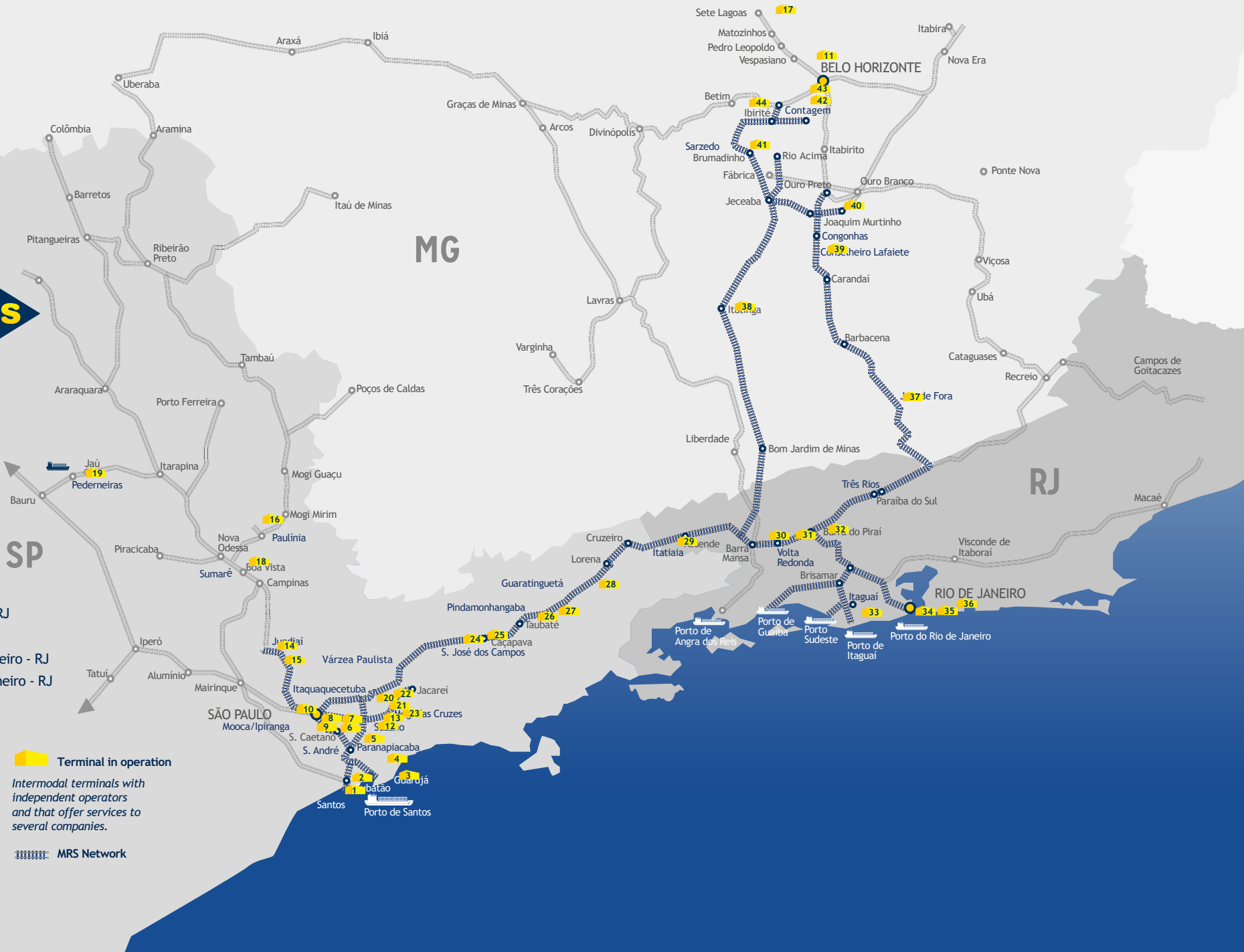
## RAILWAY NETWORK AND TERMINALS

- 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 Piraí - 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

Terminal in operation

*Intermodal terminals with independent operators and that offer services to several companies.*

MRS Network





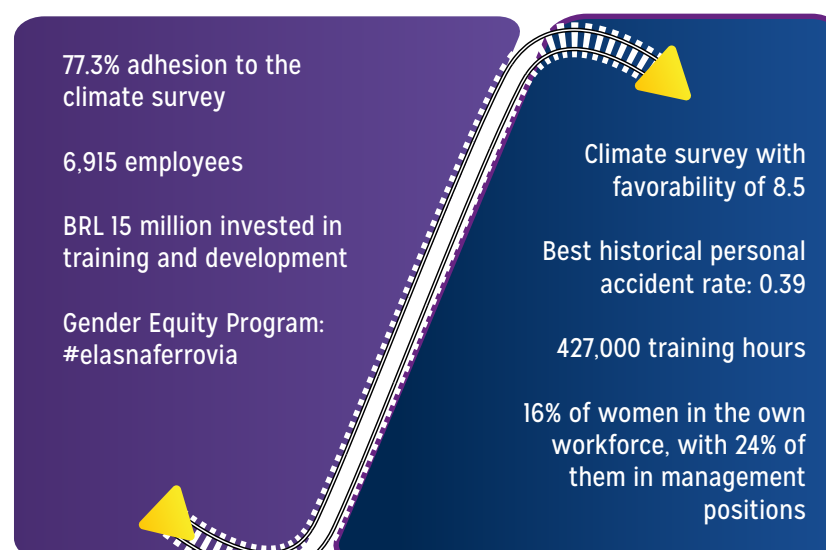
# ▶ OUR WAY OF GENERATING VALUE



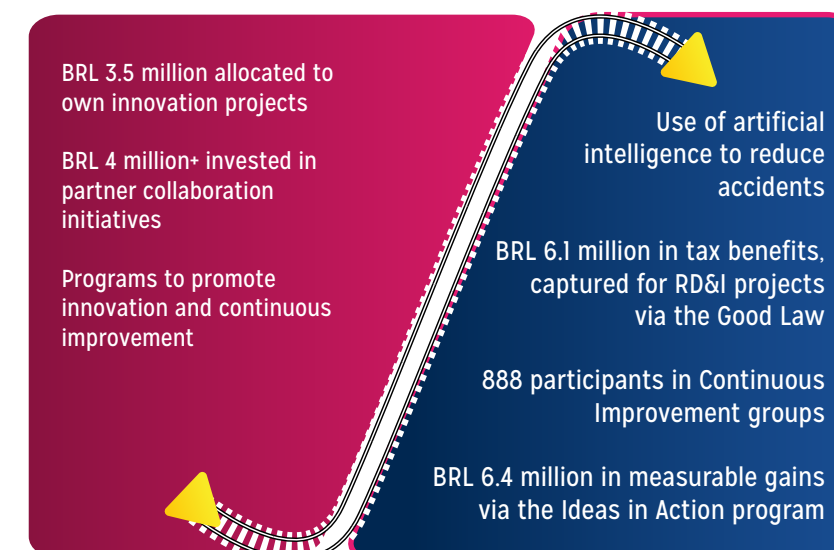
## FINANCIAL CAPITAL



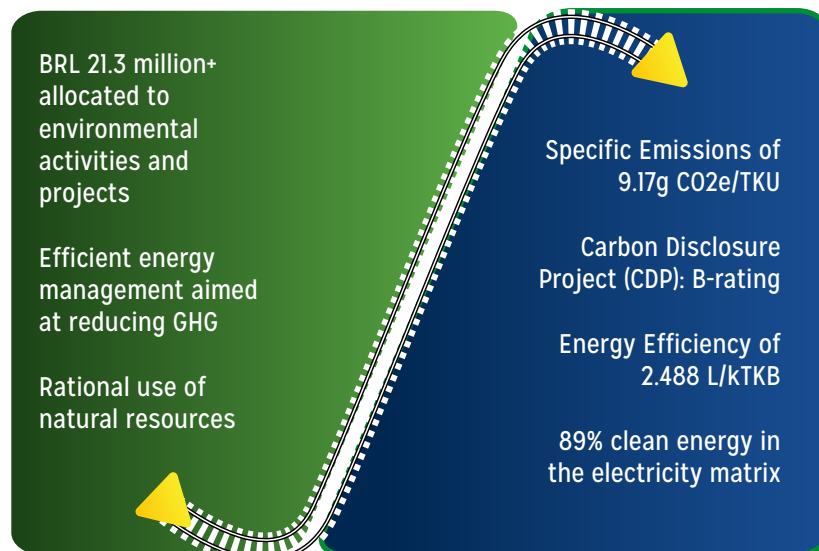
## HUMAN CAPITAL



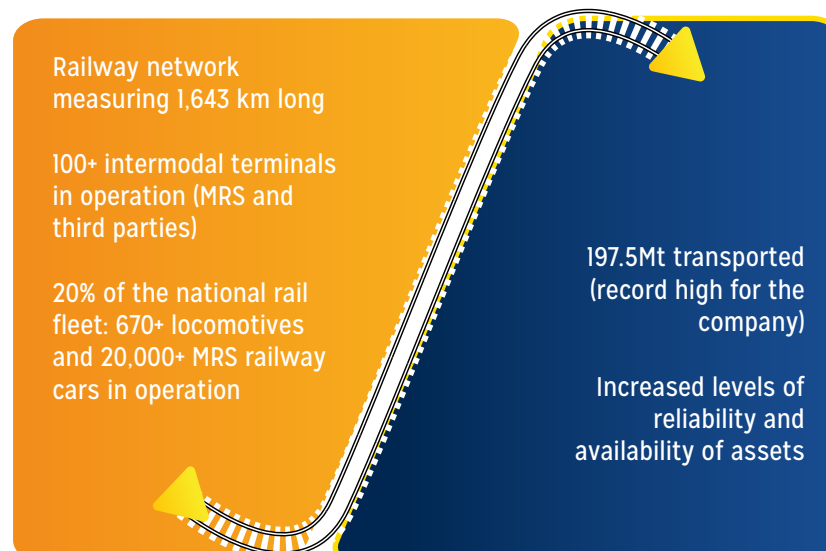
## INTELLECTUAL CAPITAL



## NATURAL CAPITAL



## MANUFACTURED CAPITAL



## SOCIAL AND RELATIONSHIP CAPITAL





# ▶ TRAJECTORY





# OUR RESULTS

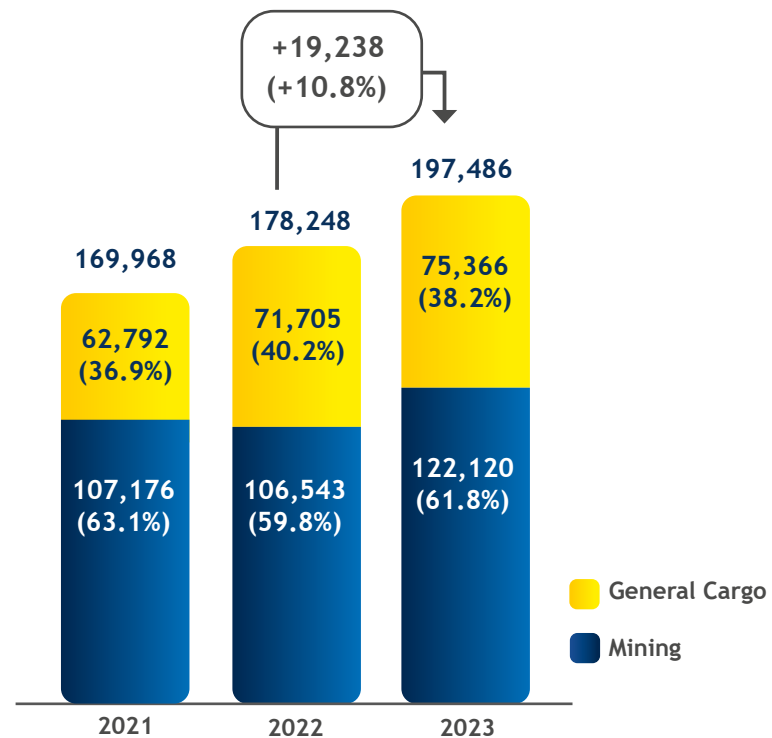


## OPERATIONAL PERFORMANCE

Our activities are primarily focused on the transportation of inputs and products related to the steel industry, such as iron ore, coal, and coke, for both the domestic market and exports. We also transport General Cargo, which includes agricultural commodities, steel products, containers, among others.

We ended 2023 with 197.5 Mt in total cargo volume transported on our railway network, representing a record for the Company. Growth between 2022 and 2023 was 10.8% (+19.2Mt).

### TRANSPORTED VOLUME (Thousands of tons)



### BEST HISTORICAL VOLUME



To grow sustainably by driving the economic and social development of the country, creating a more prosperous and dynamic environment that **GENERATES** opportunities, improves the quality of life for people and communities, and preserves the planet for future generations. This is our commitment when we talk about results.



## TRANSPORTED VOLUME

(Thousands of tons)

	2021	2022	2023	2023 x 2022	Share 2023
<b>Mining</b>	<b>107,176</b>	<b>106,543</b>	<b>122,120</b>	<b>14.6%</b>	<b>61.8%</b>
Iron Ore	104,478	104,201	119,951	15.1%	60.7%
Export	89,607	90,130	106,881	18.6%	54.1%
Domestic Market	14,871	14,072	13,070	-7.1%	6.6%
Coal & Coke	2,698	2,342	2,170	-7.3%	1.1%
<b>General Cargo</b>	<b>62,792</b>	<b>71,705</b>	<b>75,366</b>	<b>5.1%</b>	<b>38.2%</b>
Agricultural Products	39,632	46,806	50,154	7.2%	25.4%
Steel Products	7,504	6,838	6,636	-3.0%	3.4%
Pulp	3,885	5,670	5,591	-1.4%	2.8%
Containers	2,015	2,449	2,308	-5.7%	1.2%
Construction	2,259	2,133	2,222	4.1%	1.1%
Others	7,495	7,808	8,455	8.3%	4.3%
<b>Total</b>	<b>169,968</b>	<b>178,248</b>	<b>197,486</b>	<b>10.8%</b>	<b>100%</b>



### Mining

#### Iron Ore | Export

The volume of iron ore cargo destined for export – which represents 87.5% of the Mining group and 54.1% of the total volume transported by MRS – was 106.9 Mt in 2023, an increase of 18.6% compared to the previous year.



### General Cargo

The transportation of General Cargo, which is carried out by us and other railroads – by means of paid right of way – includes agricultural commodities, steel products, pulp, among others.

The result in 2023 was an all-time high, reaching the milestone of 75.4 Mt of transported volume, representing an increase of 5.1% compared to 2022.

#### Agricultural Products

We transport corn, sugar, soybeans, and soybean meal, which accounted for 66.5% of the General Cargo segment.

The commodities of sugar, soybeans, corn, and soybean meal showed an increase of 10.2%, 8.7%, 4.5% and 4.3%, respectively, in 2023 compared to 2022.

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

The transportation of iron ore, coal, and coke in the domestic market, with a volume of 15.2 Mt transported in 2023, showed a decrease of 7.2% compared to 2022. This result was primarily impacted by production stoppages for corrective maintenance on ore processing and unloading equipment.

The increases in soybean and corn shipments are the result of the entry of new players. The group accounted for a total of 63% of the volume of commodities transported.

#### Steel Products

Compared to 2022, the transportation of steel products fell by 3.0% in 2023. The main factors behind this reduction include: (i) rains in the state of Minas Gerais in the 1st quarter, which caused losses in volumes due to interdictions/incidents; (ii) a reduction in the volume of crude steel production in the country, down 6.5% compared to 2022, as well as in domestic sales, which directly impacted the volumes transported by MRS; and (iii) a reduction in the demand for transportation of semi-finished steel (plates) to supply the domestic market, due to a change in the sales strategy of a major supplier in the segment to the foreign market, making it impossible for MRS to capture the demand.

To find out more, click here or point your camera at the QR Code and access the full content of the 2023 Annual Report.





# FINANCIAL PERFORMANCE

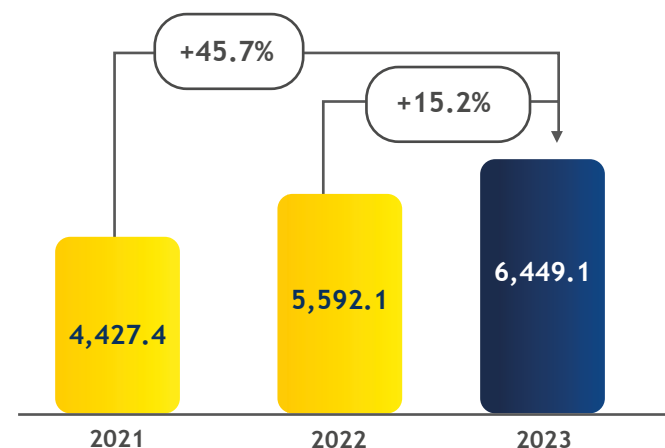
GRI 201-1

## RESULTS (BRL million)

	2022	2023	2023 x 2022
Gross Revenue	6,029.4	6,873.0	14%
Net revenue	5,592.1	6,449.1	15.3%
Costs and Expenses	(2,777.5)	(3,079.2)	10.9%
Other Oper, Rev, and Exp	30.3	59.4	95.8%
EBITDA	2,844.9	3,429.3	20.5%
EBITDA Margin (%)	50.9%	53.2%	2.3 pp
Net Income	874.2	1,200.1	37.3%
Net Debt/ EBITDA (x)	1.2x	1.0x	-0.2x

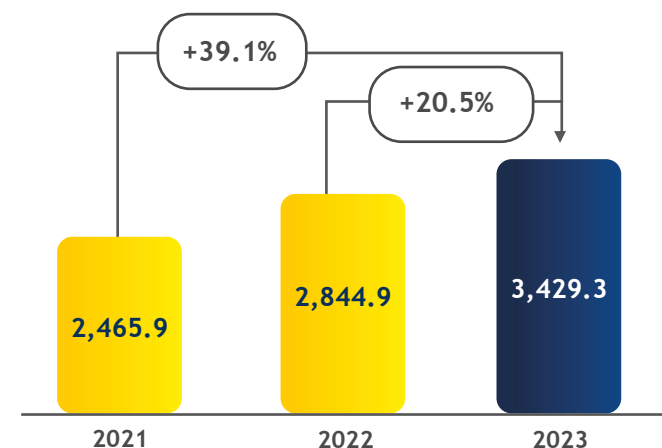
## Net Revenue

An increase of BRL 857.0 million, mainly reflecting the transported volume of 120.0 Mt by the Iron Ore segment - which represents 60.7% of MRS's total volume.



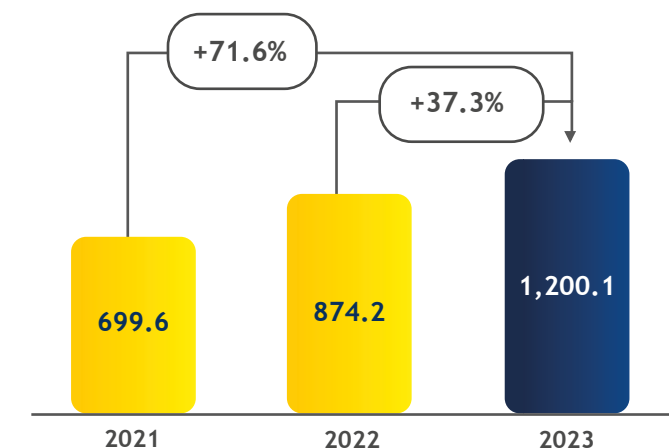
## EBITDA

EBITDA ended 2023 with an increase of 20.5% compared to 2022, reaching BRL 3,429.3 million, with an EBITDA Margin of 53.2%, up 2.3 p.p. Follow the evolution of EBITDA in more detail:



## Net Profit

We closed the year 2023 with a Net Profit of BRL 1,200.1 million, a growth of 37.3% compared to 2022, representing an increase of BRL 326.1 million. This variation mainly reflects the volume of iron ore transported for export, as described in the corresponding item.

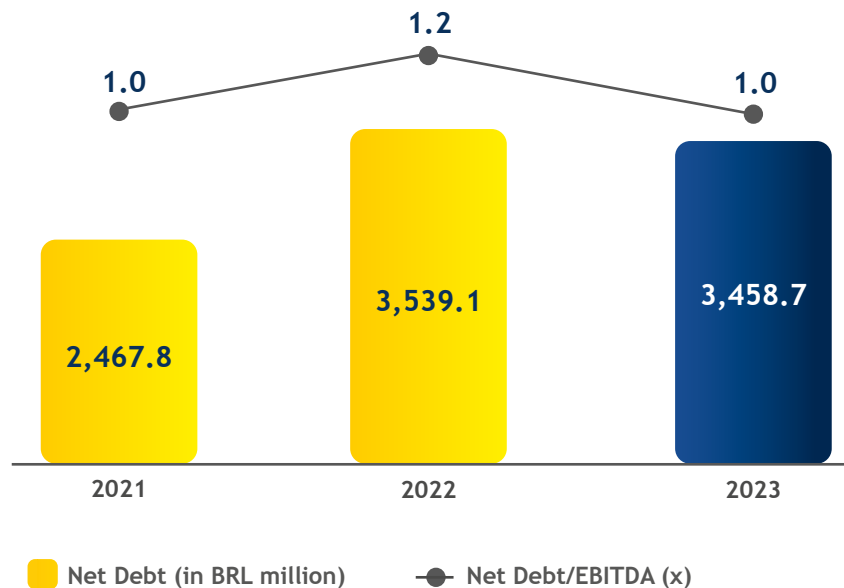




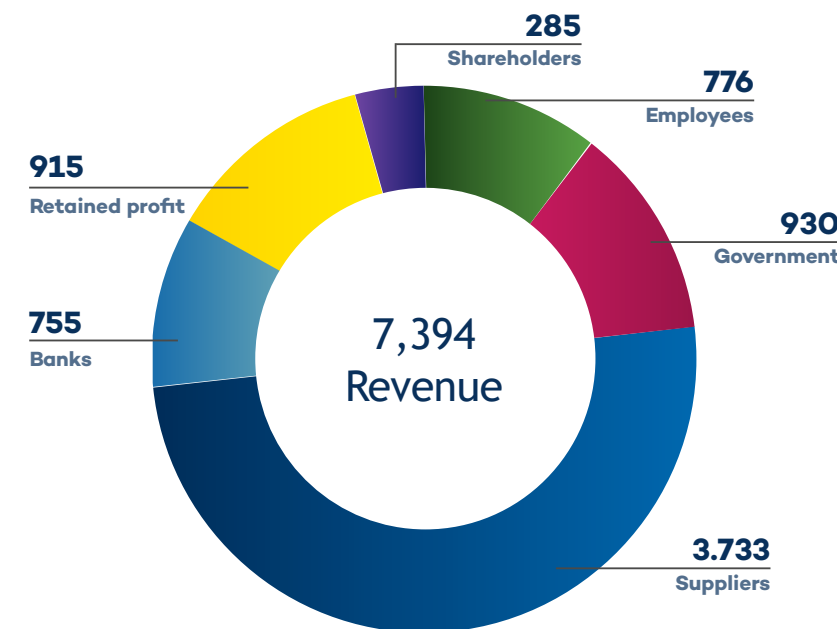
# Indebtedness

The Company's Gross Debt ended 2023 with a balance of BRL 6,846.7 million – an decrease of BRL 2,440.7 million compared to 2022.

In 2023, the net debt balance reached BRL 3,458.7 million versus BRL 3,539.1 million in 2022. This retraction refers to the amortization of financing and new funding. The financial leverage ratio measured by the net debt/EBITDA ratio was 1.0x on December 31, 2023, compared to 1.2x on December 31, 2022.



## VALUE ADDED STATEMENT (BRL million)



Note: In suppliers, expenses with diesel, maintenance materials and third-party services are considered. Includes Investment suppliers.



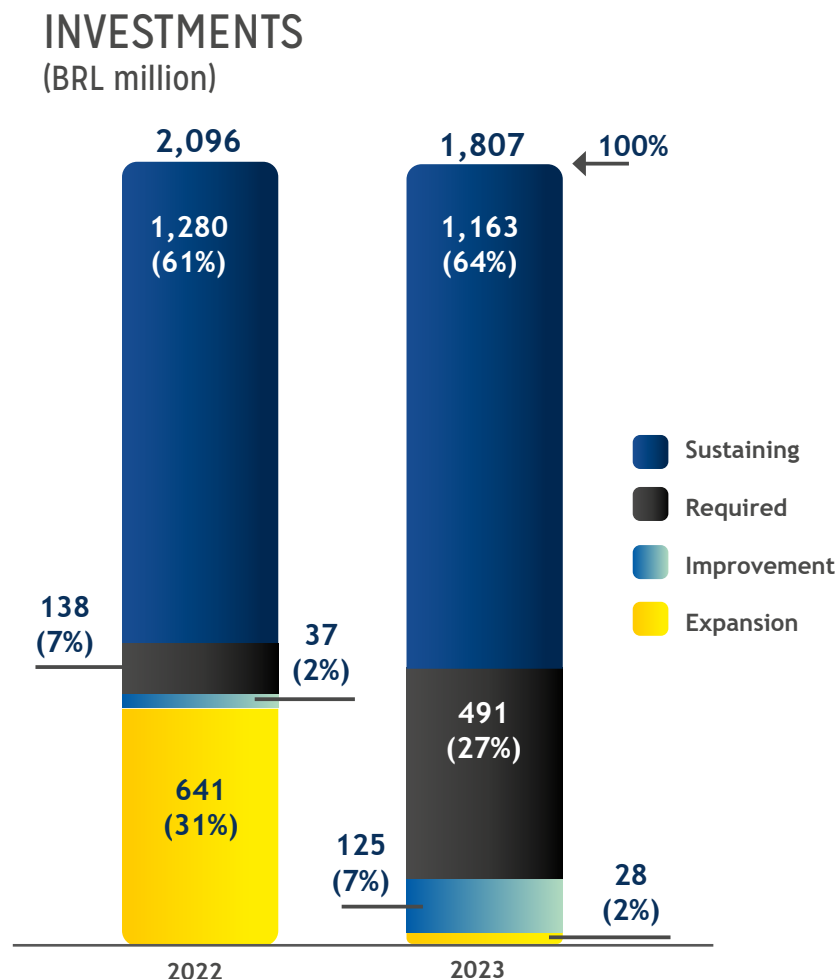
RATING		STANDARD & POOR'S	LOCAL SCALE	GLOBAL SCALE	PERSPECTIVE
			AAA	BB-	STABLE
	FITCH		AAA	BB	STABLE

# INVESTMENTS AND CARGO DIVERSIFICATION

GRI 203-1

At an increasing pace

In 2023, we kept investments close to the level of BRL 2 billion, executing projects to fulfill mandatory/legal initiatives, expansion, and maintenance of company assets. The projects generated gains in operational efficiency, ensured the maintenance and reliability of assets, promoted the improvement of equipment and systems with innovation and technology, and achieved the goals of ensuring the sustainability of the business and improving the lives of people and communities around the railroad. The mandatory projects related to the amendment to the concession contract until 2056 will continue to grow significantly over the next few years and were highlighted in the Agenda.



Jundiaí Railway Yard (SP)



The Board of Directors is responsible for approving the annual investment portfolio. The areas are then subject to a series of rules and guidelines, as well as market reference methodologies for managing project execution. Monitoring is conducted through various controls, forecast exercises, and reports that signal to senior management, including the Board's Financial Committee, the existing risks and deviations.





**BRL 491**  
MILLION INVESTED IN:

## ACQUISITION OF 10 LOCOMOTIVES (ES44)

in order to comply with the strategy of modernizing the locomotive fleet for productivity gains, as provided for in the Book of Obligations agreed for the concession renewal.

## 16 WORKS DELIVERED

highlighting the following:

### EXPANSION OF THE INTEGRATED SANTOS YARD (SP)

#### Description

Expansion of capacity to accommodate long-term volumes in accessing the Port of Santos, ensuring the service level required by different operators and types of trains existing in that system.

#### Benefits

Optimization of the occupation of lines; drastic reduction in road-rail conflicts; sustaining the logistics of the Margem Direita system for practically the entire horizon of the extension plans of the companies involved; greater longevity for the solutions.

### SIGNALING THE LEFT BANK IN BAIXADA SANTISTA (SP)

#### Description

Implementation of signaling, energy, and telecommunications systems on the Left Bank of Baixada Santista, between Piaçaguera and Conceiçãozinha. Nine shelters were installed to house the signaling equipment and more than 8 km of power and fiber optic networks.

#### Benefits

Increased capacity and safety of the stretch through control and automation of train licensing and interlocking between yards. The increased capacity allows more trains to run and reduces running times.

### INTERVENTIONS FOR URBAN MOBILITY SOLUTIONS IN BARRA MANSA (RJ)

#### Description

Improvements to level crossings (including those with exclusive pedestrian access), with sidewalk adaptation, new striping, and installation of signs.

#### Benefits

Implementation of 2,445 meters of lane fencing. More safety and comfort for pedestrians and drivers when crossing the railway line.

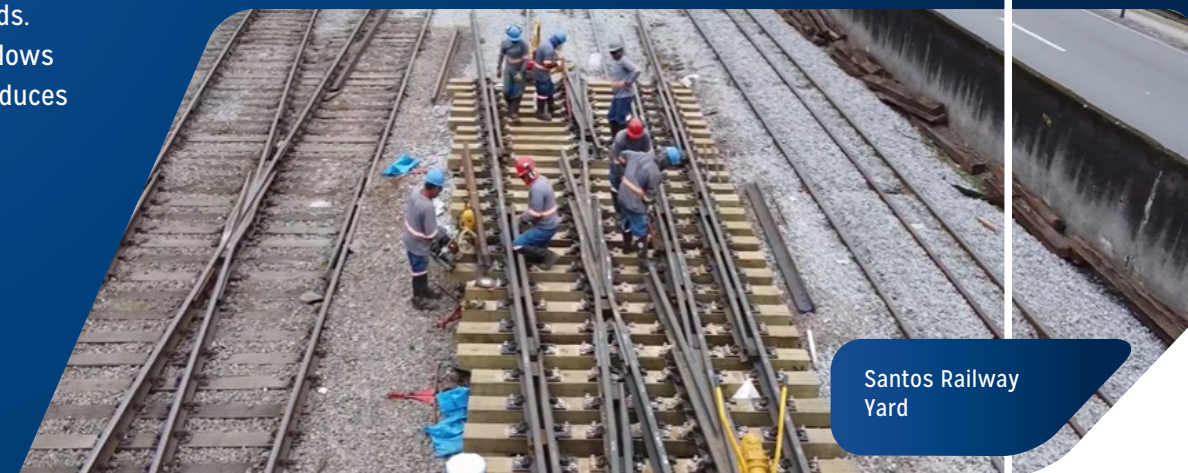
### INSTALLATION OF AUTOMATIC GATES IN IBIRITÉ (MG) AND BARRA DO PIRAÍ (RJ)

#### Description

Installation of automatic gates.

#### Benefits

Safety for vehicles during the crossing of the railway line, avoiding accidents, emergency stops of trains and consequent inconvenience for the population and railway operations.



Santos Railway Yard

# 2023/2026 CYCLE WORKS

## REMODELING OF BAIXADA (SP)

### Description

Remodeling of the railway line to support an increase in transported cargo and growth in demand from all railways, with the aim of doubling the volume transported on the region. There will be 98 km of modernization of the existing road, with the implementation of 135 lane changing devices (AMVs).

### Delivery

July/2026

## CTC OF VALE DO PARAÍBA

### Description

The project involves signaling the Vale do Paraíba railway branch, between the Pindamonhangaba Yard and the exit of the Pinheirinho Yard – totaling 133 km of track and 13 yards –, ensuring increased capacity and safety of the stretch through control and automation of train licensing and interlocking between yards.

### Delivery

July/2025

## LARGE EQUIPMENT WORKSHOP

### Description

The project will support the asset maintenance plan by building a workshop dedicated to the large railway equipment acquired.

### Delivery

July/2024

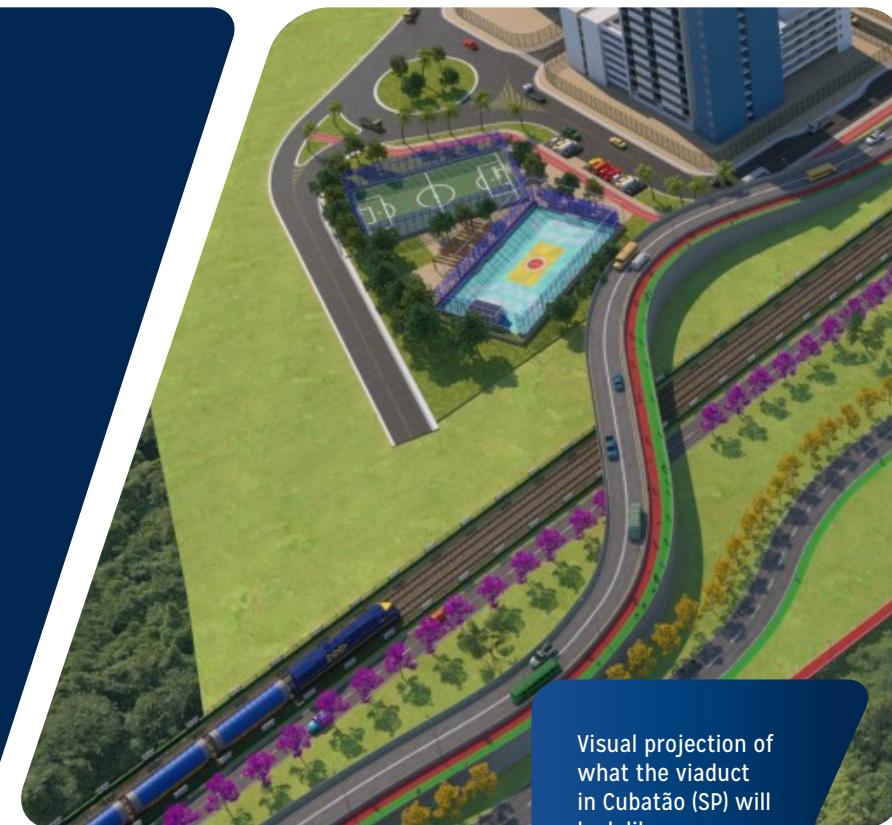
## VIADUCTS IN CUBATÃO (SP) AND CONSELHEIRO LAFAIETE (MG)

### Description

Construction of road viaducts to cross the railway line, improving urban mobility and increasing railway safety.

### Delivery

July/2024



Visual projection of what the viaduct in Cubatão (SP) will look like



### STOP, LOOK, WATCH!



Construction of the Large Equipment Workshop



One of the largest road works in the history of Cubatão



Much more mobility in Conselheiro Lafaiete



## Expansion

In addition to the mandatory investments, it is worth highlighting the works related to increasing capacity and diversifying the transported cargo

### Extension of the Porto Sudeste branch

**BRL 10.4 million**  
invested in 2023

**1.45 km+**  
stretch\*

\*Including the necessary signaling to reduce train waiting times and increase the volume of cargo transported.

### Start of expansion of the Souza Neschese terminal (MG)

**BRL 9.9 million**  
invested in 2023  
(of a total of BRL 31.4 million)

### Construction of a supplementary stretch 3.3 km long

- + transportation capacity
- train load time

## Improvements

Replacement of the GDT  
(175 cars)

**+**  
heavy haul load  
productivity

Investments in  
innovation and  
technology projects:  
development of auxiliary  
systems for train  
operation, improving the  
customer experience

Continued acquisition of  
locomotive remote controls

**+**  
remote maneuvers with  
increased safety in yards

## Sustaining

In the Sustaining group projects (64% of the total), work continued on infrastructure reliability, with 46 interventions on retaining walls, bridges, overpasses and tunnels, and the modernization of assets – locomotives, wagons and permanent track. Among the major road interventions, we highlight:

With the arrival of 7 tailings modules, 1 total line renovator and 1 vacuum stripper in 2023, the delivery of railway cars and large equipment to support the entire operation of interventions on the permanent track was completed. Some assets had already been received in 2022: 1 ballast stripper, 3 track tampers, 3 ballast regulators, and 10 tailings modules.



Renovation of  
approximately  
**22 km**  
of permanent  
track with the  
implementation  
of over  
**34,000**  
concrete sleepers





# ESG AGENDA



## ► SUSTAINABILITY MANAGEMENT

### Unlimited opportunities

In the search for an increasingly balanced operation that considers the generation of impacts for all our stakeholders, we have incorporated sustainable initiatives and practices into our portfolio over time. We work to create mechanisms for the continuous improvement of management to promote the ESG (environmental, social and governance) agenda in our routines.

We know that incorporating values into strategy and culture is always a broad and challenging process, especially given the complexity of the ESG agenda, which involves multiple players, scenarios, and distinct and relevant socioeconomic and environmental contexts. We are aware that this is the path to sustainability and we see a universe of opportunities in it.

### ESG AT THE HEART OF THE STRATEGY

Based on our strategic framework, revisited in 2022, we have broken down our strategy into six priority agendas that direct our focus of action, ESG being one of them. Also in 2023, an area dedicated to corporate sustainability was created, reporting directly to the Finance and Development Department.

### ESG GOVERNANCE

With the creation of the Sustainability Area, we established an ESG Governance model structured around thematic commissions, made up of multidisciplinary teams and led by professionals from the company's senior management, with specific and targeted work.

Manassés Costa, Luciano Souza, Adryan Pereira, Davi Peixoto, Bruna Lopes and Rosalina Rodrigues in the Conselheiro Lafaiete (MG) office



# ESG GOVERNANCE AT MRS

- Environmental
- Social
- Governance



Participants by commission:

- 1 (one) nominee from each shareholder with technical expertise
- Director and Leader of the ESG department
- CEO and Executive Directors on demand
- Thematic Commission Leaders on demand
- Optional for board members



Participants by commission:

- Executive Board
- Thematic Commission Leaders
- Team members on demand from the commission leader



Participants by commission:

- Leader (General Manager or Area manager)
- Internal team members (multi-area)





The nine thematic commissions drive the ESG Agenda in the company, conducting the respective work plans. Monthly reports are made to the ESG Commission, made up of all MRS executive directors. They monitor the performance and progress of the agenda through indicators and results and the initiatives carried out by the thematic commissions.

## Sustainability Committee

- » This is the highest level of the ESG Agenda at MRS and is responsible for advising the Board of Directors (as detailed in the topic on the Governance Model). It is made up of executives appointed by the board members, who have a solid track record in sustainability issues.
- » Until 2022, the scope of the Sustainability Committee was focused on internal auditing, compliance, and risk management. Since the structuring of the Sustainability/ESG Area in 2023, this scope has been reformulated to adapt to the new ESG Governance structure at MRS.
- » At least four regular meetings are held during the year to discuss climate change, diversity, equity and inclusion, ESG policies and performance, among other environmental, social and governance issues.

## JOINING THE GLOBAL ALLIANCE FOR SUSTAINABILITY

Also in 2023, we began negotiations to join the largest and most recognized corporate sustainability initiative in the world: the United Nations (UN) Global Compact. This platform brings together companies, civil society organizations, governments, and other players to promote universal principles in the areas of human rights, work, the environment and the fight against corruption. In February 2024, we became signatories to the Global Compact, and the company's sustainability journey is guided by the Sustainable Development Goals (SDGs).

## ESG INDICATORS LINKED TO PERFORMANCE

We also have ESG indicators incorporated into the company's performance, validated by the Executive Board, and targets linked to the variable remuneration of senior management, validated by the Board of Directors. Targets have been established to ensure a focus on diversity and occupational and railway safety, considering the impacts of the operation on communities, customer satisfaction, as well as a specific overall target on sustainability. In addition to these, we also have the energy efficiency target, which aims to reduce specific Greenhouse Gas (GHG) emissions and their implications on climate change.



## PATHS TO THE FUTURE

In 2024, we began internal studies and discussions to draw up a multi-year work plan that will lead us to the construction of the MRS Public Commitments Plan.

# MATERIALITY AND IMPACTS

GRI 3-1, 3-2

## MATERIAL TOPICS, IMPACTS, ACTIONS, STAKEHOLDERS AND RELATIONSHIP WITH GRI, SASB AND SDGS

	Approach	Impacts	Processes that make an impact	Actions	Stakeholders	GRI Indicators; SASB; SDGs
<b>Risk management</b>	This refers to the mechanisms for identifying, assessing, and reducing risks in a structured way and across all areas and processes of the organization	<ul style="list-style-type: none"> <li>. Accident mitigation and prevention (+)</li> <li>. Operation interruption (-)</li> <li>. Increased influence on credibility with stakeholders (+)</li> <li>. Financial impact (increase in revenue, decrease in costs, sanctions, etc.) (+)</li> </ul>	<ul style="list-style-type: none"> <li>. Railway operation</li> <li>. Maintenance and works</li> </ul>	<ul style="list-style-type: none"> <li>. Audit Committee with technical support for the Chairman of the Board of Directors in analyzing risk management issues</li> <li>. Internal audit: evaluation, guidance, and recommendation for approval of the Annual Audit Plan</li> <li>. Mapping of corporate risks</li> <li>. Compliance activities</li> </ul>	<ul style="list-style-type: none"> <li>. Employees</li> <li>. Communities</li> <li>. Customers</li> <li>. Vendors</li> <li>. Directors</li> <li>. Leadership</li> <li>. Shareholders</li> <li>. Public agencies</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> <li>. SASB TR-RA-540a.4</li> </ul>
<b>Corporate governance</b>	This involves the set of processes and institutions that regulate the way MRS is run/managed	<ul style="list-style-type: none"> <li>. Strategic direction: definition of public ESG targets for the company (+)</li> <li>. Improved relationships and communication with stakeholders, transparent management and greater market perception (+)</li> <li>. Conflicts of interest (-)</li> </ul>	<ul style="list-style-type: none"> <li>. Appointment of CEO and Executive Board</li> <li>. Decision on investments</li> <li>. Definition of ESG Targets</li> <li>. Management rituals</li> <li>. Policy definition</li> <li>. Internal Audit</li> <li>. Governance calendar structuring</li> <li>. Results reports</li> <li>. Contracting and pricing rail services</li> </ul>	<ul style="list-style-type: none"> <li>. Whistleblower channel</li> <li>. Community relations channel</li> <li>. Board of Directors meetings</li> <li>. Committee meetings: finance, strategic, sustainability, and audit</li> <li>. Management rituals</li> <li>. Internal Audit</li> <li>. Results reports</li> <li>. Policy on Transactions with Related Parties</li> </ul>	<ul style="list-style-type: none"> <li>. Employees</li> <li>. Communities</li> <li>. Customers</li> <li>. Vendors</li> <li>. Directors</li> <li>. Leadership</li> <li>. Shareholders</li> <li>. Public agencies</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> <li>. SDG 16: targets 16.5 and 16.6</li> </ul>



## MATERIAL TOPICS, IMPACTS, ACTIONS, STAKEHOLDERS AND RELATIONSHIP WITH GRI, SASB AND SDGS

	Approach	Impacts	Processes that make an impact	Actions	Stakeholders	GRI Indicators; SASB; SDGs
<b>Ethics and anti-corruption practices</b>	. This concerns the generation of a healthy environment in relations with all stakeholders, in compliance with anti-corruption and anti-bribery standards, laws and practices.	. Development of a favorable organizational environment (+) . Conflict of interest control (+) . Human rights and integrity (+) . Good corporate conduct (+) . Guarantee of information confidentiality (+) . Third-party relationship development (+) . Commitment to diversity (+)	. Processes for applying Conduct Policies and the Code of Ethical Conduct . Managing relationships with customers, suppliers and other third parties (contractual clauses) . Managing the Whistleblower Channel	. Conduct Policies . Code of Ethical Conduct . Relationship management with customers, suppliers, and other third parties, contractual clauses . Managing the Whistleblower channel . Commitment to comply with the LGPD . Promoting diversity at all levels of the company . Policy on Relations with Public Agencies and Anti-Corruption.	. Employees . Communities . Customers . Vendors . Directors . Leadership . Shareholders . Public agencies	. GRI 3-3; GRI 205-1, 205-2, 205-3; GRI 206-1 . SDG 16: targets 16.5 and 16.6
<b>Fuel management and eco-efficiency of the fleet</b>	. This covers the efficient control of fuel use in the pursuit of excellence in operational performance in order to guarantee sustainability	. Fuel management and fleet eco-efficiency (+) . Decrease in diesel consumption (+) . Increase in the energy efficiency index (+)	. Rail freight operations	. Allocation of trains into large cargo groups: ore, agricultural and general cargo . Analysis based on performance KPIs for each load group . Identifying opportunities for improvement	. Employees . Customers . Vendors . Directors . Leadership	. GRI 3-3; GRI 302-1, 302-3, 302-4 . SASB TR-RA-110a.3 . SDG 7: target 7.3
<b>Atmospheric emissions and greenhouse gases</b>	. This refers to emissions generated directly and indirectly by the company's activities	. Raising awareness on climate change in the MRS value chain (+) . Deployment of more efficient hybrid and electric locomotives (+) . Renewable energy consumption, climate risks and opportunities (+) . Greenhouse gas emissions and particulate matter (-)	. Railway operation and maintenance.	. Annual emissions inventory . Diagnosis of all the company's emissions . Structuring of actions to reduce emissions. . Sustainability Report . CDP Platform . GHG Protocol	. Employees . Communities . Customers . Vendors . Directors . Leadership . Shareholders . Public agencies	. GRI 3-3 . GRI 305-1, 305-2, 305-4, 305-7 . SASB TR-RA-110a.1, TR-RA-110a.2, TR-RA-120a.1 . SDG 13: 13.2

## MATERIAL TOPICS, IMPACTS, ACTIONS, STAKEHOLDERS AND RELATIONSHIP WITH GRI, SASB AND SDGS

	Approach	Impacts	Processes that make an impact	Actions	Stakeholders	GRI Indicators; SASB; SDGs
<b>Occupational safety</b>	<ul style="list-style-type: none"> <li>. This covers occupational accidents and illnesses and the measures taken to prevent them</li> </ul>	<ul style="list-style-type: none"> <li>. Investment in training and PPE to promote the physical and mental well-being of employees (+)</li> <li>. Encouraging prevention and health treatments (benefits such as health insurance, discounts at pharmacies, among others) (+)</li> <li>. Maintaining hearing health (+)</li> <li>. Immunization campaigns (+)</li> <li>. Promoting operator health (+)</li> <li>. Prevention of alcohol and drug use (+)</li> <li>. Failure to map risks (-)</li> </ul>	<ul style="list-style-type: none"> <li>. The positive impacts of the issue are caused by the processes for carrying out MRS activities, preventive medicine guidelines, welcoming and providing medical guidance to the vulnerable, and maintaining the Risk Management Program.</li> </ul>	<ul style="list-style-type: none"> <li>. Safety management</li> <li>- ISO 45001 Standard</li> <li>. PPE training and distribution matrix</li> <li>. Wellhub (formerly Gympass)</li> <li>. Partnership with the Bradesco health plan in the psychological support program for employees: Oriente-me.</li> </ul>	<ul style="list-style-type: none"> <li>. Employees</li> <li>. Directors</li> <li>. Leadership</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> <li>. SDG 8: target 8.8</li> </ul>
<b>Employee training and development</b>	<ul style="list-style-type: none"> <li>. This refers to the implementation of programs that promote the training and education of the company's employees</li> </ul>	<ul style="list-style-type: none"> <li>. Increase in employees' intellectual capital (+)</li> <li>. Decreased turnover (+)</li> <li>. Ensuring training in critical activities with a possible impact on safety (+)</li> <li>. Increased productivity and internal engagement from trained professionals (+)</li> <li>. Professionals trained to work in positions related to railway operation (+)</li> </ul>	<ul style="list-style-type: none"> <li>. Survey of training needs</li> <li>. Performance Evaluation</li> <li>. Demand for professionals needs</li> <li>. Management of demand inputs</li> </ul>	<ul style="list-style-type: none"> <li>. Climate Survey</li> <li>. Tracking the turnover rate</li> </ul>	<ul style="list-style-type: none"> <li>. Employees</li> <li>. Directors</li> <li>. Leadership</li> <li>. Shareholders</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> <li>GRI 404-1, 404-3</li> <li>. SDG 4: target 4.4</li> </ul>
<b>Diversity, equity and inclusion</b>	<ul style="list-style-type: none"> <li>. This encompasses the development of a plural, diverse, and collaborative work environment, contributing to racial and gender equity in the company's various sectors</li> </ul>	<ul style="list-style-type: none"> <li>. Development of a diverse and collaborative environment (+)</li> <li>. Contribution to racial and gender equity (+)</li> <li>. Increased Board diversity and employer branding associated with diversity (+)</li> <li>. Low diversity, equity and inclusion (-)</li> <li>. Harassment-prone environment (-)</li> <li>. Noncompliance with Law no. 8.213/1991 on Social Security Benefit Plans (-)</li> </ul>	<ul style="list-style-type: none"> <li>. Employee hiring and promotion policy</li> <li>. Workplace performance</li> <li>. Policy on the composition of the Board of Directors and external communication processes</li> </ul>	<ul style="list-style-type: none"> <li>. People Department, including the People Development and Training Area, the Recruitment and Selection Coordination, and the Diversity, Equity and Inclusion team</li> <li>. DE&amp;I actions</li> <li>. Manage indicators on the topic, performing quarterly calculations and the fulfillment of annual goals</li> </ul>	<ul style="list-style-type: none"> <li>. Employees</li> <li>. Fiscal</li> <li>. Leadership</li> <li>. Directors</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> <li>GRI 405-1, 405-2</li> <li>. SDG 10: target 10.2</li> </ul>



## MATERIAL TOPICS, IMPACTS, ACTIONS, STAKEHOLDERS AND RELATIONSHIP WITH GRI, SASB AND SDGS

	Approach	Impacts	Processes that make an impact	Actions	Stakeholders	GRI Indicators; SASB; SDGs
<b>Relationship with Surrounding Communities</b>	<ul style="list-style-type: none"> <li>. This refers to the set of actions and practices of engagement and dialog with the population living near MRS operations</li> </ul>	<ul style="list-style-type: none"> <li>. Engagement and dialog with the population living near MRS operations (+)</li> <li>. Disturbance of community life with construction and noise (-)</li> <li>. Risk of being run over and colliding with trains (-)</li> <li>. Expenditures on displacement of families living near the railway operating area (-)</li> <li>. Actions to inform and raise awareness in the community (+)</li> </ul>	<ul style="list-style-type: none"> <li>. Rail freight operations</li> </ul>	<ul style="list-style-type: none"> <li>. Social and Environmental Communication Program</li> <li>. Community Relations</li> <li>. "Open Spaces" Events</li> <li>. Communication channels between the company and the population</li> </ul>	<ul style="list-style-type: none"> <li>. Communities</li> <li>. MRS Logistics</li> <li>. Public agencies</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> <li>. GRI 202-1; GRI 203-2</li> <li>. GRI 411-1; GRI 413-1, 413-2</li> <li>. SDG 11: targets 11.3 and 11.6</li> </ul>
<b>Railway safety and accident prevention</b>	<ul style="list-style-type: none"> <li>. This concerns the maintenance of rail transport infrastructure for accident prevention, communication, and awareness raising</li> </ul>	<ul style="list-style-type: none"> <li>. Maintenance of the railway transport infrastructure for accident prevention (+)</li> <li>. Fines for non-compliance with legislation and standards (-)</li> <li>. Reduction in repair and construction costs, implementation of fence walls, flow directors, and automatic signaling (+)</li> </ul>	<ul style="list-style-type: none"> <li>. Rail accidents</li> <li>. Budget management and defense</li> </ul>	<ul style="list-style-type: none"> <li>. Terminal Safety Program (inspects the physical and permanent track conditions at customer terminals)</li> <li>. Network Safety Program (aimed at the reliability of railway shunting yards) and PREVER (audit of critical items in maintenance and operation processes)</li> </ul>	<ul style="list-style-type: none"> <li>. Communities</li> <li>. Customers</li> <li>. Vendors</li> <li>. Directors</li> <li>. Leadership</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>
<b>Customer relations</b>	<ul style="list-style-type: none"> <li>. This relates to increased customer satisfaction, higher value, and safety in transportation</li> </ul>	<ul style="list-style-type: none"> <li>. Increased customer satisfaction (+)</li> <li>. Increased value and safety in customer transport (+)</li> <li>. Greater social and environmental responsibility (+)</li> <li>. Improved relationship with society (+)</li> <li>. Increased quality of service provided by employees (+)</li> <li>. Generation of fixed and spot volume demands (+)</li> </ul>	<ul style="list-style-type: none"> <li>. Relationship between the company and its customers.</li> </ul>	<ul style="list-style-type: none"> <li>. Satisfaction survey. Monitoring of the SLA (service level agreement) between the operation and HH clients</li> <li>. Conducting studies and investments to expand and improve the logistics solutions offered</li> </ul>	<ul style="list-style-type: none"> <li>. Communities</li> <li>. Customers</li> <li>. Vendors</li> <li>. Employees</li> <li>. Directors</li> <li>. Leadership</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> </ul>
<b>Innovation and technology</b>	<ul style="list-style-type: none"> <li>. This refers to the continuous improvement of processes based on experimentation, creativity, new ideas, and methodologies</li> </ul>	<ul style="list-style-type: none"> <li>. Process improvements (+)</li> <li>. Increased efficiency (+)</li> <li>. Increased service life of materials (+)</li> <li>. Development of new forms of production and maintenance (+)</li> <li>. New products and development of MRS intellectual property (+)</li> <li>. Health, well-being, and increased employee development (+)</li> <li>. Infringement of previously developed intellectual property (-)</li> <li>. Non-accountability of funding (-)</li> <li>. Difficulty in relationship with startup (-)</li> </ul>	<ul style="list-style-type: none"> <li>. MRS Innovation Flow</li> </ul>	<ul style="list-style-type: none"> <li>. Detailed analysis of market potential and intent for new products</li> <li>. Impact management through the value map</li> <li>. Active participation of employees in the development and testing of solutions, among others</li> </ul>	<ul style="list-style-type: none"> <li>. Communities</li> <li>. Customers</li> <li>. Vendors</li> <li>. Employees</li> <li>. Directors</li> <li>. Leadership</li> </ul>	<ul style="list-style-type: none"> <li>. GRI 3-3</li> </ul>



# OUR WAY OF MANAGING THE COMPANY





# OUR 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

We at MRS are committed to building solid and transparent governance in the disclosure of sustainability information – financial, operational, social, and environmental – ensuring that our stakeholders have access to accurate and reliable data, generating credibility both internally and externally. Our strategic decision-making process considers the impact and creation of long-term value for our stakeholders and the sustainability of the business.

We have established mechanisms to identify, assess and manage risks, whether financial, operational, legal or reputational, as well as environmental and social aspects, ensuring that the company operates ethically, respecting human rights, the environment and making a positive contribution to society. We have created structures and processes to ensure a governance model in tune with best practices through clear policies and responsibilities.

MRS office in  
Juiz de Fora (MG)





“

We are committed to constantly evolving, based on the best market practices, through our risk management initiatives, which have a positive impact on corporate governance, as a fundamental part of our strategy to promote the sustainable development of MRS.”

Jorge Amaral,  
Internal Audit and Risk Management  
General Manager



# MRS SHAREHOLDING COMPOSITION

GRI 2-15, 2-24

## Communication and transparency

We value accountability and transparent communication with all our stakeholders, using various instruments and controls. One of them is the Securities and Exchange Commission (CVM), to which we report our annual Governance Report, with updates on all the actions and their respective controls carried out in the previous period.

Other control instruments:

- Annual financial statements and reviews of quarterly information 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 to IBAMA;
- Accountability to federal, state (SP, RJ and MG), and municipal (107 cities) agencies;
- Structured governance calendar, with 9 regular and 3 extraordinary meetings in 2023;
- In 2023, MRS's capital stock was BRL 3.9 billion, composed of 337,977,019 common shares (55.39%) and preferred shares (44.61%).

## Related parties

GRI 2-29

Our Policy on Transactions with Related Parties aims to give greater transparency to the process established in the Shareholders' Agreement, by defining the guidelines and principles for situations of potential conflict of interest.

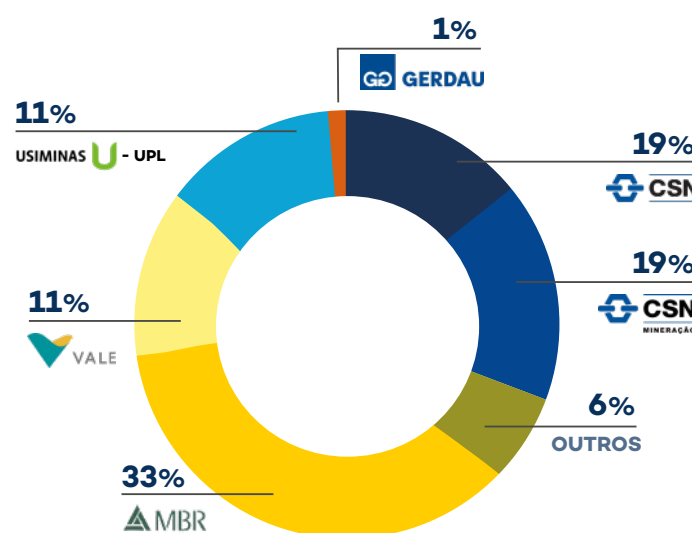
Transactions with controlling shareholders are associated with the provision of rail freight transportation services and the purchase of inputs, such as rails, example. These are carried out under usual market terms and conditions, contributing relevant revenue for us at MRS, and without undue benefits for the controlling shareholders.

Vale and CSN are among our main clients, with captive cargo contracts. A tariff model with fixed annual prices is adopted for them, guaranteeing payment security for business investments. These types of contracts are characterized as being long-term: in 80% of cases they have Take-or-Pay conditions, as

they offer protection against diesel price variations and allow for long-term planning, taking into account demand versus investment.

Cross-shareholdings in our management bodies or the existence of a marital relationship, common-law marriage, or kinship of up to the second degree are related to the Company's administrators and controlling shareholders and are disclosed in MRS's Reference Form, which also shows any relevant cross-shareholdings and transactions with related parties. Information on the existence of a controlling shareholder and the MRS Shareholder Agreement, or related to it, can be found in the same document.

## MRS SHAREHOLDING COMPOSITION



## STATUTE, POLICIES AND SHAREHOLDERS' AGREEMENT

Our various policies that guide MRS'S good governance practices can be consulted in full. [Click here.](#)

# Governance bodies and instances

Our corporate governance structure is made up of the Board of Directors and the Statutory Executive Board, with the support of non-statutory directors. The Board of Directors is advised by non-statutory financial, strategic, sustainability and audit committees. According to the Bylaws, the General Audit Area reports directly to the Chairman of the Board of Directors. We do not have a Fiscal Council installed.



## BOARD OF DIRECTORS

GRI 2-9

The Board of Directors is the highest body in our governance and is responsible for the company's strategic direction, for deciding on the most relevant investments, and for the health and longevity of the business, thus exercising duties related to economic, environmental, and social topics. It is also incumbent upon the Board of Directors to appoint the CEO and directors of MRS.

### Specifics

The members of the Board of Directors are appointed and defined in a joint vote with the shareholders, in accordance with the rules set out in the Shareholders' Agreement.

According to the MRS Bylaws, the Board of Directors is made up of up to 17 members, with a two-year term of office, and re-election is permitted.

Its composition seeks to respect the plurality of backgrounds, experiences, and areas of knowledge relevant to the business.

The remuneration of board members relates exclusively to travel costs. As the members also hold positions in MRS, or in the companies that are part of the controlling block, their main remunerations are covered by these activities.

Although there is no formal performance evaluation process, an analysis of governance progress is carried out annually so that opportunities for improvement can be identified and implemented.

### Profile of the Board in 2023

The term of office of the Board of Directors for 2023 is valid until the 2025 Annual General Meeting. At the end of the year, the Board was made up of ten members, nine of whom were shareholder representatives and one employee, all of whom were male. In the current term of office, which began on April 27, 2023, the composition of the Board is as follows:

Member	Position	Age group	Gender	External	Independent	1st term of office
Marcelo L. Barros	Chairman	50+	M	Y	N	09/12/2019
Luís Fernando B. Martinez	Member	50+	M	Y	N	12/12/2014
Alejandro D. Laiño	Member	50+	M	Y	N	03/08/2013
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

Do you want to learn more about the profile of MRS Board Members? [Click here](#)

NUMBER OF MEETINGS IN 2023:  
12

ENGAGEMENT:  
89%



# ADVISORY COMMITTEES TO THE BOARD OF DIRECTORS

	Assignments	Members	Term	No. of Meetings	% Participation
<b>FINANCIAL</b> 	<ul style="list-style-type: none"> <li>Establishes and reviews policies for finance management</li> <li>Contributes to the reduction of financial or economic impacts</li> <li>Prepares and reviews the Financial Risk Management Policy</li> <li>Analyzes the annual costing and investment budget</li> <li>Analyzes and advises on the fundraising plan</li> </ul>	<ul style="list-style-type: none"> <li>1 board member</li> <li>8 members with technical expertise appointed by shareholders</li> <li>In the current term, the committee is made up of 3 women and 6 men</li> </ul>	<ul style="list-style-type: none"> <li>Aug/2023 to Aug/2025 (possibility of reelection)</li> </ul>	8	80%
<b>STRATEGIC</b> 	<ul style="list-style-type: none"> <li>Analyzes strategic issues that impact medium and long-term direction</li> <li>Advises and recommends</li> <li>Evaluates the Executive Board, corporate goals, budget guidelines, business plan</li> <li>Meets on demand. No internal regulations</li> </ul>	<ul style="list-style-type: none"> <li>4 members, 1 appointed by each shareholder</li> <li>In the current term, the committee is made up of 4 men</li> </ul>	<ul style="list-style-type: none"> <li>Apr/2023 to Aug/2025 (possibility of reelection)</li> </ul>	6	91%
<b>SUSTAINABILITY</b> 	<ul style="list-style-type: none"> <li>Provides technical support to the board of directors in the analysis of sustainability issues, with an emphasis on environmental and social issues.</li> <li>Tracks and monitors the progress of the ESG agenda at MRS</li> <li>Tracks and monitors issues related to climate change</li> <li>Monitors the preparation of reports related to the topic of sustainability</li> <li>Tracks and monitors the progress of the ESG agenda at MRS</li> <li>Monitors the development and implementation of social and environmental programs and actions</li> </ul>	<ul style="list-style-type: none"> <li>4 members with technical expertise appointed by the shareholders</li> <li>In the current term, the committee is made up of 2 women and 2 men</li> <li>Participation on demand of the Chairman of the Board of Directors and/or members</li> </ul>	<ul style="list-style-type: none"> <li>Nov/2023 to Aug/2025 (possibility of reelection)</li> </ul>	2	100%
<b>AUDIT</b> 	<ul style="list-style-type: none"> <li>Evaluates, gives opinions and issues recommendations on Financial Statements, Management Report, MRS Annual Audit Plan; Methodology for managing corporate, operational and environmental risks;</li> <li>Evaluates, gives opinions and issues recommendations on external audit reports, internal audits and internal controls;</li> <li>Evaluates, gives opinions and issues recommendations on the Statute and Budget of the General Management of Internal Audit and Risk Management (GGAIGR);</li> <li>Evaluates, gives opinions and issues recommendations on the hiring/removal of independent auditors and the General Manager of Internal Audit and Risk Management;</li> <li>Supports the Board of Directors in evaluating GGAIGR's performance and establishing its goals;</li> <li>Monitors progress of the MRS integrity program and monitors complaints;</li> <li>Evaluates and monitors the Company's risk exposure.</li> </ul>	<ul style="list-style-type: none"> <li>4 members with technical expertise appointed by the shareholders</li> <li>In the current term, the committee is made up of 4 men</li> </ul>	<ul style="list-style-type: none"> <li>Aug/2023 to Aug/2025 (possibility of reelection)</li> </ul>	7	100%

There are no independent members on the committees.



# EXECUTIVE BOARD

## Assignments

- Protect and enhance MRS's assets.
- Maximize long-term return on investment.
- Carry out the executive management, proposing initiatives, business plans, and policies to the Board.
- Implement the strategy defined by the Board.
- Conduct day-to-day operations within the limits established in the Bylaws.

## Composition of the Statutory Directors

### Guilherme Segalla de Mello

Chief Executive Officer

### Alexandre Claro Fleischhauer

Chief Engineering and Maintenance Officer

### Ane Menezes Castro Matheus

Chief People Officer

### Daniel Dias Olívio

Chief Operating Officer

### Felix Lopez Cid

Chief Projects and Works Officer

### Henrique Rocha Martins

Chief Financial and Development Officer

### Luiz Gustavo Bambini de Assis

Chief Institutional Relations Officer

### Raphael Steiman

Chief Commercial Officer

Guilherme Segalla de Mello, Alexandre Claro Fleischhauer, and Felix Lopez Cid are statutory directors. According to the Internal Regulations of the Board, Guilherme Segalla de Mello holds the positions of Director of People, Director of Operations, Director of Finance and Development, Director of Institutional Relations, and Commercial Director.

MRS adopts a fixed remuneration policy, approved at a Preliminary Shareholders' Meeting in 2012, with annual bonuses for results linked to the achievement of pre-established targets. The policy is reviewed annually by the Strategic Committee, with a recommendation to the Board of Directors for any necessary adjustments.



Do you want to learn more about the profile of MRS Board Members? [Click here](#)





# ETHICS AND INTEGRITY

GRI 3-3 MATERIAL TOPIC: ETHICS AND ANTI-CORRUPTION PRACTICES | GRI 205-1, 205-2, 205-3, 206-1

Promoting an ethical, transparent and responsible organizational culture is the basis of our Integrity Program, which defines conduct policies and anti-corruption standards that must be followed by all employees in their daily activities and in their relationships with our stakeholders.

In 2023, we performed the following:

- Review and creation of ethical standards, with control and monitoring of acceptances and reading;
- Review and creation of compliance training, including senior management, the Ethics Committee and third parties;
- Campaign to disseminate the culture of compliance, with the participation of senior management;

- Review of the structure of the Ethics Committee, including the General Legal Area;
- Implementation of indicators and monitoring to assess adherence to the Integrity Program;
- Integrity Due Diligence (prior analysis for risk mapping) for suppliers, subcontractors, and customers of alternative businesses, such as fleet leasing, railway consulting, and scrap sales;
- Integrity Due Diligence for hiring employees in strategic positions;
- Identification and monitoring of conflicts of interest and politically exposed persons;
- Exit interviews with exploration of ethics and integrity.

To access the full content of the policies and practices specific to the Integrity Program, point your phone's camera at this QR Code or click here.



Rodolpho Ortiz in the Jundiaí (SP) warehouse



Providing a safe, healthy, and harmonious environment is MRS's commitment to its entire team and to society.

## Human Rights

Adequate working and resting conditions are fundamental rights of workers, as stipulated by law and guaranteed by the company in the guidelines of the Code of Conduct and Ethics. Violations of these rights should be reported through the Whistleblower Channel, in accordance with Human Rights, current legislation, and market best practices (GRI 412-I).

### Our reporting channel is toll-free and for everyone

Anybody – employees, outsourced workers and the general public – has direct access to the whistleblower channel **0800 300 4531**. Complaints may even be anonymous, related to non-compliance with the company’s ethical commitments. It is the responsibility of the Compliance Area team, which is subordinate to the General Internal Audit and Risk Management Area, to conduct the investigation process of all registered complaints and, if valid, apply the penalties indicated in the Code of Ethics and Conduct and the MRS Disciplinary Regulations.

### Complaint management

Every quarter, the complaints and the treatment given to them are reported to the Board of Directors and the Ethics Committee, which handles the most complex cases.

**120** cases addressed

**72** addressed by the Whistleblowing Investigation Group (e.g. fraud, psychological harassment, and discrimination)

**35** dismissals      **2** suspensions  
**35** warnings      **1** supplier blockage



No cases of corruption involving people from the public administration, from any level – municipal, state or federal, – were identified or reported.

There are no corruption-related lawsuits filed against MRS. We are not aware of any cases against one or more of our employees related to corruption.

Roberta Ferreira at the Operational Control Center in Juiz de Fora (MG)





## International Standard Auditing

Our internal audit practices are certified with Quality Assurance (QA) from the Institute of Internal Auditors (IIA) according to the best international standards. For internal audit, corporate risk management, continuous auditing, and whistleblowing, we use our own methodology. Every two years, our ongoing auditing, whistleblowing channel management, and corporate risk management activities are verified by external consultants.

We also classify the risk of corruption, as described in our Risk Dictionary, as “Risk of Unethical Conduct/Fraud”.

In 2023, we performed:

- 10 audits in different processes, according to risk prioritization.
- 2 consultancies.
- 1 verification of the controls linked to the corrective actions already implemented.
- 2 works related to the IIA QA Certification: a pre-certification, when there is a prior audit, and the certification itself, with additional tests.

## Growing Ethically

Driven by the large number of projects planned for the coming years due to the concession renewal,

the Internal Audit team began exclusive audits to validate supplier contracting processes and verify the measurements of services provided. In 2023, four audits with this scope were conducted.

## Raising awareness to avoid mistakes

We know that the constant training of employees allows alignment and access to information for everyone on topics related to the Integrity Program. For this reason, mandatory functional training and others related to compliance, such as the General Data Protection Law (LGPD), gain relevance in the internal agenda. This encompasses both the integration of new employees and the recycling of those already belonging to the team, as well as awareness campaigns promoted by the company.

## Legal Partnership

We share our anti-corruption policies and practices with our business partners. Upon registering in our database, suppliers receive detailed information about our Integrity Program, our Anti-Corruption Agreement, and our Code of Ethics. For contracts already signed, we require compliance with Law 12.846, dated August 1, 2013, by which our suppliers must ensure that contractual issues will be performed ethically and responsibly.

Michele Teixeira and Leonardo Augusto at the railway car maintenance workshop in Belo Horizonte (MG)

**99%**  
of active employees,  
including directors,  
completed training on  
the Code of Ethical  
Conduct and the  
Integrity Program.



# RISK MANAGEMENT

GRI 3-3 MATERIAL TOPIC: RISK MANAGEMENT | GRI 2-25, SASB TR-RA-540A.4

Risks are external or internal factors that can generate some type of loss or prevent the achievement of the company's strategic objectives. To mitigate the most impactful risks to the business, we created the Risk Committee in 2023, an internal structure composed of representatives at the executive board level. This committee is responsible for defining priority risks and establishing policies, rules, and strategies to reduce the most impactful risks to the business. Risk leaders were also appointed. These are employees who must identify risk factors and controls and develop action plans for any deficiencies found in the controls. In 2023, the corporate risk mapped was operation stoppage.

## Side by side with strategy

Guided by the ESG Strategic Agenda, we have defined two major fronts for risk management.

**Medium-term actions**  
continuously review the risk matrix

**Long-term actions**  
strengthen the governance of risk management



Emílio Vieira at the locomotive maintenance workshop in Jundiaí (SP)

We revised our Risk Dictionary - which is part of the procedures currently adopted by the Internal Audit area - and included risks focused on ESG: climate change, energy transition, and geopolitics. The “climate change” risk is incorporated into the company's inherent risk matrix, being strategically addressed and deployed on a multi-year basis to ensure the correct resilience to MRS's business.



# Operational risks

To act preventively in identifying operational risks, we rely on the ATGMS (Autonomous Track Geometry Measurement System) and VTI (Vehicle Track Interaction) equipment, installed on the locomotives of production trains. These systems are tasked with inspecting the vehicle/track interaction across the entire railway network in cycles occurring approximately every three days. Additionally, we maintain three processes for inspecting the permanent track.



## Geometry inspection

This verifies defects of vertical or horizontal misalignment of the rails caused by problems with fastening, unevenness, ballast compaction, overelevation, among others.

## Internal crack inspection

This can diagnose faults of rail breakage onset caused by wear, load failure, high ballast rigidity, etc.

## Rail surface inspection with RIV (Rail Inspection Vehicle)

This makes it possible to identify roughness deviations in the region of contact with the rail billet wheel, caused by contact wear.

## RESULTS OF THE PROCESSES FOR INSPECTION OF THE PERMANENT TRACK

Parameters	Equipment	2021	2022	2023
Gauge and geometry	TEV	3,536	1,546	3,674
Gauge and geometry (approx.)	ATGMS	-	10,000	43,322
Surface defects and rail profile	RIV	4,578	4,153	2,395
Ultrasound	US	5,472	4,497	4,026
Vertical variation of the track	VTI	105,915.60	100,975.60	155,726.00

### Notes:

The low production of the RIV was due to the low production of the grinder in 2023.

ATGMS: As of Aug /23, we effectively implemented the inspection process with this equipment, treating and generating alerts with the data.

RIV: Low production due to the operational performance of the grinder (the RIV works by generating information for the grinder, so if it does not work, the RIV does not need to inspect).

TEV: Resumption of operation with effective capacity in 2023.

VTI 1 started operations in September 2020 and VTI2 in November 2022



## ▶ INNOVATION AND TECHNOLOGY

MATERIAL TOPIC: INNOVATION AND TECHNOLOGY

GRI - 3-3

For MRS, to innovate is to propose solutions on a sustainable basis, with the objective of generating value and meeting the company's needs in a creative, efficient, and effective way. To this end, we have established a robust and agile cycle to identify problems, evaluate solutions, test hypotheses, and build prototypes based on a Minimum Viable Product (MVP). Based on the value generated, we scale the solution as a mature project. Since 2020, 102 initiatives have been proposed and 53 of them completed.

### Our innovation team

- Two departments with their own innovation center.
- An Innovation Management Area.
- 50 ambassadors in the areas of Maintenance, Operations, Commercial, Finance, and Human Resources, trained and qualified to identify needs and opportunities.

## BRL 3 million

contributed to their own innovation projects

## BRL 3.8 million

invested in initiatives in collaboration with partners - sharing cost, risk and return

## BRL 6.1 million

in tax benefits, raised for Research, Development and Innovation (RD&I) projects via the Good Law, the largest fundraising in MRS's history

## BRL 4.4 million

through public notices to foster innovation

## BRL 27.4 million

estimated return on project

To learn more about the Good Law, click here or access the QR Code



“

Innovation and technology without a link to the strategy do not make sense for MRS. Here, all investments in innovation must serve our business objectives, i.e. they must bring improvements to processes, increase the efficiency or availability of assets, and help develop new approaches to the business. Going beyond operational benefits, innovations also serve to provide development and promote the health and safety of employees and society.”

Pedro Henrique Oliveira  
Innovation Management Manager



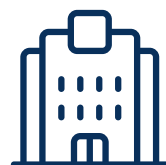
## We are stronger together

Stimulating the strengthening of innovation ecosystems in our area of operation is a premise of MRS, especially considering that our operations are concentrated in the most prosperous region of the country. We believe that innovation is a transformative force capable of driving the economic and social progress of territories, as well as promoting a more sustainable future.

An innovation ecosystems is the training of people in technology. In 2023, we expanded our efforts to train and develop local talent in partnership with Edumi, a social impact and civil society organization that trains low-income youth for the technology market through a digital platform. We encourage our employees to contribute with mentoring for young people and the initiative has also become a catalyst for growth for the communities near our railway network.



**28**  
young people trained in partnership with edumi, aged between 18 and 27 years old (43% black and 46% women)



**21**  
cities in the three states where MRS operates



**300**  
hours of content in online classes



**Creation of the talent bank** (exclusively for Edumi students) for the next vacancies opened externally by MRS

## SHARE AND COLLABORATE

To amplify the positive impact of our operations, we have consolidated partnerships with innovation hubs (thematic, physical or virtual spaces), startups, and technology companies, stimulating the sharing of knowledge and experiences.

**MOINHO INNOVATION HUB - JUIZ DE FORA (MG):** in this environment, our employees volunteer to offer, on a recurring basis, lectures and mentoring to local entrepreneurs.

**JF SUMMIT - JUIZ DE FORA (MG):** we sponsor and are present at the largest innovation and entrepreneurship event in the Zona da Mata region of Minas Gerais, which brought together more than 2,000 people. At our booth, we offered a space for lectures and we were open to conversations, interviews and exchange of experiences, attracting entrepreneurs from startups and other business models from all over the country.

**INOVAP:** we participated in the discussions and are contributing to the construction of Inovap - Alto Paraopeba Innovation Ecosystem - which proposes the integration of various players in the innovation environment of the municipalities of Alto Paraopeba (MG).

**NATIONAL INNOVATION DAY:** in commemoration of the date, October 19, we opened the doors of units in Minas Gerais - Juiz de Fora, Congonhas and Belo Horizonte; in Rio de Janeiro - Arará; and in São Paulo - Santos and Jundiaí - for 300 people, offering more than 40 lectures, crochet and craft beer workshops, as well as a Python programming workshop with the aim of promoting development and stimulating entrepreneurial action.



Marcela Araújo at the locomotive maintenance workshop in Belo Horizonte (MG)

In the projects carried out in 2023, it was possible to apply the Innovation Value Map – a framework based on the integrated reporting methodology developed in 2022 –, contributing to the maturation of the methodology. The map was built so that the results and values generated by the innovation could be measured through indicators, reducing their subjectivity. Another objective is to give innovation visibility beyond the financial return and thus change the culture that the return needs to be expressed in monetary values.

The descriptions of the capitals were changed from the initial proposal so that they accurately reflected the values generated by the projects, in line with the strategic objectives.

## FINANCIAL

Set of resources generated for an organization to be used in the production of goods, the provision of services and the maintenance of the business. Cash generation in the company as a result of innovation projects: budget reduction, revenue increase, etc.

## MANUFACTURED

Manufactured, non-natural physical objects or production units available to an organization for use in the production of goods or the provision of services (assets, transport cycle, availability).

## HUMAN

People's experience, satisfaction and happiness and their motivations at work, including alignment and support for governance structure, risk management and ethical values. Loyalty and motivation to improve processes, goods, and services, including the ability to lead, manage, and collaborate.

## INTELLECTUAL

Knowledge-based organizational intangibles, including intellectual property, such as patents, copyrights, software, and licenses. This also encompasses tacit knowledge, systems, procedures, and all the learning generated when carrying out an innovation project.

## DATA

Generating and analyzing data on all spheres of the organization (e.g. assets, production and people) and related parties (customers, suppliers, the community, among others) in order to improve the service provided. Innovation projects result in the capture of new data, analysis and advanced data intelligence capable of generating optimizations, forecasts, performance improvements, etc.



# Programs and initiatives that fill us with pride

## Computational vision

Having already established monitoring through technology and the development of specific intelligences for behavior analysis, in 2023 a new work front was incorporated into the video analytics project (automatic analysis of video content). This time it was for the detection of driver fatigue, in order to improve the safety of employees and rail operations. Also in 2023, we implemented two devices in a locomotive dedicated to the Campo Grande (SP) x Jundiaí (SP) section and another in a high value-added piece of permanent track maintenance equipment responsible for renewing ballast on the Steel Railway and Serra do Mar sections. After a new testing phase, the solution escalation plan will begin.

Aerial images captured by drones are already used in the inspection, analysis and detection of the conditions of the permanent track. Artificial intelligence, created in conjunction with a partner startup, identifies anomalies in items along the rails.

**Aerial images:** with the use of artificial intelligence, aerial images captured in the inspection of the permanent track already make it possible to detect anomalies, for example, in screws, tirefond (specific screw used in fixing rails and sleepers), clamps and plates.

**Images by portals:** we have completed the specification for the inspection portal on the use of technology capable of detecting cargo movement in rail circulation.

A computer vision solution is installed in the Cruzeiro (SP) yard, able to alert parameters by railway car, centralization of the limit load within the car envelope and distance of the load in relation to the heads of the cars. When it detects an anomaly, the system sends an alert to the Maintenance Control Center (MCC) team, which stops the train and calls the external service team to handle it. For now, the solution has been implemented for coils - cargo that accounts for 90% of handling incidents during transportation. The next step is to complete development for detection of other types of payload. This initiative received recognition in the ANTT Award - Highlights 2023, in the User Service category.

## AI for safer level crossings

We are using Artificial Intelligence (AI) to reduce accidents at level crossings. We tested a system consisting of a camera, an audible alert and specific software capable of providing real-time warnings of level crossing obstructions. As a result, preventive measures can be taken quickly, such as deploying a rail escort team to provide on-site support and even halting rail traffic until it is cleared. Throughout 2023, the solution was validated for implementation at more level crossings, still on a testing basis.



Example of AI-flagged track obstruction

## Additive Manufacturing

The Technology Development Center - Additive Manufacturing by Arc Deposition (CDT Mada) - approved, along with the Brazilian Company for Industrial Research and Innovation (Embrapii), the execution of the Dedicar project, which consists of developing a smart system for monitoring and controlling the direct energy deposition process with wires. After full development, the system will be used in the manufacture and recovery of our asset components.

This is a collective initiative by the companies and institutions that make up CDT Mada - the Senai Institute for Innovation in Metallurgy and Special Alloys, MRS Logística, ArcelorMittal, Belgo Bekaert and Delp Engenharia - in partnership with startups 3D Lopes and Strokmatic, the Senai Institute for Innovation in Laser Processing and the Senai Institute for Innovation in Embedded Systems, to develop an artificial neural network. The aim is to predict and monitor the behavior of the deposited bead as a function of the variables of the Additive Manufacturing processes of Arc Deposition and Laser Metal Deposition with Wire (LMD-W).

## Forecast of HH customer railway cars

Through a Proof of Concept of advanced data intelligence solution for railway car forecasting for customers, it was possible to identify the optimal condition of the car distribution. The solution consists of the use of machine learning, based on the customer's shipment and use history, capable of performing optimal projection, ensuring increased availability of cars and locomotives, which reduces the need for asset acquisition. After the evolution of the algorithm developed in the Proof of Concept and the automation of the databases for testing in operational conditions, a return of BRL 27 million is expected considering one customer.

## OPV - Optimization of railway car distribution for workshops

In this case, we conducted the Proof of Concept of an optimization solution for optimal distribution of cars for maintenance, with a focus on cost reduction and asset availability. Taking into account the conditions of the workshops (stock, maintenance scope, availability, etc.) and the assets (location, maintenance demand, demand), the intelligence optimally directs the car, increasing the

availability of the assets, which reduces the need for procurement. The next steps are to evolve the algorithm developed in the Proof of Concept and automate the databases for testing in operational condition.

## AI Brake Shoe Measurement

We developed a Proof of Concept for the development of artificial intelligence for inspection and measurement of railway car brake shoes through video analytics. To do this, we have developed an algorithm capable of measuring the shoes, increasing the availability of assets (locomotives and cars) and reducing the stopped train hours for this type of inspection. A structuring processor will be acquired for application of the model in an operating environment.

## Heat Stress Control

We have developed equipment for cooling the locomotive cabin in order to ensure the proper temperature inside the machines that do not have air conditioning. The developed equipment aims to improve the working condition and will be tested in real condition.



Open MRS was created to enhance innovation collaboratively and diversely, through interaction with external market agents such as startups, universities, and technology and innovation hubs. Its goal is to develop the logistics of the future by solving challenges faced by MRS. In 2023, two challenges were proposed (see box). Interested parties participated online, allowing for broad access. The 2023 edition of Open MRS will be concluded in 2024, following the period of result collection and rollout directions (gradual implementation stage).

## UNDERSTAND EACH CHALLENGE

**1. MITIGATING THE IMPACTS OF MOISTURE IN ORE:** How can we reduce the impacts of moisture in the ore, which leads to stuffing (spreading after unloading) and optimize the process of spreading the load and removing the apparent water?

**Status:** a Proof of Concept (POC) will be carried out in 2024 to evaluate a robotic arm for water suction with the supplier Instor.

**2. OPTIMIZATION OF PREDICTIVE ANALYSIS OF SLOPES AND EMBANKMENTS:** How can we optimize predictive analysis of slope and embankment landslides, reducing operational impacts?

**Status:** a solution test will be carried out from the supplier Sipremo, in the first half of 2024, to identify and alert slip events.

Want to learn more about Open MRS? Click here or point your phone's camera at this QR Code.





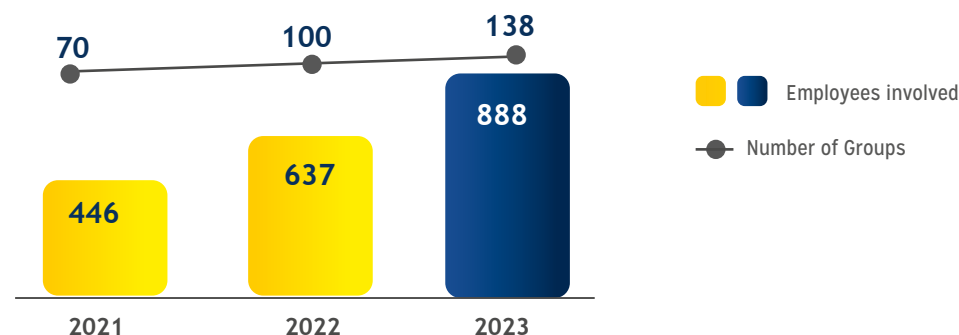
## Grand Meeting

For yet another year, we were present at the annual event promoted by the Brazilian Union for Quality (UBQ), which encourages the sharing of best practices in quality management by large corporations in the country. MRS participated in the Lean and Quality Control Circles categories.



With the aim of disseminating the culture of innovation among employees, the GMC program (Continuous Improvement Groups) was intensified in 2023, expanding opportunities for recognition and awards for all members of improvement groups. After the MRS Championship program fulfilled its role in helping boost company productivity, we established GMC as the main hub for improvement initiatives, aiming to further enhance our solutions and continue raising our performance level. A total of 138 projects led by operational employees were completed, with training provided in problem-solving methods. The strengthening of GMC further promoted cooperation between departments and the development and expansion of employees' skills.

### GMC GROUPS



One of the winning groups in 2023, with the project "Reducing the Average Formation Time of the Empty 272", the "On Track" team will represent MRS at the Grand Meeting event in 2024, held by UBQ.



Our participation in the 2023 Grand Meeting promoted the recognition of our employees who excelled in the constant pursuit of improvement, besides being a great opportunity to learn from those who are market leaders in management methods and practices. All of this is directly connected to our strategic framework, reinforcing the principles of excellence, people and openness to the new."

Aline Toledo  
Continuous Improvement Coordinator

## Creativity + action is innovation

Since 2001, we have been fostering the creative potential of our employees through the Ideas in Action Program, to generate engagement and promote a dynamic work environment that values the contribution of each individual, encourages experimentation, creates value, improves processes, and drives a culture of innovation within the company.



**800**  
ideas registered

**715**  
participating employees

**65**  
individual and collective ideas implemented, involving 104 employees

**Topics:** safety, productivity, waste elimination, operational efficiency and cost reduction.

**Eligible employees award**

**BRL 166,240.00**

Incremental financial gain

**BRL 6.4 million**  
(achieved with 14 measurable ideas)

Cumulative  
(since 2013)

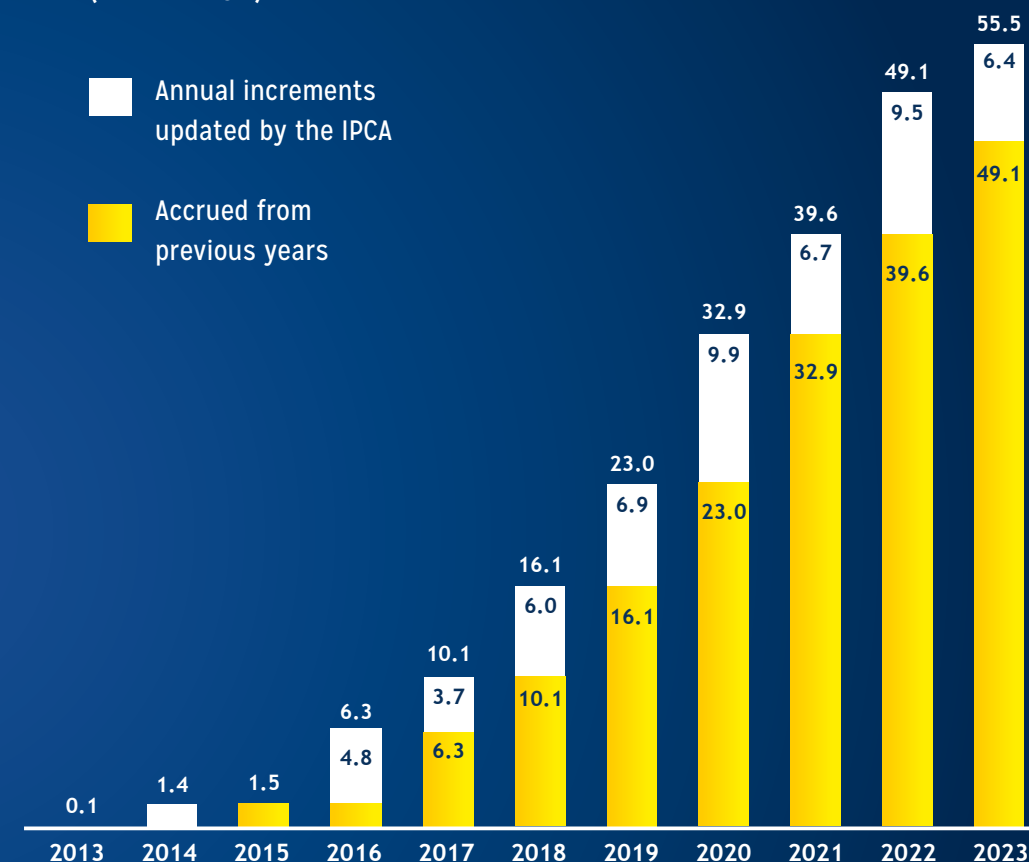
**BRL 55.5 million**

(obs.: taking into account monetary restatement and the perpetuity of ideas, what is approved in one year continues in the following years).

## ACCUMULATED FINANCIAL RESULT

(BRL million)

■ Annual increments updated by the IPCA  
■ Accrued from previous years



Deducting implementation expenses; Updating the IPCA based on December 2023; Accumulated values considering the perpetuity of earnings.

### Notes

1) The annual incremental gains shown in the chart refer to the calculation of the financial return obtained considering the first 12 months of measurement, after the idea was implemented.

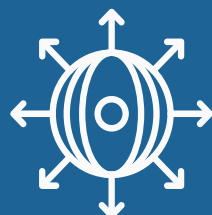
2) Considering that an idea changes a process, the gains continue in the following years and are considered accumulated from previous years, only with monetary updating by the IPCA.



## CYBER AND INFORMATION SECURITY

For us at MRS, protecting business assets in the cybersecurity environment is crucial to safeguarding confidential information, sensitive data and guaranteeing the company's operational integrity and sustainability. This includes customer data, intellectual property, strategic plans, and other critical assets. The year 2023 was marked by global challenges in cybersecurity, and aware of the criticality involved, we made strategic and robust investments in our technological infrastructure, demonstrating our utmost dedication to protecting the business assets.

### We invested BRL 2.5 million in cybersecurity and information security



#### Infrastructure Development and Strengthening

We implemented technologies to protect systems from intrusions, malware, and other cyberattacks.



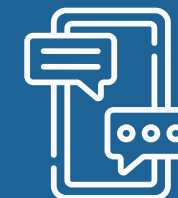
#### Employee Qualification and Training

We conduct ongoing information security awareness programs to ensure that our employees are the first line of defense against digital threats, adopting safe attitudes in their work routines and personal lives.



#### Management System

We constantly update our policies in line with market standards for data protection and privacy, including advancements in compliance with the General Data Protection Law (LGPD).



#### Response to Incidents and Recovery

We have strengthened our capacity for security incident response and system recovery to ensure business continuity in adverse scenarios.

## Respect for privacy and individual rights

Our organizational culture, centered on ethics and respect for privacy and individual rights, in full compliance with the principles and fundamentals of the General Data Protection Law (LGPD), demonstrates our commitment to protecting personal data of all our stakeholders. We rely on the strong commitment of our leaders and on support instruments such as the Code of Ethical Conduct, policies, training, investments, technology and governance.

### Training and organizational culture

In 2023, we conducted training and awareness campaigns to ensure that our employees understood the importance of the LGPD, privacy principles, and the protection of personal data in their daily activities. More than 88% of employees completed training on the HR Portal, the company's people management system. After onboarding, training is continuous and mandatory.

### Updating policies and processes

We reviewed our internal policies, business processes, and terms of service to ensure compliance with the LGPD, aiming to identify and mitigate risks related to privacy and the protection of personal data.

### Technology

Through technological tools, we centralized all personal data processing activities, providing us with agility to execute necessary protection actions.

### Governance

Our governance structure includes a Data Protection Officer who oversees compliance and serves as a point of contact between MRS, the National Data Protection Authority (ANPD), and Data Subjects.

### Stakeholder engagement

We value every feedback from our stakeholders and are always seeking to learn about best practices related to privacy management and the protection of personal data to enhance our process. Our relationship channels for the public include:

**MRS for you:** monthly content broadcast via Microsoft Teams, in pill format, for the entire company;

**Participative Management Meetings (PMMs):** a time when managers pass on information to the teams in order to align them;

**Privacy Commission:** bimonthly meeting with managers to exchange ideas and periodically evaluate the Privacy Program at MRS;

**Clipping:** Selection of news about the LGPD and related topics to be broadcast in the company's internal communication channels;

**Official email on privacy and personal data protection at MRS:** sending content via the [privacidade@mrs.com.br](mailto:privacidade@mrs.com.br) account to specific audiences;

**Participation in courses and events on privacy and protection of personal data:** promoted by the Sest/Senat system for companies in the transportation industry.

### Monitoring and impact assessments

Regular data protection impact assessments allow us to proactively identify and reduce potential risks to information.

### Privacy Ambassadors

We have 40 employees who, after taking part in specific training, work in all MRS General Areas as Privacy Ambassadors, in order to spread the principles of cyber security to their teams.

#### PERSONAL DATA PROCESSING 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/)





# OUR WAY OF CARING FOR THE PLANET





# ENVIRONMENTAL MANAGEMENT SYSTEM

GRI 304-1, 304-3

Our Environmental Management System (EMS) is robust and enables us to adopt best practices for managing environmental programs, controlling environmental risks, and optimizing operational costs. Process performance is proactively informed by the EMS, which helps eliminate and minimize potential environmental impacts, reduce incidents, adequately prepare employees, and ensure more accurate implementation of environmental strategy and commitments made to competent authorities.

We maintain our unified environmental licensing with IBAMA through Operating License LO 988/2010 - 2nd renewal - 2nd amendment, covering the licensing of railway operation and maintenance, as well as workshop complexes in Belo Horizonte (MG), Jeceaba (MG), Conselheiro Lafaiete (MG), Barra do Piraí (RJ), Santos (SP), Cubatão (SP), and Jundiaí (SP), as well as supporting units/activities, consolidating all our activities into a single operating license. This optimizes the execution of environmental programs, enhances management, and promotes synergy in environmental results and controls.



Having a positive impact on the environment and society by offering sustainable logistics solutions is one of the main guiding principles of the MRS business strategy. We pride ourselves on making progress every year in meeting our environmental goals



We also emphasize that we comply with all legal environmental requirements and maintain all other current authorizations with environmental agencies, such as water resource usage permits, vegetation suppression authorizations (ASV), among others.

### Green Area

Seeking to intensify its work in the environmental and social pillars, the company created the General Environment and Social Policies Area in 2022. The structure, which incorporated the Environmental Management Area, previously linked to the General Safety and Environment Area, also gave rise to the Environmental Licensing Area, still in 2022. In 2023, the Social Policy Area was created, the last area in the new structure. This reformulation expanded the governance of the company's topics and, consequently, the performance opportunities based on the new scopes:

#### ENVIRONMENTAL LICENSING AREA

Management of MRS's environmental licensing and authorizations processes, considering the challenges of implementing the new works planned from the renewal of the concession.

#### ENVIRONMENTAL MANAGEMENT AREA

Managing the constraints of environmental licenses and authorizations and complying with EMS activities, promoting the environmental compliance of company operations.

#### SOCIAL POLICY AREA

Relationships with communities neighboring the railway, including strategy development, impact execution, and management, through the construction of social guidelines and policies guiding MRS's actions (resettlement of people, impacts of construction, and social dialogue).

**BRL 21.3 million** invested in environmental projects/activities:

- ▶ Waste management
- ▶ Wastewater and water resource management
- ▶ Recovery of degraded areas
- ▶ Maintenance of compensatory plantations
- ▶ Air quality management
- ▶ Environmental programs

# Prevention and response to environmental occurrences

## Prepared for environmental emergencies

As part of our current and public Environmental Emergency Response Plan, we have a program for preventing environmental incidents. Our teams conduct regular inspections, hold daily dialogues, and carry out simulations to keep employees trained and ready to intervene in case of need. Environmental emergency kits are available at strategic units, each containing more than 15 items. The trailer kits for coupling to different motor vehicles are equipped with more than 20 parts and should be used in response to highly critical incidents. Additionally, there are vehicle kits and cleaning kits for incidents with lower potential damage.

Furthermore, we have a contract with a specialized company for environmental emergency response, operating 24/7 and available to be called in cases of large-scale incidents. However, due to the good performance and control, in 2023, we didn't have any calls.



STOP, LOOK, WATCH!



Simulated major accident in partnership with public agencies and other railroads



The coordinated actions with the new Social Policy Area are yielding positive results for communities near the railway, such as social and environmental education activities (leaflet distribution, lectures, active listening, among others) regarding the impacts of the new works planned in the concession contract addendum.

In the months of June and July, we mobilized around 140 employees from ten different locations for practical training on “environmental emergencies” in the three states where we operate.

With the participation of the Fire Department, we conducted a large-scale drill at the P1-07 complex in Jeceaba (MG). We simulated the leakage of approximately 15,000 liters of diesel, accompanied by a possible fire in a locomotive, requiring the rescue of the unconscious engineer. Employees from various areas participated, from the states of Minas Gerais, Rio de Janeiro and São Paulo, as well as other companies in the railway sector.



Lucas Vale, Social Policy analyst, showing a video of the works in Barra do Pirai (RJ) and explaining details of the work to a resident



## Commitment in the value chain

We request our suppliers to also be committed to preventive actions and emergency response measures. The company operating and maintaining diesel stations, for example, one of our main inputs, must present and keep updated risk management plans and emergency response plans. All companies contracted for construction work are required to maintain environmental emergency kits at construction sites and to train employees on their proper use. These obligations are stipulated and formalized through service contracts and specific internal procedures required for each group of suppliers.

## Biodiversity protection

GRI 304-1, 304-3

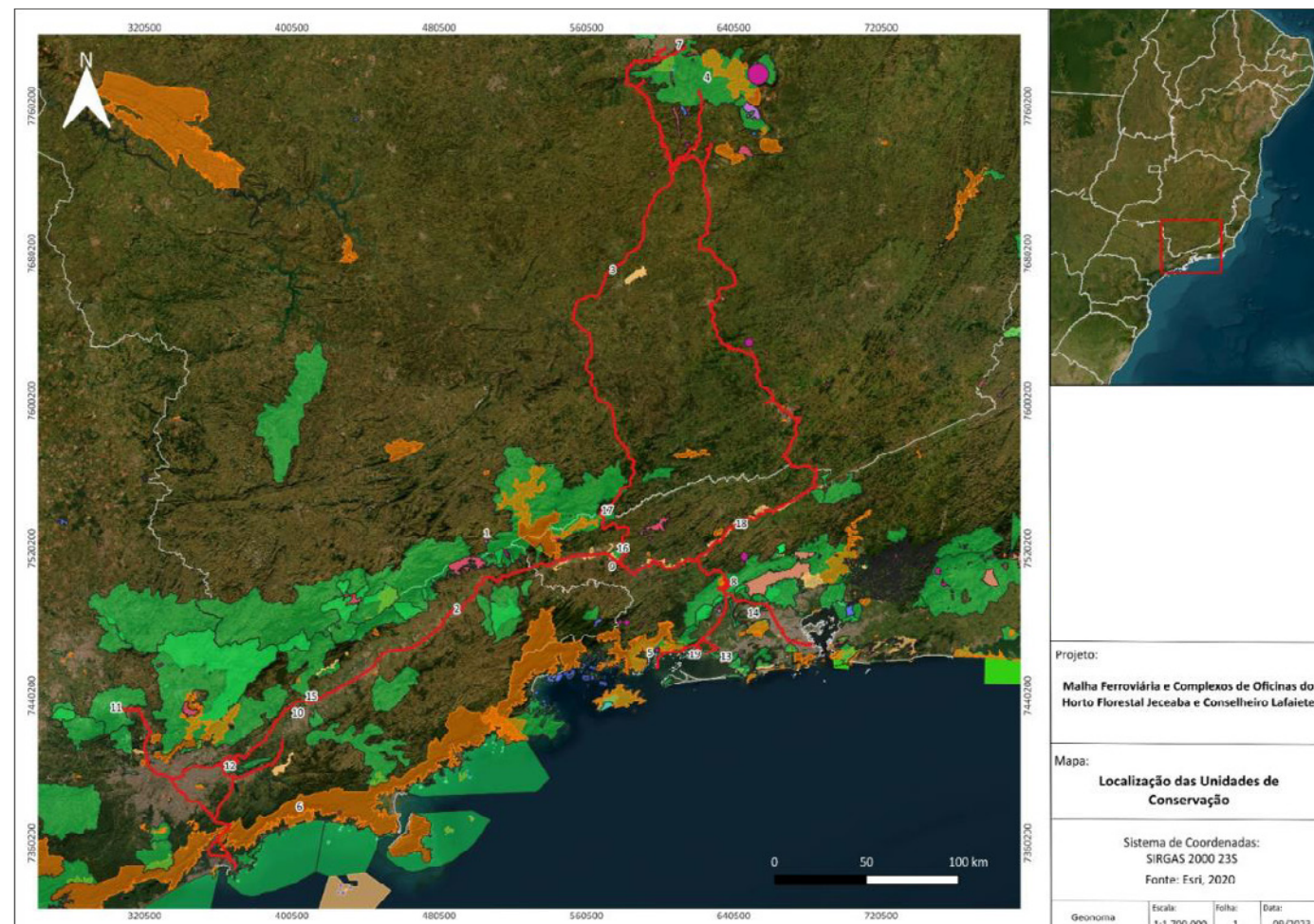
Our trains pass through regions of biodiversity protection, in areas of two important Brazilian biomes – the Atlantic Forest and Cerrado – where 17 Conservation Units (UCs) are located. The beauty of the daily landscape that unfolds in the paths taken by our trains are a source of pride and admiration. We know how important it is to preserve our natural resources, which is why we act responsibly and seriously to reduce and compensate for the possible impacts of our operations on the flora and fauna of these regions. Each and every work or

intervention by MRS is preceded by legal authorizations from the competent environmental agencies. Tree felling and interventions in Permanent Preservation Areas (APPs), if necessary, are accompanied by annual planting for compensation, with monitoring until their full recovery.

Erosion, wear and tear, and soil infiltration are points of attention for railway operations; therefore, critical areas regarding drainage are continuously inspected so that any necessary actions can be executed preventively. The Environmental Liabilities Management and Erosion Process Management programs involve a robust set of initiatives aimed at maintaining drainage systems, rehabilitating degraded areas,

In 2023, maintenance and monitoring were carried out on **7 compensatory plantations, totaling more than 23 hectares of areas in the process of restoration.** These areas will undergo maintenance and monitoring until they reach adequate levels of restoration.

## CONSERVATION UNITS INTERSECTED BY THE MRS NETWORK



### LEGEND

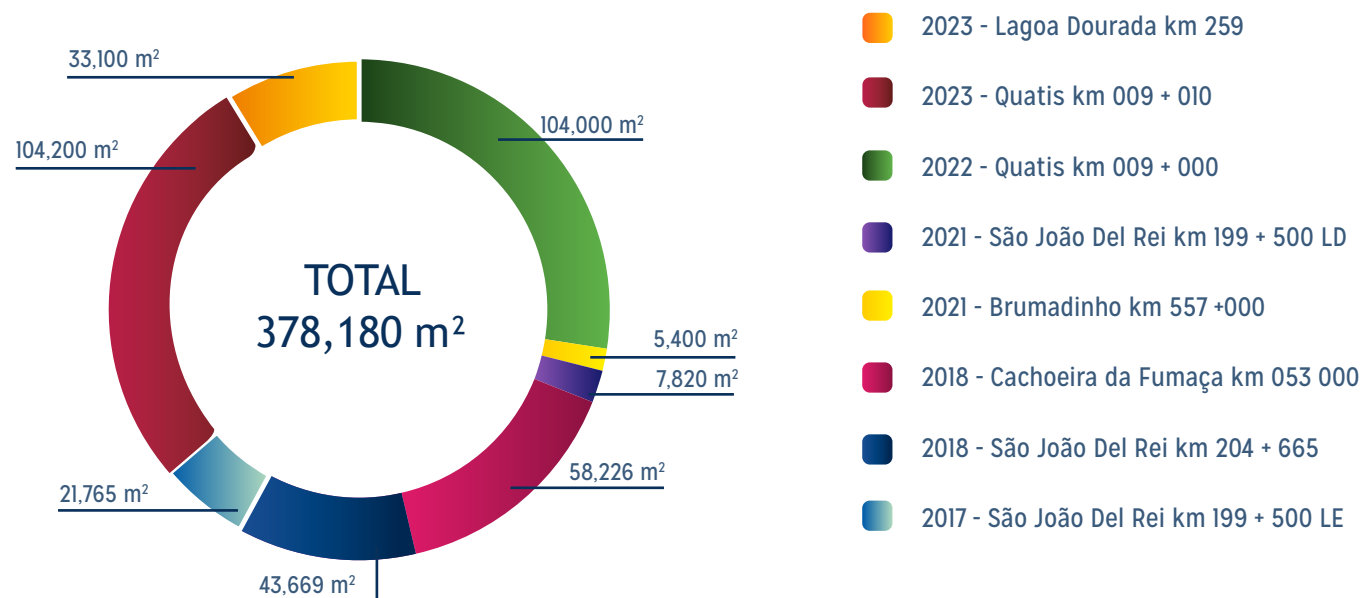
- Railway Network
- States
- Conservation Units
  - Environmental Protection Area
  - Area of Relevant Ecological Interest
- Ecological Station
- Forest
- Park
- Wildlife Refuge



## Degraded/rehabilitated areas

In 2023, we invested approximately BRL 2.5 million in the restoration of degraded areas in the municipalities of Quatis (RJ) and Lagoa Dourada (MG), totaling 13.7 hectares. An additional BRL 69,000 were invested in the maintenance process for an area of 0.54 hectares in Brumadinho/MG, restored in 2021, to ensure the efficiency of the intervention conducted, totaling 14.3 hectares of areas recovered by the company.

### RECOVERED AREAS



Note: As per specific conditions of the operating license, MRS is committed to the recovery of certain areas throughout the license's validity period. Thus, in 2023, the aforementioned areas were restored and will be maintained for a minimum period of three years.

Area in Lagoa Dourada (MG) before recovery and after being recovered





# Inform, raise awareness, educate and engage: Environmental Education Program

With educational and participatory actions, we train, enable and inform employees and communities about environmental demands and issues. Our Environmental Education Program is structured in two pillars: Environmental Education Program for Workers (PEAT) and Environmental Education Program (PEA), focusing on communities in the municipalities covered by our railway network.



**1,400**  
employees involved  
in **50 PEAT** actions,  
such as campaigns  
and training



**40**  
PEA actions in  
the communities:  
lectures in schools  
door-to-door  
interventions and  
direct dialogues

## TOPICS COVERED:

- ▶ Sustainability
- ▶ SDG
- ▶ Correct waste disposal
- ▶ Venomous animals
- ▶ Noise and particulate matter
- ▶ Valuing life and safety
- ▶ Use of the environmental emergency kit

Direct dialogue  
action with the  
community and  
leafleting in  
Fisherman's  
Village, in  
Santos (SP)



"Every life matters"  
action, promoted at  
Praça da Estação, in  
Juiz de Fora (MG)



Specific action on composting, planned for students  
and professionals at Escola Estadual Doutor Álvaro  
Rocha, in Barra do Pirai (RJ)





# CLIMATE MANAGEMENT AND ENERGY EFFICIENCY

MATERIAL TOPIC FUEL MANAGEMENT AND FLEET ECO-EFFICIENCY | GRI, SASB: GRI 3-3, 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

## Climate change

Combating the effects of climate change on the business and contributing to actions to reduce the agents causing global warming are part of our strategy for sustainable energy transition, considering, above all else, the importance that the railway sector can play in this scenario as one of the most sustainable logistics alternatives compared to other modes of transportation. Nonetheless, we understand the importance of mitigating the impacts of climate change, which is why our materiality encompasses the topic of Atmospheric Emissions and Greenhouse Gases.



X



Railway transport can emit up to **80%** less carbon dioxide compared to the highway mode.

### CO<sub>2</sub> CALCULATOR

The sustainable gains of the multimodal solution composed of railway and road transportation are effectively measured by the CO<sub>2</sub> Calculator, a tool developed by the MRS team capable of indicating the reduction in carbon dioxide emissions compared to exclusively road logistics flows.

Want to learn more about the MRS CO<sub>2</sub> calculator? Click here or point your mobile phone camera at this QR Code.





▶ We have made progress in the evaluation of the **Carbon Disclosure Project (CDP)** in the Climate Change dimension, increasing our score from C to B-.

It's worth noting that in 2021, our score was D, which underscores the maturation of the topic within the company, with significant advancements in climate governance and internal, operational, and strategic developments. We continue to inventory the three scopes of greenhouse gas (GHG) emissions, with transparency for all stakeholders, and the data is audited by a third-party independent entity, ensuring reliability in the reports and emission control.

▶ For the second consecutive year, we have been awarded the Gold Seal in the Brazilian **GHG Protocol** Program, the largest national platform for disclosing greenhouse gas emission data.

▶ Another important step taken was the establishment of the Decarbonization Commission, comprised of employees from different areas of the company, driving the climate agenda and reporting the progress of the issue to the ESG Commission, which in turn, is composed of the MRS Executive Board.

Click here to access the MRS 2023 questionnaire



Programa Brasileiro GHG Protocol

## Absolute emissions

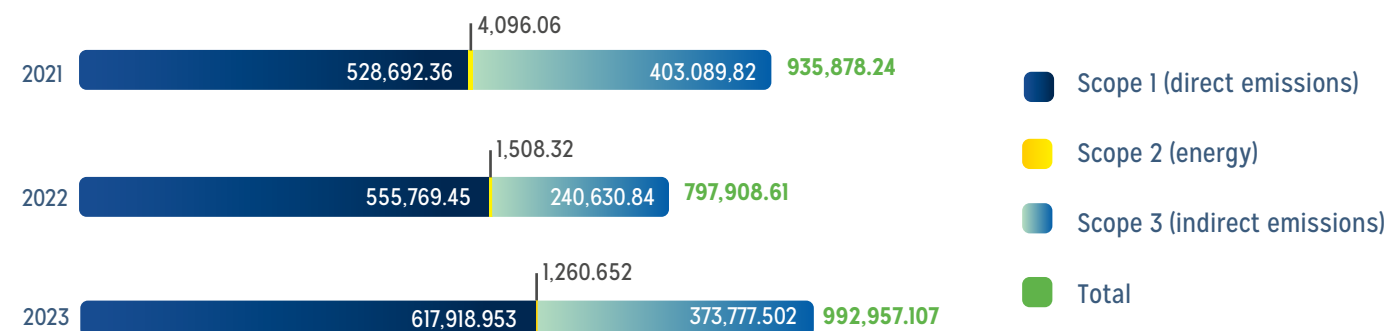
Our absolute emissions from diesel consumption represent approximately 98.5% of the company's scopes 1 and 2 emissions, totaling around 619,000 tonnes of CO<sub>2</sub>eq - an increase of approximately 11.2% compared to 2022. This result was mainly due to the higher volume of own cargo transported in the last year (74% of the total) and consequently, the increase in diesel consumed: an increase of about 15.4% in TKU transported compared to 2022.

We recorded a reduction in emissions from energy consumption (scope 2) of 16.5% compared to 2022. In general, this reduction occurred mainly due to both the decrease in energy consumption and the reduction of the emission factor for this

category (since there was a greater participation of renewables in the Brazilian electrical grid).

We increased indirect absolute emissions (scope 3) by approximately 55.2% compared to 2022. The number is primarily justified by the increase in the acquisition of rails and concrete sleepers by MRS to support the Large Track Interventions project and the concession renewal works. Furthermore, as we increased diesel consumption, we also increased indirect emissions resulting from this input (production and life cycle). It's important to note that the inventoried categories are 1, 2, 3, 4, 5, and 6, with MRS studying opportunities to expand the inventory in future cycles.

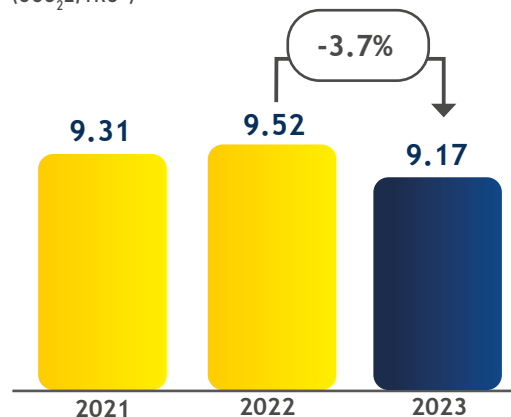
## GREENHOUSE GAS (GHG) EMISSIONS (IN TONS OF CO<sub>2</sub>EQ)



## Specific emissions

We quantify the total specific emissions, originating from scope 1, in gCO<sub>2</sub>eq/TKU (grams of CO<sub>2</sub> equivalent per ton-kilometer unit). We obtained the best result in the historical series, with 9.17 gCO<sub>2</sub>eq/TKU, a reduction of 3.7% when compared to 2022. Although there are energy efficiency gains in this result, the main justification comes from the increase in the percentage of biodiesel in the diesel blend, which consequently reduced greenhouse gas emissions.

### SPECIFIC EMISSIONS (gCO<sub>2</sub>e/TKU\*)



\*TKU: Ton per kilometer unit, i.e. only the weight of the load multiplied by the distance transported.

The specific emissions of the railway fleet totaled 9.05 gCO<sub>2</sub>e/TKU – a reduction of 3.4% compared to 2022, mainly due to increased operational efficiency and the higher percentage of biodiesel in the diesel consumed by MRS, from the national RenovaBio program.

### SPECIFIC EMISSIONS BY LOAD TYPE

Heavy Haul

**7.44**  
gCO<sub>2</sub>e/TKU

↓ (reduction of 2.1%)

General Cargo

**13.29**  
gCO<sub>2</sub>e/TKU

↓ (reduction of 1.9%)

Agricultural

**23.31**  
gCO<sub>2</sub>e/TKU

↓ (reduction of 1.5%)



In 2023, we avoided emitting more than 23,000 tonnes of CO<sub>2</sub>e into the atmosphere compared to the emission intensity of 2022.



## Initiatives for the reduction of GHG emissions

1

Increasing the speed of trains at key points on the railroad, without increasing energy consumption, using the inertia of the train to save money,

2

Improved driving by engineers with efficient driving.

3

Utilization of more efficient locomotives with diesel engines emitting less, and testing of hybrid locomotives.

4

Increased locomotive productivity improving asset turnover and HP per TB ratio (Locomotive Power per Gross Ton).

5

Reduction of unnecessary locomotive idle time.





## Beyond GHG

In addition to greenhouse gas emissions, we periodically monitor other atmospheric emissions, such as particulate matter (PM), NOx, and SOx parameters, at some maintenance workshops and in railway network operations. Historically, the results have been below the limits set by CONAMA Resolution No. 491/2018 and are reported with the frequency required by the licensing environmental agency.

Atmospheric emissions resulting from freight transportation are monitored with the support of specialized consultancies, following two methodologies approved by the environmental agency: monitoring of the railway network and maintenance workshops of assets using the Hi-Vol equipment, which measures particulate matter suspended in the atmosphere, and monitoring of railway cars during the transportation of cargoes with potential wind drag, with periodic submission of results to the environmental agency. The values amount to approximately BRL 300,000.

With a focus on reducing the environmental impact of our operations and improving air quality for the

communities near the railway, we have progressed in the plan to expand the use of polymer sprayers – a resource used to reduce wind drag of particles during the transportation of cargoes with low granularity in open cars.

In 2023, we invested BRL 10.1 million in the installation of two spraying plants, in the municipalities of Sarzedo (MG) and Jeceaba (MG), for transporting ore in open wagons. The two new plants complement the other two located in Barra Mansa (RJ) and Pindamonhangaba (SP).



**STOP, LOOK, WATCH!**



Discover MRS's most technologically advanced polymer sprayer.



Polymer sprinkler in Jeceaba (MG)



# Fuel management and eco-efficiency of the fleet

GRI 3-3 MATERIAL THEME FUEL MANAGEMENT AND FLEET ECO-EFFICIENCY

SASB TR-RA-110A.3 GRI 304-1, 304-3

## Sustainability on rails

Seeking to increase capacity and improve operational efficiency, we continue to enhance the model of the 272-car ore train, which is twice the standard size formed by 136 railway cars. In 2023, a large part of the efforts regarding the topic were focused on refining the driving model of the 272-car train to make it increasingly efficient in terms of fuel consumption. By the end of 2023, the result was already better than that obtained with the standard 136-car model in some sections covered by the study.

We incorporated **10 new ES-44 locomotives** into the fleet, which are more efficient than the current ones, and **we will receive another 13 throughout 2024**

We received a **new CORIS simulator**, which brings a series of new features, providing more **agility and precision** for train driving analyses and simulations

We have advanced in the **technical specifications phase of the hybrid locomotives** to suit MRS's specific needs

In **2024**, we will receive an **electric locomotive** to develop **optimized solutions** through joint testing with the supplier

Train driving simulator in Juiz de Fora (MG)





## Our way of conducting

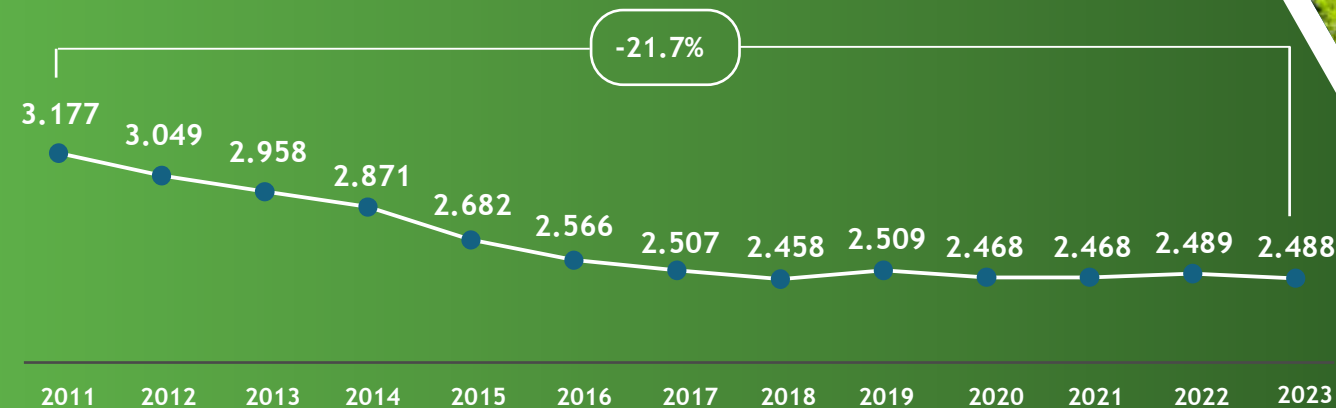
We monitor the energy efficiency of our operation by measuring the amount of liters consumed in transporting 1,000 gross tons over one kilometer (liters per thousand TKB). The overall indicator reflects the combined efficiency of the three cargo groups in which the company operates: Ore, Agricultural, and General Cargo.

Our overall energy efficiency index was 2.488 L/kTKB, surpassing the result of 2022. The year 2023 was even more challenging due to an incident on the Steel Railway, which led us to drastically change our operation for two months, negatively impacting energy efficiency. We mobilized various areas, adapted our operational model, and improved the driving of our trains, and even ended the year with historical highs in terms of annual volume. If the incident period were excluded from the analysis, the overall result for the year would be 2.462 L/kTKB.

**Energy efficiency**  
**2.488** L/kTKB

### ENERGY EFFICIENCY

(in L/kTKB)  
Global Evolution



We know that the better our energy efficiency (L/kTKB), the lower the total specific emissions (gCO<sub>2</sub>e/TKU), and, as it is a priority and strategic issue, we have a robust fuel efficiency program already consolidated in the company.

Initiatives such as driving management, distributed traction in trains, monitoring improvements to increase authorized speeds, implementation of AESS (automatic

engine start and stop), and the use of new and more modern rolling stock allow us to reduce diesel consumption and, consequently, fulfill the important mission of reducing GHG emissions.

As a result, we can observe that energy efficiency has improved from 3.177 L/kTKB in 2011 to 2.488 L/kTKB in 2023, representing a 22% improvement since then.





## Ore

The energy efficiency result of the Ore group was 2,138 L/KTKB, with a 1% increase compared to the previous year. This result was negatively influenced by the aforementioned incident, given that the ore segment was the most affected, due to the location of the occurrence. When excluding the impact of the incident, the result would be 2.112 L/kTKB, representing an improvement of 0.2% compared to 2022.

Initiatives adopted to achieve the result: increasing speed in sections where the terrain drives the train to overcome slopes; reducing train stops in sections unfavorable to energy efficiency; improving operational driving procedures to optimize locomotive traction effort; adopting the strategy of isolating/switching off commanded locomotives at some points where the topography of the section allows.

## Agricultural

In the Agricultural freight group, the energy efficiency was 4.225 L/TKU, representing a 0.2% reduction compared to 2022. This result is directly linked to the strategy of allocating AC-44 locomotives (MRS's premium fleet) to these flows, which has led to increased productivity, capacity enhancement, and improved

energy efficiency. Another strategy adopted was the shutdown/isolation of commanded locomotives at some points allowed by the topography of the section.

## General Cargo

For the General Cargo group, the result was positive compared to 2022, being 3.655 L/KTKB, with a reduction of 0.4%. We improved the operational design to optimize locomotive capacity, allowing us to reduce the use of less productive machines.

## Challenges for 2024

The average weight of railway cars loaded with iron ore - one of the main pillars for energy efficiency - will be a relevant topic under development with customers in 2024. The focus is on improving the quality of the loads to increase the average weight of the trains, ensuring the safety of the operation, and consequently improving energy efficiency.

In addition to the actions already adopted, efforts in 2024 will be focused on the structured use of data intelligence to generate more efficient and innovative solutions, focused on improving energy efficiency, reducing emissions, and operational productivity.

# Climate Resilience

GRI 3-3 MATERIAL TOPIC ATMOSPHERIC EMISSIONS AND  
 GHG, 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



We deepened our studies regarding the assessment of climate risks and opportunities, following the specific framework of the Task Force on Climate-Related Financial Disclosures (TCFD), and we assessed 7 out of the 22 climate risks identified in 2022: two physical risks and five transition risks, listed as “critical” according to the methodology. We also created monitoring indicators for the identified risks to track performance and take possible resilience measures, work that will continue with the assessment of other risks and the definition of their indicators. The risk of “climate change” is incorporated into the company’s inherent risk matrix.

## CLIMATE RESILIENCE, IMPACTS AND RISKS

EVENT	PROJECTED CHANGE	POTENTIAL IMPACTS	CATEGORY (TYPE OF RISKS)
RISING AVERAGE TEMPERATURES			
Changes in temperature-related variables, such as increased average temperature, including minimums and maximums, and a greater number of days with temperatures above 25°C.	Rise in temperature	<ul style="list-style-type: none"><li>• Loss of equipment, buckling of rails and installations, generating financial loss and need for replacement (-)</li><li>• Increased insurance costs (-)</li><li>• Increase in electricity consumption due to excessive use of air conditioning (-)</li><li>• Increased expenses due to rising prices caused by the increasing unavailability of natural resources and raw materials (-)</li></ul>	Physical hazards (chronic physical)
INCREASE IN CBIO CREDITS			
Purchase of CBIO credits by fuel distributors, focusing on meeting the Renovabio target (National Biofuels Policy).	Increase in the price of fossil fuels	Better efficiency compared to road transport: lower diesel fuel consumption and, therefore, more attractive to customers. (+) <ul style="list-style-type: none"><li>• Reduction of GHG emissions (+)</li><li>• Increased operating expenses with the purchase of diesel fuel. (-)</li><li>• Stigmatization of the sector for the use of fossil fuels (-)</li></ul>	Transition risks (current regulation)
CARBON PRICING OF THE TRANSPORT SECTOR (TRANSPORT, FOSSIL FUEL, MINING AND INDUSTRIAL SECTORS)			
Establishment of carbon pricing mechanisms in Brazil for the transport, fossil fuel, mining and industrial sectors	Need to pay taxes or purchase credits to comply with legal regulations, resulting in an increase in the price of fossil fuels.	Need to pay taxes or purchase credits to comply with legal regulations, resulting in an increase in the price of fossil fuels. <ul style="list-style-type: none"><li>• Adoption of the use of biofuels (+)</li><li>• Use of electricity from renewable sources (+)</li><li>• Greater efficiency compared to road transport and competitive advantage (+).</li><li>• Increased expenses related to fuel consumption and production (-)</li><li>• Stigmatization of the sector for the use of fossil fuels (-)</li><li>• Migration of the company's customer operations to locations without carbon pricing mechanisms (-)</li></ul>	Transition risks (emerging regulation)



## CLIMATE RESILIENCE, IMPACTS AND RISKS (CONT.)

EVENT	PROJECTED CHANGE	POTENTIAL IMPACTS	CATEGORY (TYPE OF RISKS)
FLEET REPLACEMENT DUE TO DISUSE OF FOSSIL FUELS			
Replacement of fossil fuels with other energy sources	Replacement of diesel locomotives with electric locomotives. Replacement of internal combustion equipment and vehicles with electric ones.	<ul style="list-style-type: none"><li>• Reduction of GHG emissions (+)</li><li>• Realization of unforeseen investments for the renewal of fleet, equipment and cars (-)</li></ul>	Transition risks (technological)
REMOVAL OF GOVERNMENT INCENTIVES FOR THE PURCHASE OF DIESEL			
Withdrawal of economic incentives for fossil fuels by the Federal Government	Rising fossil fuel prices	<ul style="list-style-type: none"><li>• Reduction of greenhouse gas emissions with energy efficiency actions (+)</li><li>• Increased expenditure (-)</li></ul>	Transition risks (market)
INCREASED SEVERITY AND FREQUENCY OF EXTREME WEATHER EVENTS			
Changes in precipitation-related variables, such as an increase in consecutive days with rain and days with rainfall above 25mm	Increased occurrence of floods and windstorms	<ul style="list-style-type: none"><li>• Increased expenses for damage recovery (-)</li><li>• Increased insurance costs due to extreme weather events (insurance claims) (-)</li><li>• Increased costs due to rising prices caused by the increasing unavailability of natural resources and raw materials (-)</li><li>• Financial losses due to the shutdown of operations during heavy rains (-)</li></ul>	Physical hazards (acute physical)
CHANGES IN PRECIPITATION PATTERNS AND EXTREME VARIABILITY IN WEATHER PATTERNS			
Changes in drought-related variables, such as a reduction in the volume of rainfall and an increase in the number of consecutive days without rain	Highest occurrence of drought	<ul style="list-style-type: none"><li>• Elaboration of climate adaptation plans for the events (+)</li><li>• Increase in the price of energy during the dry season (-)</li><li>• Decrease in the company's revenue due to reduced demand (-)</li></ul>	Physical hazards (chronic physical)

## A resilience plan for extremes: heavy rain and prolonged drought

To deal with the consequences of climate change, we maintain a permanent management structure for the impacts of rain and drought on railways: our climate risk management plan addresses periods of both drought and heavy rainfall (high intensity), as well as prolonged and/or intermittent rainfall that can negatively impact railway operations. From April to October (dry season), preventive work is undertaken to reduce vulnerabilities, while from November to March (rainy season), all points of concern receive extra reinforcement through monitoring and alerts for immediate action, if necessary.

### ATYPICAL RAINFALL BEHAVIOR

The rains in 2023 showed atypical behavior, alternating between periods of high hourly rainfall rates, which led to a significant increase in alerts, and days with light and constant rain, resulting in high daily accumulations. This scenario of high rainfall volume triggered soil saturation (waterlogging) at critical levels, culminating in occurrences of embankment failure and mass displacement in the Paraopeba and Steel Railway regions.



#### RAINY SEASON PLAN

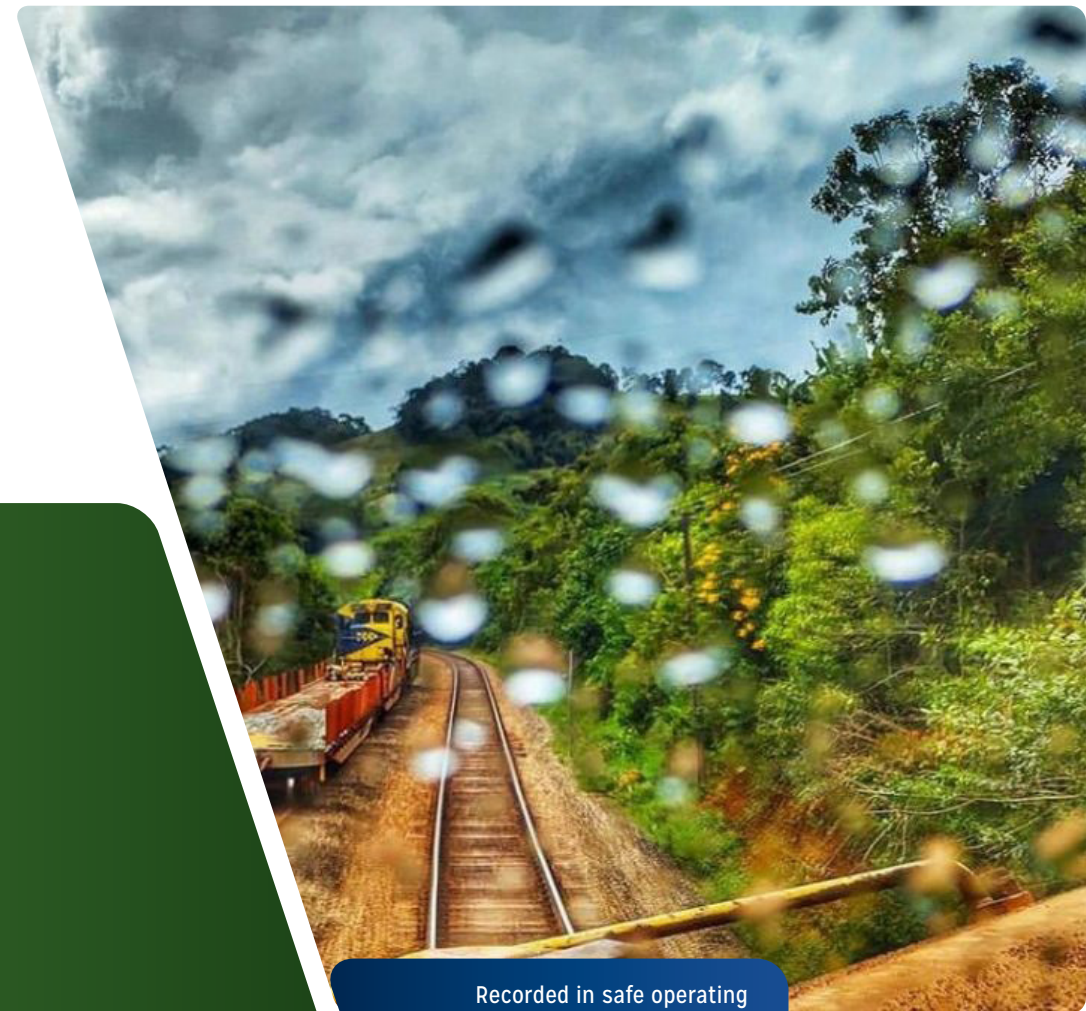
**99**  
meetings  
with the  
areas involved

**16**  
management  
alignment  
meetings

**1,487**  
yellow alerts  
(traffic restriction)

**888**  
red alerts  
(traffic stoppage),  
with 216  
occurrences  
of rain-related  
failures

And more  
Study/tests with  
a new supplier of  
meteorological  
services to  
improve climate  
monitoring



Recorded in safe operating  
conditions by train conductor  
Fabrício Cândido





## DRY SEASON PLAN

**100%**  
of the  
prevention  
initiatives  
carried out

**22 million**  
m<sup>2</sup> of mowed and  
pruned areas

**8,000 km**  
of chemical  
weeding activities

Cleaning of  
**1,817**  
manholes

**943 km**  
of gutter cleaning

**61.6 km**  
of trenching

And more

Umbrella contract with  
suppliers of yellow  
line equipment (large  
machinery used in  
maintenance activities)  
in the three states,  
covering the entire MRS  
network

Creation of three  
additional ballasts  
in Juiz de Fora (MG),  
Jeceaba (MG), and Bom  
Jardim de Minas (MG)  
Theoretical training

for leaders and  
those responsible for  
accidents

Large-scale  
simulation to improve  
response to incidents

Study to increase the  
speed of railway cranes

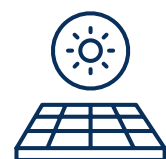
Inspection and  
maintenance of  
drainage systems



# ENERGY MANAGEMENT

GRI 302-1, 302-3, 302-4

Our commitment to responsible management of natural resources and the pursuit of more sustainable, economical, and strategic energy alternatives is evident through the use of clean energy sourced from negotiations in the free energy market, with contracts in place until the end of 2027, the utilization of solar farms, and choices for more efficient equipment, by the EMS.



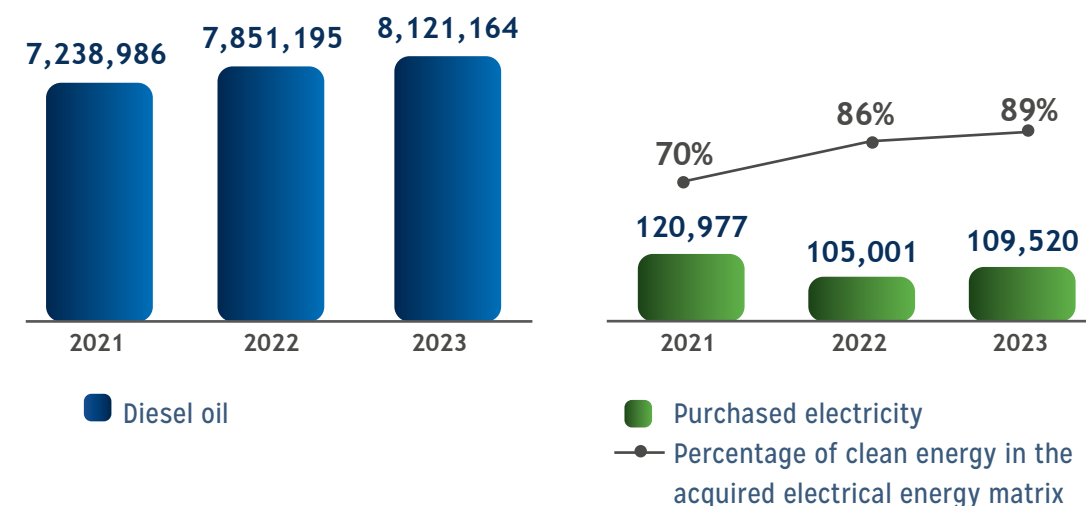
We added another solar energy supplier to our portfolio, ensuring that the low-voltage units in São Paulo (SP) are also powered by clean energy.



We rigorously monitor and track energy consumption in all our buildings, aiming to swiftly identify and address deviations, as well as to pinpoint improvement opportunities, thereby contributing to both reduced consumption and waste.

## ENERGY CONSUMPTION WITHIN THE ORGANIZATION

(em GJ) GRI 302-1



Note: The increased consumption of diesel and electricity in 2023 is related to a roughly 15.4% increase in TKU transported compared to 2022. On the other hand, the percentage of clean electrical energy matrix acquired increased by 3 percentage points compared to 2022. Considering 1l of diesel = 36MJ

Treating these deviations significantly optimizes resource usage, potentially leading to reduced transportation pricing for our customers.

**89%** of our purchased electricity matrix comes from clean energy - an increase of 3 pp compared to 2022.

The use of renewable energy reduces the emissions of greenhouse gases and other pollutants, helping to mitigate climate change and protect the environment.



## WASTE MANAGEMENT

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

**2,760**

tons of waste generated in maintenance activities alone and destined for external companies;

This result is

**15% lower** than 2022;

Of this total,

**1,380**

tons were reused or recycled - about 50% of all waste generated;

**BRL 5 million**

invested in the management of hazardous and non-hazardous waste, and in improvement actions.

The 2023 result demonstrates our commitment to the National Solid Waste Policy (PNRS), focusing on reducing landfill disposal, reusing materials, and decreasing raw material consumption, contributing to the circular economy and being eco-efficient in our processes.

### WASTE MANAGEMENT

The waste generated undergoes a thorough analysis for reuse and recycling

1

Ensuring safety for operations and employees, we routinely use components recovered by our maintenance teams

2

The recovery of batteries, electroelectronic, mechanical, and brake components, cast items, wheels, and bogies of wagons and locomotives avoids the use of natural resources for the manufacturing of new products

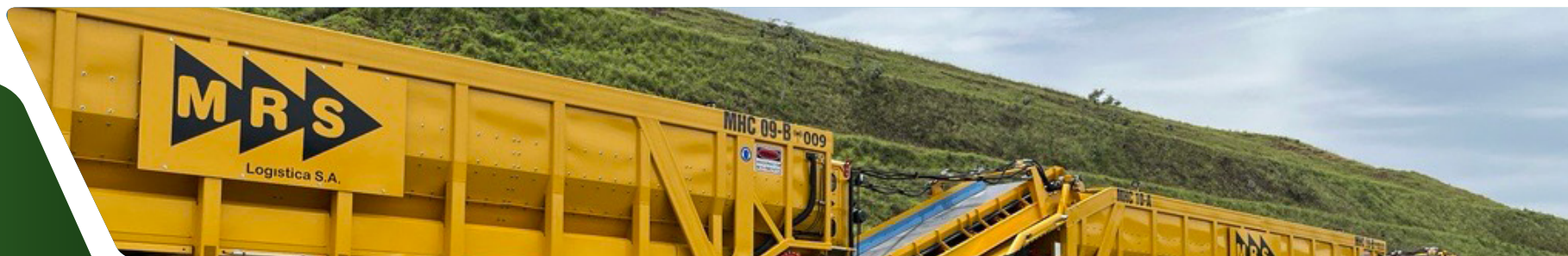
3

## REVERSE LOGISTICS

We maintain partnerships with external suppliers in three reverse logistics processes: packaging of herbicides used in chemical weeding (1,320 packages in 2023); lead-acid batteries (103 tons of batteries in 2023); and polypropylene lubricating oil packaging, which were previously destined for co-processing for class I landfill and are now reused in Minas Gerais for pipe manufacturing.

## MORE WITH LESS

In 2023, we began the replacement of wooden sleepers with concrete ones - which are five times more durable and directly contribute to a reduction in waste generation. This project is estimated to last for 11 years, with the replacement of over 80% of the existing sleepers in the Rio de Janeiro corridor and the Steel Railway.



Materials reused in 2023 that were no longer sent to landfills and prevented the purchase of new items that would eventually become new waste

15,672  
sleepers reapplied in  
the railway network

134,257.98 t  
scrap metal reused by  
third parties

98%  
of recycling/reuse of  
other woods

10,465.30 m<sup>3</sup>  
of sleepers reused by  
third parties

359,390  
liters of oil sold for re-  
refining by third parties

99%  
Recycling of waste with  
recycling potential

305.17 t  
of rails reused in the  
rail network

102.56 t  
of lead batteries sold  
for reverse logistics  
application



STOP, LOOK, WATCH!



Renovation - MRS's Major Track Interventions Team starts replacing sleepers on the Steel Railroad



Among the reused materials, we highlight scrap metal, which saw its quantity sent for recycling more than tripled in 2023, due to the high demobilization of locomotives. These bulky waste materials could have been sent to landfills, which, besides generating high costs for the company, is an unsustainable practice. Thus, their destination for recycling ensures that MRS's waste will become raw material for another company.

## Destination 100% correct

With operations in 107 municipalities across three states, we have over 80 units and rely on a robust Waste Management Program. Through this program, the proper handling process of 2,760 tons of solid waste classes I and II is controlled from origin to arrival at various destinations. For this purpose, we collaborate with a specialized waste management company and various destination facilities in the states of Minas Gerais, Rio de Janeiro, and São Paulo. The success of the program is measured by the outcome of 100% of waste being managed correctly and controlled by indicators in our EMS, with no records of fines, penalties, or the like. All our efforts are aimed at seeking sustainable solutions, applying concepts of circular economy, cleaner production, and eco-efficiency.

Rail scrap  
sorted for  
disposal



## IN RECENT YEARS, WE HAVE PROMOTED IMPROVEMENTS IN OUR SUSTAINABLE MANAGEMENT PROCESSES REGARDING THE HANDLING OF HAZARDOUS WASTE GENERATED:

1

We initiated the reverse logistics process for plastic lubricant drums, with an average annual generation of 2 tons.

2

We sent aerosol packaging for recycling in the state of Rio de Janeiro, with an average annual generation of 1 ton.

3

We directed the residues from the sludge of our ETPs (Effluent Treatment Plants), previously classified as hazardous, for reuse, with an average annual generation of 40 tons.

4

We altered the destination process of uncontaminated rubber waste generated in workshops through a partnership with a supplier for reuse or recycling.

### Training and control

In all our units, we have trained employees responsible for assessing waste generation, segregation, and packaging. They regularly participate in environmental training sessions and daily environmental dialogues (DDAs) conducted by environmental technicians as part of the company's Environmental Education Program.

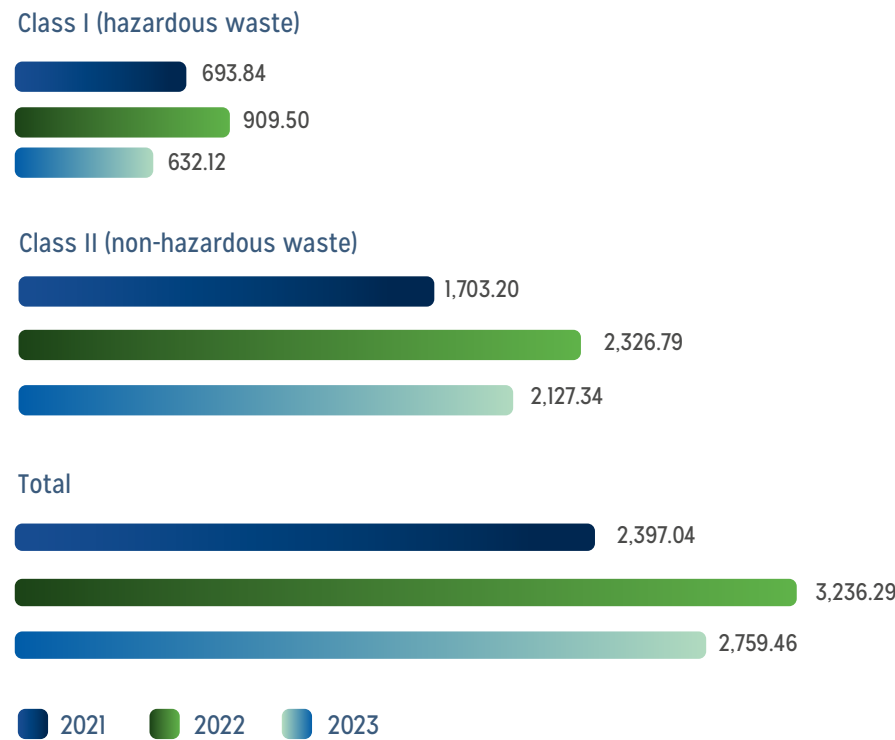
To ensure the continuity of the positive results achieved, all our suppliers undergo a rigorous approval process, including audits of their processes with an emphasis on environmental licensing and compliance with other legal requirements.

### Waste generated by waste composition in metric tons

GRI 306-3

The representation of class II waste generated in 2023 increased compared to the previous year: 77% compared to 72% in 2022, in the total waste composition. This is due to better segregation and classification, as well as reflections and critical analysis on the need for generation.

### WASTE GENERATED BY WASTE COMPOSITION IN METRIC TONS



Breakdown of waste composition for the year 2023. Solid waste contaminated with oils and greases; liquid waste (generally water and oil, from the cleaning of industrial effluent treatment systems) Common garbage, recyclables, wood, rubber, welding slag, etc.

Felipe Louzada operating a forklift at the Waste Center in Jundiaí (SP)





We maintained high levels of waste disposal for co-processing, without sending to class I landfills, contributing to the sustainability of the process. Additionally, we upheld our performance in waste recycling (highlighting the segregation of 100% of paper, cardboard, plastic, and glass waste) and co-processing.

### WASTE NOT INTENDED FOR DISPOSAL BY WASTE COMPOSITION AND RECOVERY OPERATIONS

(in tons) GRI 306-4

	2021	2022	2023	Share 2023
Hazardous waste (class I)	689.20	909.49	632.12	43.9%
Co-processing	634.85	882.55	597.71	41.5%
Physical-chemical treatment	54.14	22.41	34.28	2.4%
Incineration	0.21	4.53	0.13	0.0%
Non-hazardous waste (class II)	781.92	880.68	806.96	56.1%
Recycling	397.66	475.20	402.56	28.0%
Co-processing	384.26	405.48	366.22	25.4%
Energy recovery	-	-	38.18	2.7%
Total	1,471.12	1,790.17	1,439.08	100.0%

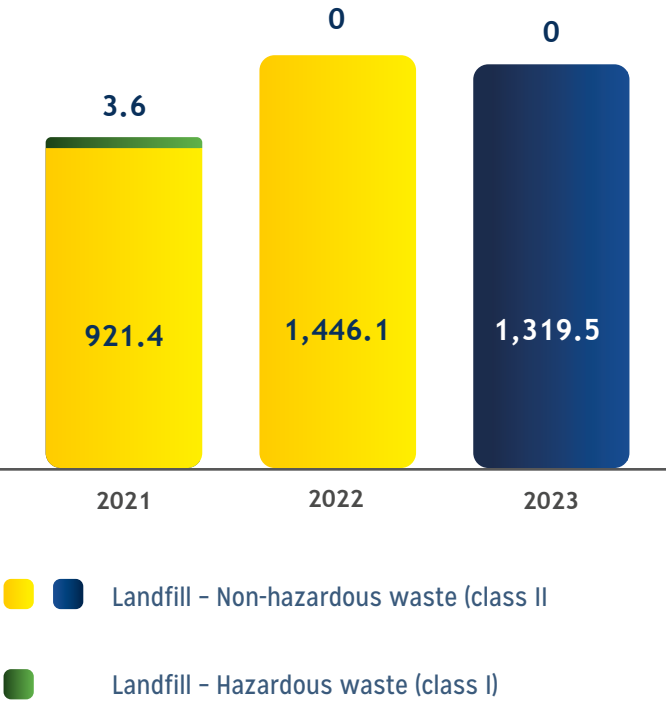
Note: We also maintained the rates of sending class II waste to landfills, while continuing to refrain from sending class I waste for burial. The other half of the class II waste generated is destined for co-processing, recycling, or energy recovery.

### Waste reused internally in 2023



### WASTE DESTINED FOR DISPOSAL BY WASTE COMPOSITION AND DISPOSAL OPERATIONS

(in tons) GRI 306-5



# WATER MANAGEMENT

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

In our operations, we utilize three different sources of water consumption: authorized abstraction (surface or groundwater), public water supply, and water trucks, which we use for maintenance activities along the railway network.

## Constant and real-time monitoring

A telemetry system, comprised of multiple sensors, monitors in real-time and remotely the hourly volumes of water abstraction, static and dynamic levels of groundwater wells, and intake durations, via SGA. This ensures complete control for compliance with legal obligations and identifies the need for initiatives to raise awareness among employees about sustainable water consumption.

## Understand to act

We understand that deepening studies on water scarcity is crucial to understanding climate change and its impacts. Therefore, we maintain a constant focus on new available technologies and promote awareness of best practices among our team of employees for the conscious use of this resource. Our resilience measures to reduce the Company's exposure to the risk of a shortage of this resource include a plan to deal with suppliers capable of serving the company's main units, investments in leak detection, and real-time evaluation. In order to monitor the Company's water and energy consumption, we set up a monthly consumption monitoring commission to hold regular meetings to monitor consumption, identify deviations, and draw up and implement action plans to address them. In addition to improving consumption monitoring, the initiative reinforces the control of measures for

cases of water scarcity. In this sense, we also rely on water reuse techniques in our locomotive workshops in Barra do Pirai/RJ and Jeceaba/MG, and we are studying the implementation in other units to ensure that all industrial plants have this resource. For administrative units, our shortage plan involves the use of water trucks, a process already structured with suppliers to avoid any impact on activities in case of occurrences.

For 2024, we will expand our efforts on this topic, with the aim of evaluating possible operational and maintenance sensitivities caused by a potential lack of water, as well as starting discussions to adapt the business to this scenario.

We also invested BRL 677,310.24 in good practices for the rational use of water resources at the company in 2023.

**109,700 m<sup>3</sup>**  
of water, representing a  
**15.8%**  
increase compared to 2022.

This increase in water consumption is mainly related to the installation of two new polymer sprayers in Sarzedo/MG and Jeceaba/MG, aimed at improving air quality, as mentioned on page 70. However, the specific water consumption remained the same as in 2022, at 0.0016 L/TKU.



STOP, LOOK, WATCH!



See how we monitor real-time water usage



Learn more about our water reduction initiatives



“

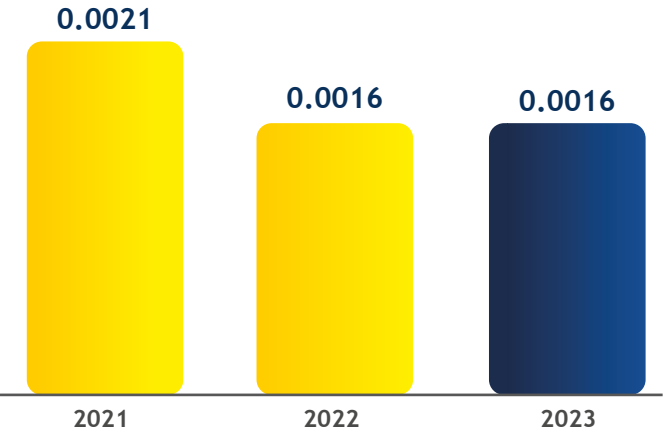
MRS implements responsible water management, always seeking to improve and optimize the planning and use of water resources in its various activities. The combination of technologies and innovative practices aimed at process efficiency plays a crucial role in contributing to the availability of water resources now and for future generations.”

Flávia Barros  
General Manager of Environment and Social Policies



### SPECIFIC WATER CONSUMPTION

(in L/TKU)  
GRI 303-3



### WATER ABSTRACTION (in mega liters)

	2021	2022	2023	Share 2023
Surface water	6.63	4.55	4.09	3.7%
Groundwater	51.01	26.54	50.37	45.9%
Water trucks	11.74	11.90	9.50	8.7%
Third-party water (public supply)	51.63	52.12	45.83	41.7%
Total water abstraction	121.01	95.11	109.79	100.0%





## Effluents

It's worth noting that 100% of the industrial and domestic effluents generated in our operations are collected, treated, and disposed of properly, in accordance with current legislation. We have Industrial Effluent Treatment Plants (ETPs), oil-water separators, and septic tank systems for domestic effluents in locations not served by municipal collection networks.

In 2023, we installed a new Effluent Treatment Plant (ETP) at the Locomotive Workshop in Barra do Piraí (RJ). Operations began in 2024, thus expanding the devices that treat the treated effluent to be discharged into the receiving body, improving the quality of the effluent, which helps maintain the local ecosystem.

### GENERATION AND TREATMENT OF INDUSTRIAL EFFLUENTS (volume treated in m<sup>3</sup>)

Site	Municipality/ State	2021	2022	2023
ETP - Locomotive Workshop	Barra do Piraí/ RJ	1,343.98	1,268.34	1,970
ETP - PI-07 Locomotive Workshop	Jeceaba/ MG	1,944.54	2,758.71	3,470
ETP - HF Electric Rotators	Belo Horizonte/ MG	498.00	374.00	405
ETP - HF Locomotive Washer	Belo Horizonte/ MG	908.20	3,365.50	819
ETP - Locomotive Workshop	Jundiaí/ SP	387.00	979.60	315
ETP - Raiz da Serra Locomotive Workshop	Cubatão/ SP	179.30	380.65	207
Total		5,261.02	9,126.80	7,186

#### Notes:

The locomotive workshops in Barra do Piraí (RJ) and PI-07 (Jeceaba-MG) saw a higher volume of treated effluent compared to 2022, primarily due to increased asset maintenance activities and the contribution of rainfall.

The other workshops maintained a standard volume of treatment, with small natural percentage differences, attributable to asset maintenance schedules and effluent generation.

Effluent  
treatment plant  
in Jundiaí (SP)







# OUR WAY OF ESTABLISHING RELATIONSHIPS



“

Our business also involves taking care of people, so they can develop and reach the best of their individual and collective potential, creating a solid organizational culture, an inspiring work environment, and engaged and committed professionals.”

Simone Souza,  
General Manager of Human Development





## OUR TEAM

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

At MRS, people are at the heart of everything we do. We are committed to creating a welcoming and collaborative environment where each individual can forge a path that leads them further.

Our commitment is to mutual respect and collective well-being. We recognize the importance of caring for people and invest in it constantly. Over the years, we have always taken pride in continually building and evolving a multidisciplinary, diverse, ethical team with specific skills and technical competencies aligned with the specificities of the business. Moreover, our team is capable of teamwork, leadership, collaboration, assuming responsibilities, learning, and adapting, all aligned with our values, engaged, and committed to the growth and success of MRS.

That is definitely what makes MRS a unique place for building incredible journeys.



STOP, LOOK, WATCH!

Learn more about employer branding

In 2023

6,915 employees\*

Employees by gender\*



84.4% 15.6%

Employees by race\*

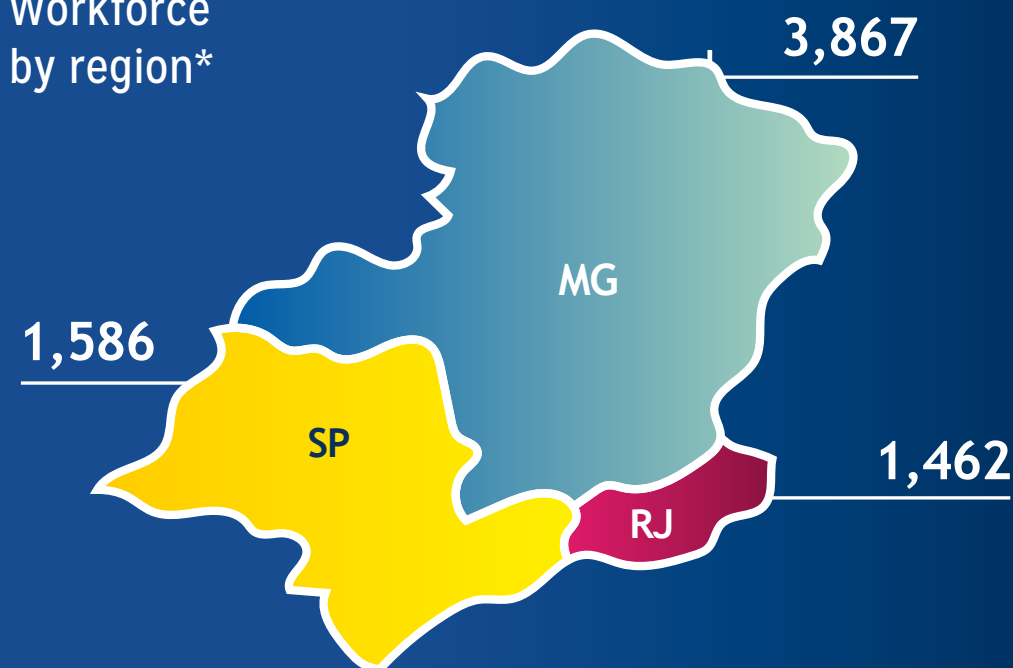
0.4%  
Yellow

55.3%  
White

44.2%  
Black, mixed  
race and  
indigenous

0.2%  
Not  
informed

Workforce by region\*



3,906  
third-party  
employees

\*In this indicator, the following are included: own permanent staff and own temporary staff. Does not include interns and statutory directors.



# Promoting diversity and inclusion

GRI 3-3 MATERIAL TOPIC: DIVERSITY, EQUITY, AND INCLUSION | GRI 405-1

We are committed to making diversity a constant theme in our outreach and engagement activity calendar. Throughout the year, we promote initiatives aimed at fostering diversity, equity, and inclusion in the workplace. In addition to lectures and literacy publications, we have reviewed our organizational guidelines and expanded their scope, establishing the MRS Organizational Guideline for Diversity, Equity, and Inclusion. We have also maintained corporate goals to increase the number of black, mixed race, and indigenous individuals, and regarding the female

audience, we have goals to increase the total number of women and their representation in leadership positions.

## With equality and respect

In 2023, we trained our male leaders on gender issues, focusing on raising awareness of inequality, unconscious bias, and the role of men in building more egalitarian environments, both within and outside the company. Over 140 leaders were trained to disseminate knowledge and foster a culture of diversity at MRS.

## MRS Diversity and Inclusion Week

Once a year, we deepen the debate by promoting MRS Diversity and Inclusion Week. In 2023, between the 6th and 10th of November, we addressed our diversity profile and experts presented, in five lectures, topics such as structural racism, neurodiversity, inclusion of LGBTQIA+ people, racial literacy, people with disabilities and challenges of parenting.

Railway cars with thematic paint to celebrate diversity and inclusion.



## DIVERSITY, EQUITY AND INCLUSION COMMISSION

We have a Diversity, Equity and Inclusion Committee, with definition of scope of action in regulations and monthly meetings to discuss actions and projects related to the topic. The commission is made up of representatives from all boards and interested volunteers, in addition to the president of MRS and two directors.



“

Participating in the ‘Conscious Men’ program was a transformative experience in my development as an active agent of change against sexism and in promoting gender diversity within our company. I learned to recognize my own prejudices and behaviors and to challenge gender stereotypes to create an environment of psychological safety where all individuals have the freedom to achieve their full potential, regardless of gender. I am committed to continuing to support initiatives that promote a fair and inclusive work environment for all.”

Eduardo Teixeira,  
General Manager of Railway Car Maintenance



# Growing presence of women

GRI 405-1

The #elasNaFerrovia initiative emerged in 2020 as a campaign to promote the attraction of new female employees to MRS and to empower and encourage the development of our female railway workers. The activities were maintained and improved in the following years, and we continue to expand our efforts in 2024. In March, we restructured #elasNaFerrovia, which now becomes a large program that concentrates a portfolio of actions that permeate the entire journey of women at MRS, in all its phases, aiming to expand attraction, retention, development and care with these women.

**Conversations:** we promote initiatives for active listening to women in various units to understand the challenges they face in their daily lives and what we can do to improve working conditions, providing a moment of psychological safety and openness to opinions and reports. Meetings were held in Jundiaí (SP), Santos (SP), Conselheiro Lafaiete (MG), Belo Horizonte (MG), and Juiz de Fora (MG).

## EVOLUTION OF EMPLOYEE PROFILE BY GENDER (%)

	2021	2022	2023
Men	87.2%	85.8%	84.4%
Women	12.8%	14.2%	15.6%
Total	100%	100%	100%

THERE ARE ALREADY OVER 1,000 OF US

In addition to these actions, there are engagement campaigns and improvements made in the workplaces, which have positively impacted the experience of female employees and, consequently, the retention of women. As a result, for the first time in our history, we have surpassed the milestone of 1,000 women in the company.

**15.6%**  
women in the workforce.

We reached the mark of **1,000+** women at the company

**23.7%**  
of management positions held by them.

Andrielle Garcia and Danielle Martins in Control Center Operational, in Juiz de Fora (MG)



The actions aimed at attracting women to the railway have led to a growth in female presence over the past two years, with an increase of over 35% - a percentage three times higher than the overall growth of MRS, which stood at 11% during the same period.

1. The following are included in this indicator: permanent staff; temporary staff (employees working on projects, trainees, people on leave, and apprentices). Does not include interns and statutory directors.  
2. The criteria for presenting the data have been changed compared to the 2022 Sustainability Report, with the aim of adjusting the report considering all employees under the CLT regime. With the change in criteria, the numbers for 2022 and 2021 have been recalculated to ensure comparability of information.

## A special focus on black professionals

GRI 405-1

Considering the national social standard, we are aware of the low representation of Black, mixed-race, and Indigenous populations in management positions, a representation that increases as the level of specialization decreases, reflecting Brazil's structural racism. In an effort to change this scenario and expand opportunities, we offer a structured mentorship program to Black professionals within the company. This program includes development journeys where a more experienced professional (the mentor) provides guidance to another professional seeking career development (the mentee). Training sessions are provided for mentors to prepare them to support mentees, and workshops for mentees cover topics related to career development such as financial and career planning, networking, and communication. Mentors and mentees follow a monthly meeting schedule for exchanging experiences and advice, and also engage with specialized consultants who oversee the mentorship program.

**15.8%**  
of management positions are occupied by black, mixed race and indigenous people

\*Considered director, management and coordination positions



As a Black woman working in the predominantly male field of Information Technology, I once had many limitations in my career outlook. However, participating in the Mentoring Program for Black Professionals\* has allowed me to discover the power of my ancestors, expand my knowledge base, meet exceptional colleagues with rich histories, engage in valuable exchanges with my mentor, Eduardo Simão, and, above all, have the necessary tools to take a leading role in my career and my story. Moreover, discussing racism in a corporate environment and understanding how it can be a limiting factor for the careers of so many people makes the program even richer, allowing us, mentees and mentors, to be cogs in a transformation free of prejudice.”

Tacila Nascimento, Systems Analyst

\* In the first edition, more than 100 applications were received from mentors and mentees, including three directors. A total of 7 black and 8 mixed race people were selected. The program continues into 2024.





“

**Mentoring for black professionals has been a transformative experience for me. We are having very enriching discussions about racial and career-related issues, reflecting on our role in transforming the company and our reality. For me, it's also an opportunity to see myself in a different role, not as a director or teacher (which I have been for many years), but as a partner to my mentee on this journey.”**

**Gustavo Bambini,**  
Chief Institutional Relations Officer



## Disability is not a defect

GRI 405-1

We maintained our commitment to the inclusion of people with disabilities in our workforce, offering a better work experience to this public, from attraction actions to professional development and talent retention. As a way of expanding the participation of people with disabilities at different levels, we are committed to valuing and training professionals who are studying higher education and technical education by creating an Affirmative Internship Program for People with Disabilities, publicized broadly for all courses and training periods. Furthermore, we have improved accessibility in our workshops and administrative offices, promoting active listening and empowerment actions for people with disabilities, campaigns and educational actions against ableism.

We delve deeper into initiatives to expand the inclusion of people with disabilities in MRS and one of the highlights of this journey is the creation of a pilot project to implement a practical tests for train operation, the Accessibility DOJO of Joaquim Murtinho (MG).



### STOP, LOOK, WATCH!



On the National Day of the Fight for People with Disabilities, we organized a lecture for the MRS team featuring Janaina Bernardino, a designer, customer experience specialist, and visually impaired individual. Check out the video, which was played during the lecture, where MRS professionals provide guidance for interacting with people with disabilities.

# Parental Care

GRI 401-3

## Baby on Board

We understand that parenthood goes far beyond the sexual orientation and marital status of individuals. Therefore, we support employees of any parenting model (adoptive parents, single fathers/mothers, same-sex or heterosexual couples, or any other family configuration) during this important moment of welcoming children. We provide relevant information about pregnancy, childbirth, breastfeeding, immunization, development, and first aid in group settings. In 2023, meetings were held every 21 days from March to December, lasting 90 minutes each. The program cycle has a total duration of 15 hours and allows for the formation of a network of mutual support and socialization among participants.

## Breastfeeding support room

We took another important step towards inclusion and support for our female employees with the inauguration, in 2023, of the breastfeeding support room in our administrative building in Juiz de Fora (MG). This initiative, aimed at promoting a more welcoming and inclusive work environment, provides greater comfort to mothers returning to work after maternity leave. It reflects our ongoing commitment to supporting our employees in all stages of their lives.

Breastfeeding support room in Juiz de Fora (MG)



## PARENTAL LEAVE

GRI 401-3

	2021		2022		2023	
	Men	Women	Men	Women	Men	Women
Total number of employees entitled to parental leave	5,357	791	5,529	924	5,753	1,074
Total number of employees who went on parental leave	115	12	123	22	136	20
Total number of employees who returned to work after taking parental leave	115	11	123	22	136	20
Total number of employees who returned to work after taking parental leave and remained employed twelve months after returning to work.	108	10	115	19	130	19
Return-to-work rate of employees who took parental leave	100%	91.67%	100%	100%	100%	100%
Retention rate of employees who have taken parental leave	93.91%	83.33%	93.5%	86.36%	95.59%	95.00%



# Employee training and development

GRI 3-3 MATERIAL TOPIC EMPLOYEE TRAINING AND DEVELOPMENT | GRI 404-1, 404-3

By promoting a continuous learning environment, we stimulate innovation, creativity, and the pursuit of excellence, which are fundamental pillars for long-term sustainability. Investing in the professional development of our employees demonstrates our Company's commitment to building a solid foundation for the future by forming a team that is increasingly prepared to adapt to technological advances and changes in the business environment.

In 2023, the MRS Academy continued to stimulate the development of the team, investing over BRL 15 million in qualification, improvement, certification, and development of employees from different areas, levels, and functions, covering the majority of the team.



98

**employees trained** by the Leadership Training Program, in partnership with FIA Business School.



21

**employees** completed the **Specialization in Rail Freight Transport**, in partnership with the Military Institute of Engineering (MIE);



57.6

**hours of training** per employee, on average.



**BRL 15 million+**

**invested** in qualification, improvement, certification and development actions

288

students graduated from the Railway Operations course offered by the MRS Academy, in partnership with the SENAI System of Industrial Education and Learning, in the states of Minas Gerais, Rio de Janeiro, and São Paulo.

336

employees graduated or continued their studies in the Education Incentive Program, in which MRS subsidizes part of the tuition fees for undergraduate, postgraduate, technical education, and language courses.

## Driving railway education

Knowing the positive impact that the technical vocational course can have on professional life, we trained 39 employees with technical qualifications, recognized by the Ministry of Education, between the months of June and July 2023, enabling the career progression of 80% of this audience even before completing the course. In addition to theoretical knowledge, employees worked on integrative projects, based on innovation concepts, with the aim of presenting a solution for a solution. demand identified within the company. Nine projects were presented, making the dynamics of the classes even richer and more stimulating.

## Solid knowledge on Permanent Track

We constantly seek the application of innovative methods that promote the continuous development of the team and, for technical operators, we structure training at two levels, being a theoretical part and a practical part, using a Geometric Correction Simulator, totaling 94 hours of training in 2023. Previously, training took place in the field, during breaks in which activities were carried out, and now the process is carried out continuously, allowing employees to have contact with different types of machines on the same equipment, bringing speed to the process. It is a significant evolution, with gains in agility, quality and safety in training.



### TRAINING IN 2023

**7,865**  
employees impacted<sup>1</sup>

**452,000+**  
hours of training

**1,200+**  
types of trainings

**198** IDP actions<sup>2</sup>

1. Considers all employees trained in the year 2023, including active and inactive ones;
2. Individual Development Plans

MRS team  
gathered at the  
Jundiaí plant (SP)





# Creating new railroad enthusiasts

GRI 404-1

Our Apprentice, Internship, Trainee, and Operator programs, which serve as entry points for careers at MRS, aim to stimulate professional interest in the railway industry. These programs received a boost with the participation of 487 young individuals starting their careers. In the case of trainees specifically, the 2023 class, consisting of 17 professionals, was structured to meet the need for attracting technical profiles, with the goal of developing them into specialists in various areas.

## MRS Internship Program

We believe in, and are committed to, the development of talent at the start of their careers. For those still pursuing higher education or technical education, the Internship Program is a great opportunity for learning, experiencing new things, and engaging in activities that enhance academic development. Participants have the chance to engage in significant projects that drive the railway sector and positively impact people's lives.

We offer interns a learning track developed by us to enhance their behavioral and technical knowledge. Known as the Development Track, it encompasses team integration, a development and immersion week, training, the development of a project applied to the Company, performance evaluation, and monthly follow-up meetings. Our interns also receive benefits to support their journey, such as a market-competitive internship stipend, life insurance, health plan, Wellhub (formerly Gympass), meal voucher, food voucher, and transportation allowance.



Victor Silva and Maria Andrade at the administrative unit in Juiz de Fora (MG)



# #VemSerMRS

Learn more about our career programs. Click here or access our QR Code



**343**  
active interns  
in Dec/23

**41.4%**  
of black, mixed  
race and indigenous  
interns

**55.1%**  
female interns

Over  
**12,000**  
hours of training  
performed by  
interns

47 interns located in the state of Rio de Janeiro, 243 interns in Minas Gerais, and 53 in São Paulo

In 2024, we will conduct the Affirmative Internship Program, offering 100% affirmative positions for people with disabilities.

# Benefits and remuneration

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

## Fair compensation

The MRS Compensation Policy is aligned with our values and the pursuit of commitment and motivation among our employees. We adopt market practices to ensure the long-term sustainability of the business and periodically seek specialized consulting to support our decisions.

We aim to reward employees consistently according to their roles within the organization and contribute to the company’s ability to attract, retain, and motivate individuals in pursuit of desired outcomes, while maintaining external competitiveness in compensation.

The current lowest nominal salary paid at MRS corresponds to 1.24 times the national minimum wage. The overall average nominal salary is 3.30 times the minimum wage, with men earning an average of 3.11 times the minimum wage and women earning an average of 4.39 times the

minimum wage. There is no salary (or any other) distinction based on gender or race; the difference between the average nominal salary of women and men is justified by the higher male presence in operational positions.

### Comparison of average fixed salary by gender

The criterion for presenting the data has been changed compared to the 2022 Sustainability Report, in which statutory directors were included. The table below reflects the scenario of employees hired under the CLT regime, including those on leave. Apprentices, interns, and statutory directors were not included, following the pattern of tables in the report that separate by job category. The numbers for 2022 and 2021 have been recalculated and follow the same standard to ensure comparability of information.

## COMPARISON OF AVERAGE FIXED SALARY BY GENDER (WOMEN/MEN)

	2021	2022	2023
Managers	1%	5%	2%
Specialists and Similar	-1%	0%	-3%
Analysts and Similar	-6%	-6%	-6%
Technicians	-3%	1%	2%
Assistants	7%	5%	4%
Operational	-2%	-7%	-9%
Overall MRS	43%	42%	41%

Notes:

- Fixed Salary: considers the nominal salary, without any additional amounts, as of December of the relevant year.
- Positive values (+): women's salaries higher than men's / Negative values (-): women's salaries lower than men's.

The “General MRS” line does not represent the sum of the percentages by functional category. This line represents the total average salary of women compared to the total average salary of men, regardless of functional category.

- Women's salaries appear higher than men's in the “General MRS” line because the calculation considers the average salaries of each gender. Since the highest concentration of women is in higher positions, on average, they earn more.
- The small variations between the percentages of Fixed Salary presented above and those of Fixed Salary + Variable, indicated in the Indicators Center, are due to the difference between the individual or area-specific target indicators, which are independent of gender but are considered in the calculation of Fixed Salary + Variable.



## MRS BENEFITS

- ▶ Reference health insurance in the market
- ▶ Dental insurance
- ▶ Private pension plan (MRSPrev) for all levels
- ▶ Life insurance
- ▶ Wellhub (formerly Gympass)
- ▶ Incentive to education and development (30% reimbursement on technical or higher level courses)
- ▶ Agreement with the Transport Social Service (SEST) and the Transport Learning National Service (SENAT)
- ▶ Meal ticket/food assistance
- ▶ Extra Christmas voucher
- ▶ Maternal and child assistance
- ▶ Funeral assistance
- ▶ Discounts in pharmacies
- ▶ Partnerships with language schools
- ▶ Supplementation of the employee's base salary during the first 12 months of sick leave if the INSS benefit is lower than the base salary
- ▶ Hybrid workday model: three days on-site and two in the home office
- ▶ Online and accessible Nutritional Guidance Program
- ▶ Mental Health Program with online and affordable therapy



Alexandre Nunes and  
Marcelo Prata

The MRS Compensation Policy encompasses all employees without any distinction and includes variable compensation programs and a comprehensive benefits package.

## Profit Sharing Program

Through the Profit Sharing Program (PPR), we aim to encourage the commitment of the MRS team to achieve the company's short-term goals. All employees are eligible for the program, which considers both corporate goals and specific departmental targets. These objectives encompass operational excellence, customer satisfaction, business sustainability, as well as those related to ESG (Environmental, Social, and Governance) initiatives.

## Bonus Program

This is a supplementary variable compensation program in addition to the PPR, applicable to managerial and related positions. It follows the same general rules as the PPR, differing only in the target number of salaries and performance measurement, which is individualized (individual goals). Since 2021, company leadership has had goals related to ESG themes linked to variable income.

## Labor and Union Relations:

GRI 407-1

In alignment with best practices, in 2023 managers underwent training on specific Labor and Union Relations content. Since then, the topic has been the subject of monthly discussions with managers through HR Committees held on-site and with the presence of the People Director.

## Climate Survey

GRI 404-1

We continue to build an ethical, diverse, respectful, and harmonious work environment so that people can develop their best potential. We have adopted a new market methodology, allowing us to conduct surveys more frequently and choose the most suitable frequency to continuously monitor employee engagement factors. We now use a more user-friendly and intuitive tool for employees, quicker in generating results for leadership, and allowing for different analyses of the organizational climate, as well as better comparability with the overall market and companies in the same sector.

With the change in methodology, the measurement scale also changed to a 0 to 10 scale, making it impossible to compare with results from previous years when favorability was presented in percentage format. The calculation is now based on the average of all the ratings that employees gave when responding to the questions, divided by the number of responses.

Carolina Spina, Daniele Alves and Maria Ramos at the MRS unit in Jundiaí (SP)



Employee  
adhesion:

**77.3%**

Final note: **8.3**

Notes  
Platform benchmark (836 companies): 8.1  
Benchmark of the transportation and logistics  
segment (30 companies): 8.2

## QUALITY ZONE

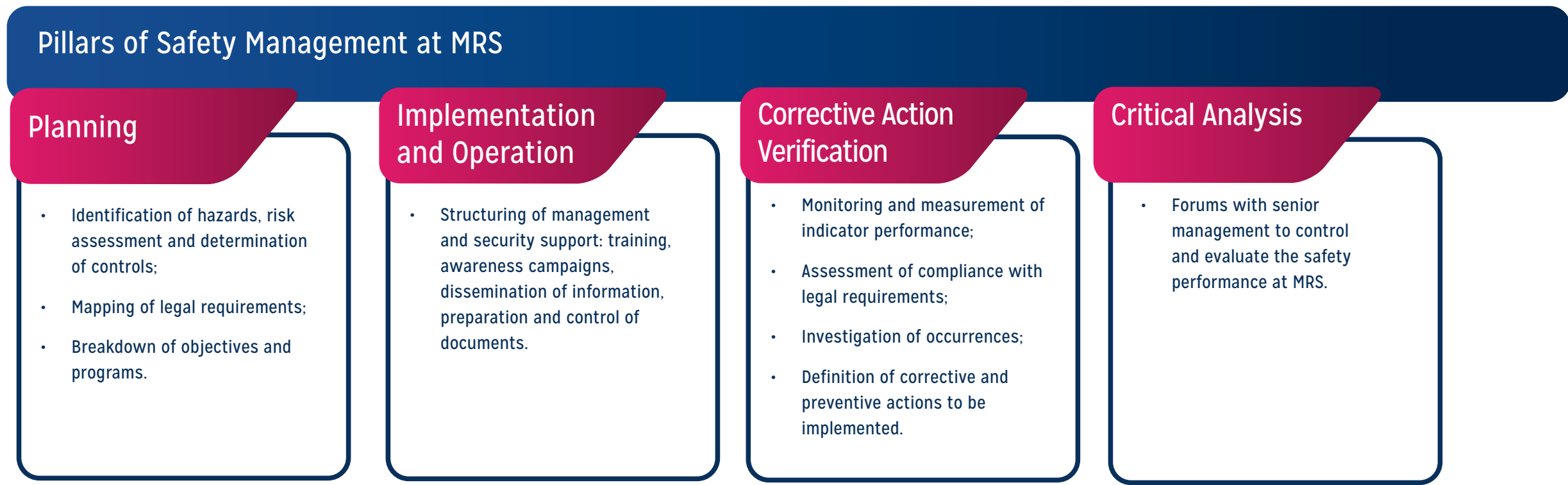
Opportunities for improvement are as valued as positive results, as they indicate where we should intensify our work with managers. We were classified in the 'Quality Zone,' according to the market scale defined for the assessment of these instruments, with the 'Excellence Zone' being the next level to be achieved. Throughout the year, managers were encouraged to register their sectoral action plans for improving the climate on the platform, an initiative that resulted in 229 plans being registered, contributing to the integration of processes and the improvement of organizational climate management mechanisms.



# HEALTH AND SAFETY

GRI 403-1

Rail freight transportation is an essential part of the country's growth infrastructure, and the safety of operations is equally crucial and strategic for us at MRS. No priority outweighs safety, and we pursue this with the commitment of every employee, at all workstations and hierarchical levels. Our management, supported by the ISO 45001:2018 standard, the Occupational Health and Safety Management System (SGSSO), and Regulatory Standards, aims for the highest standards to ensure the integrity of employees (both our own and third parties), customers, and communities near the railway.



# Occupational Safety and Health

GRI 3-3 MATERIAL TOPIC OCCUPATIONAL SAFETY | GRI 403-1, 403-5, 403-9  
SASB TR-RA320A.1

## Safety is what matters!

In 2023, we achieved our best historical accident rate (TRIR) - 0.39 - related to 10 accidents throughout the year. However, unlike in 2022, we recorded two cases with severe consequences. Although we reached a record result, the occurrence of severe cases demonstrates that the company needs to and will continue to prioritize safety as its main value, seeking to carry out continuous improvement actions.

## Overconfidence

Overconfidence leading to non-compliance with procedures has been the main factor in workplace accidents at MRS, whether due to negligence or lack of attention. Therefore, we have been working strongly

on “Consequence Management,” whose purpose is to reinforce good behaviors and their multiplying effect. Another measure is to address undesirable behaviors, making a distinction between errors and violations due to negligence. Disciplinary sanctions were applied after investigating accidents and/or personal/rail incidents that proved acts of violation. Errors, on the other hand, were related to lack of attention.

## No working while drowsy

In 2023, we began testing a technology capable of detecting fatigue and/or pre-workday sleepiness, known in the market as a “drowsiness meter.” A total of 74 employees from different locations and positions participated. After the completion of the tests in 2024, we will evaluate the benefits of the solution.

Wilson Pinheiro, moments before starting road maintenance activities in Paranapiacaba (SP)



We recognized  
**23** own employees  
with the “Value in  
Safety” award



## Accident rate

SASB TR-RA-320A.1

We remain committed to ensuring a high level of safety on the railway network, and it is thanks to these ongoing efforts that we have been able to maintain occupational safety indicators in line with the best global practices.

### OCCUPATIONAL ACCIDENTS

	2021	2022	2023
Accident figures	14	17	10
Accident Rate/ Total Recorded Incident Rate (TRIR)	0.63	0.74	0.39
CAF (no.)	11	14	8
SAF (no.)	3	3	2
Near Miss Frequency Rate (NMFR)	56.89	51.26	61.86
Fatality rate	-	-	-

Note: The occupational accidents rate is calculated using the formula (number of accidents x 1,000,000) / (headcount x 180), where headcount is the total number of employees (both own and third-party) and 180 represents the standard number of hours worked in a month.

### ACCIDENT RATE

	2021	2022	2023
With leave	0.49	0.61	0.31
Without leave	0.14	0.13	0.08

Note: The nature of the activity of employees most exposed to accidents on the railway involves walking and manufacturing, especially in the scope of permanent track maintenance. For this reason, accidents, even if not potentially severe, result in leave periods for the employee.

Managers are instructed to encourage teams to report 100% of events, emphasizing the importance of identifying and reporting risks as a way to prevent losses and damages. MRS provides various channels to stimulate communications by both employees and third parties.

### OCCUPATIONAL SAFETY INDICATORS

GRI 403-9

	2021	2022	2023
<b>Injuries</b>			
Injury Rate (TL)	0.09%	0.06%	0.10%
Number of injuries	20	15	24
<b>Occupational Illnesses</b>			
Occupational Illness Rate (TODO)	0.01%	0.02%	0.03%
Number of occupational illnesses	1	4	9
<b>Days lost</b>			
Lost days rate	1.77%	1.42%	1.36%
Number of lost days	38,698	37,143	33,182
<b>Absenteeism</b>			
Absenteeism rate	3.62%	3.56%	3.06%
Scheduled hours to work	15,087,080	15,708,660	16,781,560

## OUR INSTRUMENTS TO STIMULATE RECORDS



### Risk and Loss Statement (CRP) and Personal Incident Log:

CRP inputs through an online form, which can be made by the complainant or by a designated employee. Personal incidents are recorded in a system specific for that purpose.



### Right to Safe Work:

Forms made available at the service fronts to meet the needs of employees who do not feel safe enough to perform an activity.



### MRS Whistleblowing Channel:

Email: [mrs@canaldedenuncias.com.br](mailto:mrs@canaldedenuncias.com.br)  
Toll-free number.

Open channels for all stakeholders, advertised on the MRS website, on the intranet, and on the company's official social media channels.

## Always training and empowering

We fulfilled our commitment and continued experiential training with the opening of four more Safety Dojos (spaces dedicated to reflection and awareness about safety) in the cities of Belo Horizonte (MG), Joaquim Murtinho (MG), Volta Redonda (RJ), and Jundiaí (SP). With this, we now have six spaces exclusively dedicated to technical training and simulations of real situations to prevent workplace accidents. The other two are located in Bom Jardim de Minas (MG) and Barra do Piraí (RJ).

## Safety Workshop

We held four editions of the traditional “Safety Workshop”, this time in Belo Horizonte (MG), Conselheiro Lafaiete (MG), Vassouras (RJ), and Atibaia (SP), with the participation of 560 employees including both staff and contractors.

## For contractors

We ended 2023 with approximately 37% of our workforce composed of contracted employees. Specific actions were directed towards them, in five safety events in Juiz de Fora (MG), São Vicente (SP), and Belo Horizonte (MG), involving over 500 participants.



STOP, LOOK, WATCH!

Do you want to know what the Security Dojo is?

## WITH YOU, WE GO SAFER

Our safety campaigns resulted in over 10,000 interactions, providing guidance on safe behavior.

### JANUARY TO MARCH

Safety is up to you.



### APRIL

Fall at Same Level and World Day for Safety and Health at Work



### JULY TO AUGUST

Campaign for preventing hand accidents



### SEPTEMBER TO DECEMBER

Safety task force



### NOVEMBER TO DECEMBER

Care for hydration and well-being





## Great works, great responsibilities

Throughout the year, we integrated 6,020 employees, both internal and outsourced, into MRS's safety management model, reflecting the challenge of ensuring everyone's safety during times of expansion and growth. To support this effort, we began experimenting with contractor management software, initially to meet the needs of partner companies in the Projects and Construction Department. Currently, 47 partner companies and 455 employees are supported by the new tool. Among the benefits observed are greater speed in the mobilization phase - two business days; ID badges with QR codes and information about employees' skills, facilitating and improving the quality of safety inspections and audits; and reports on labor responsibility that help increase legal security in the relationship between the contracting and contracted parties.

## Occupational Health

**100%** of employees **took the periodic exam** in 2023.

We inaugurated Our **8th occupational health medical center**, in the region of Itaguaí (RJ), to serve employees who work in the vicinity of the Port of Rio.

We conducted **3,277 occupational exams** in the **in-company** modality - 42.1% more than in 2022.

Note: This model adds agility, reliability, practicality, and comfort for the employees.

**10,851 occupational examinations** (admission, periodic, change of occupational risk, return to work and dismissal).

Medical center  
in Juiz de Fora  
(MG)



## Our Programs and Initiatives

### HEARING CONSERVATION PROGRAM (PCA)

**5,477** audiometric tests and audiological anamnesis according to the criteria in Annex II of NR7 - **19% more than in 2022**.

**Actions:** lectures, hearing conservation campaigns, and interventions during the Internal Week on Occupational Accident Prevention and the Environment (Sipatma) and in the Daily Health and Safety Dialogues (DDSS).

### PREVENTION PROGRAM FOR THE USE OF ALCOHOL AND OTHER DRUGS (PPAD)

**6,744** tests by the PPAD - **up 52% when compared to the previous year**.

**339,944** pre-operational breathalyzer tests for railroad conductors and operators of the Operational Control Center (CCO) - **an increase of 117% from 2022 to 2023**, following the acquisition of systemically integrated self-administered breathalyzers.

Daily Safety Dialogue on Hypertension in Barra do Piraí (RJ)



Blue November: raising awareness of prostate cancer at the Brisamar unit in Itaguaí (RJ)

### NUTRITIONAL ORIENTATION PROGRAM

**636** employees have already been through the program, totaling **1,409** video calls and **97,987** messages exchanged.

### WELLHUB (FORMERLY GYMPASS)

**3,303** members, of which **2,338** are employees, interns and apprentices and **965** are employees' dependents.

### HEALTH AND QUALITY OF LIFE CAMPAIGNS

**282** initiatives to promote health and well-being at its own health centers in Minas Gerais, Rio de Janeiro and São Paulo - **70% more than in 2022**.

**Topics:** mental health, prevention of sexually transmitted diseases, quality of restorative sleep, prevention and combat of hypertension, hand hygiene and protection, diabetes, eye health, prevention and control of cholesterol, venomous animals, first aid, breast cancer (Pink October), prostate cancer (Blue November), skin cancer, and coping with heat.

### EMOTIONAL HEALTH PROGRAM

**1,360** employees used the online therapy service, with **12,463** video calls and **164,755** messages exchanged.



## MRS GAMES



In order to strengthen personal and professional relationships through sports, encourage the fight against a sedentary lifestyle, and improve the organizational climate, we launched the MRS Games in 2023.

The railway athletes competed in:

- . Seven-a-side football
- . Beach tennis
- . Mixed volleyball
- . Seated volleyball.

**1,522 participating employees**

**102 teams formed**

**Games in Minas, Rio, and São Paulo**

To liven up the game days, we created a special MRS Games playlist, and the employees themselves added their favorite songs to enliven the moments of competition and socializing.

The second edition is already guaranteed for 2024, including new sports.



“The atmosphere was relaxed and joy took over the games. The competitive spirit was present, but above all, it was a time of great fun for us, employees, and for our families, who were able to closely watch our games. If the first edition was a success, I am sure that my colleagues are all highly anticipating the next ones. I have already confirmed my participation as a coach again.”

Diego Hauck, Coordinator of Organizational Structure and People Analytics



### STOP, LOOK, WATCH!



See how the atmosphere was during the games



Check out the champions of each sport

Beach Tennis in Juiz de Fora (MG)



Football in Santos (SP)



Football in Barra do Piraí (RJ)



Volleyball in Mogi das Cruzes (SP)



Football in Belo Horizonte (MG)



Sitting Volleyball in Barra do Piraí (RJ)





## CHRONIC DISEASE PREVENTION AND GUIDANCE PROGRAM

**2,728** employees identified with alterations in their exams received individual guidance during their periodic check-ups on how to change their lifestyle and improve their quality of life.

## FLU VACCINATION CAMPAIGN

Annual for employees and dependents.

We expanded the coverage of the Unified Health System (SUS), contributing to the protection of **5,003** people.

In joint efforts with the SUS, we also helped update the vaccination cards of our employees, immunizing approximately **600** professionals.

Rollover simulator used during the Sipatma in Juiz de Fora (MG)



## INTERNAL WEEK ON OCCUPATIONAL ACCIDENT PREVENTION AND THE ENVIRONMENT (SIPATMA)

Slogan: **“Safety is up to you”**

From May 9 to 12, employees were mobilized to reflect on accident prevention, as part of Yellow May, a movement focused on traffic safety.

**Actions:** online lectures and interactive activities on hearing health and environmental issues with stands, games and the use of simulators addressed risk perception, active care and the right to work safely.



**STOP, LOOK, WATCH!**



Living a nightmare in the rollover simulator



# Railway safety and accident prevention

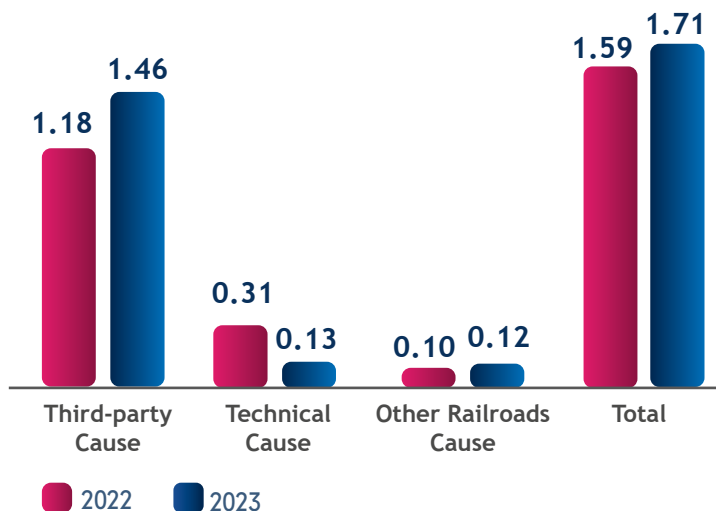
GRI 3-3 MATERIAL TOPIC: RAILWAY SAFETY AND ACCIDENT PREVENTION | GRI 403-2, 403-7

SASB TR-RA-540A.1, SASB TR-RA-540A.2

Our railway safety indices remain aligned with those of the leading first-class North American railroads. However, there was a decline in the indicator compared to 2022: from 1.59 accidents per billion GTK (gross ton-kilometer) to 1.71 in 2023. This is strictly related to accidents involving the community, primarily caused by reckless behavior.

In 2023, 156 railway incidents were recorded in the community, including 52 collisions (collision between train and road vehicles) and 104 pedestrian collisions (collision between train and people). The number corresponds to 85% of the total occurrences of the year. In 2022, we had a total of 102 occurrences.

## EVOLUTION OF THE ACCIDENT RATE (per billion TKB)



## Historic reduction in accidents due to operational failures

On the other hand, we achieved our best historical performance in accidents caused by operational failures and/or railway assets, reducing the challenging result from 2022 – from 0.31 to 0.13 accidents per billion TKB in 2023. Despite the increase in production for the year – a 14.2% rise in total gross tonnage transported in 2022, considering both our own volume and that of other railways – there was a reduction in accidents: a 58% decrease in the “technical cause” accident rate. This result reflects the operational reliability and asset quality of MRS, positioning it as one of the safest and most efficient railways in the world.

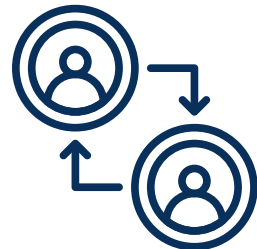


## ELIMINATION OF URBAN CONFLICTS

As a complement to safety actions aimed at communities near the railway, we invested over BRL 80 million in projects to eliminate urban conflicts, revitalize and maintain level crossings, and construct/rebuild fencing walls along the railway's easement strip.

## Full focus on awareness

Amidst the scenario involving third parties in 2023, we invested in strengthening the safety culture through traffic awareness and education: we mobilized extra escort teams equipped with dedicated vehicles and guards at level crossings with higher criticality in records of accidents and collisions. Additionally, we organized socio-educational activities in municipal public schools and conducted overt actions in the railway easement strip in the municipalities of Brumadinho (MG), Mário Campos (MG), Congonhas (MG), Santos Dumont (MG), Juiz de Fora (MG), Paraíba do Sul (RJ), Três Rios (RJ), Barra Mansa (RJ), and Nova Iguaçu (RJ). In total, there were six escort teams with dedicated vehicles and two guards positioned at level crossings with a concentration of accidents. The operation is ongoing, demonstrating our commitment to community safety. The work was focused on communities with a higher incidence of accidents in 20 cities, involving a total of 6,465 people.



**Social mobilization with broad support:** we remain committed to external awareness campaigns, employing various approaches, from “face-to-face” interactions to publications in widely circulated media outlets such as radio and TV channels, as well as digital platforms like Instagram, Facebook, and YouTube.

## JOINT FACE-TO-FACE INITIATIVES

- ▶▶▶ **1 educational blitz** in Suzano (SP), with support from the State Highway Police and the Municipal Traffic Department.
- ▶▶▶ **5 outreach actions** featuring informative materials, banners, and sound trucks promoted by leading local radio stations with high youth audience engagement, involved in 78% of the accidents.
- ▶▶▶ **1 action** in Juiz de Fora (MG) during **National Traffic Week**, with the support of ANTT technicians and the municipality’s traffic agents.
- ▶▶▶ **1 lecture on “Railway Safety”** taught at the São José Educational Foundation, in Santos Dumont (MG), with 190 students in ATTENDANCE.
- ▶▶▶ **1 visit by students from the municipal network** to the Security Dojo of Bom Jardim de Minas (MG).



Action for the Prevention of Accidents during School Holidays in Public Schools – Suzano (SP)



## STILL REGARDING OUR INITIATIVES

### Mobilization in tourist events

In various tourist-concentrated municipalities, at different times of the year – such as the Costa Verde (RJ) between December and February, and Aparecida (SP) during the religious holiday of the patron saint in October – we deploy escort teams to control and organize the flow of people at level crossings.

### Pamphleteering

Daily pamphleteering actions at the thousands of level crossings, covering the 1,643 km of railway lines and their surroundings, also including establishments selling alcoholic beverages.



Juiz de Fora (MG)

### “Open Space”

Three events with the participation of 124 community leaders for understanding and feedback on social demands in Juiz de Fora (MG), Vassouras (RJ), and Cubatão (SP).



Juiz de Fora (MG)



Vassouras (RJ)



Cubatão (SP)

### In the press



**A radio campaign with the slogan “Your life is worth more than 3 minutes” featuring approximately 1,050 airings** in the municipalities of Santos Dumont (MG), Juiz de Fora (MG), Santana do Deserto (MG), Paraíba do Sul (RJ), Três Rios (RJ), Volta Redonda (RJ), Barra Mansa (RJ), Mendes (RJ), Japeri (RJ), Itaguaí (RJ), Guararema (SP) and Suzano (SP).



**44 positive mentions** on the topic of railway safety on television and internet news portals.



**4.3 million users** reached with safety content on social media: approximately 24,000 interactions and 4,700 views of audiovisual content, mainly on YouTube.



Awareness Campaign at the Municipal School Augustinha Raphaela Maida Molteni in Suzano (SP)



Yellow May/ Traffic Week - Itaguaí (RJ)



Community meeting in the Vila Esperança District, in the Municipality of Santos Dumont (MG): we presented to pedestrians the viewpoint of the train engineer as they approached the level crossing to help them understand the reaction time and stopping distance of the locomotive in emergencies.



Traffic Week - Santos Dumont (MG)





# SOCIETY

GRI 3-3 – MATERIAL TOPIC: RELATIONSHIP WITH SURROUNDING COMMUNITIES | GRI 2-28, 202-1, 203-1, 203-2, 413-1, 413-2

The residents of the 107 municipalities where our 1,643 km railway network is present, spanning the states of Minas Gerais, Rio de Janeiro, and São Paulo, are a priority audience for MRS. Therefore, we structured a robust team responsible for maintaining an ethical and transparent relationship with public authorities, civil entities, businesses, the press, and the population of these cities, seeking to minimize the impacts caused by our operations, continuously and consistently improving.

We base our actions on initiatives that contribute to the socioeconomic and cultural development of these territories, where the presence of railway activities serves as a growth driver. It's worth highlighting that the communities located in the immediate vicinity of the railway deserve our team's special attention.



## Increasingly closer

In 2023, we undertook a comprehensive internal effort to review and implement policies, procedures, and programs supporting our social initiatives, starting with the organizational restructuring of the Institutional Relations Department. One of the outcomes was the establishment of the Social Policies Area, linked to the General Management of Environment and Social Policies, as mentioned in subsection 5.1. Environmental Management System. Consequently, new processes were incorporated to enhance our proximity to communities through an even more qualified and effective approach.

## Commitment renewal

The renewal of the concession until 2056, achieved in 2022, generated an even greater need for active, continuous, and quality dialogue with these stakeholders, given the volume of interventions and improvement works in urban mobility, expansion of railway transportation, and safety actions outlined in the investment plan.

## Planned communication

A comprehensive and well-structured relationship and communication plan was developed to ensure that individuals and communities affected by the execution of the works were heard and actively involved in the process at all project stages. This was achieved through the creation of spaces for interaction, information sharing, and collaboration in seeking solutions, such as urban mobility enhancements.

### PRE-WORK

Territorial mapping stage, multidisciplinary construction of aspects of the various stakeholders involved in the execution of the project. In addition to communicating the project, timeline, and impacts.

### DURING THE WORK

Communicating progress, changes, and impacts; Involving the community and public authorities for monitoring and addressing demands.

### POST-WORK

Evaluation of stakeholder relationships; Community satisfaction survey; Monitoring/addressing post-construction complaints (toll-free).

## Communication from start to finish

The plan also includes other methodological resources and communication actions to ensure the effectiveness of dialogue strategies. Among the initiatives are routine visits to communities, project presentation meetings, public hearings, door-to-door outreach, social sessions, distribution of pamphlets in the work area, forums with communities, WhatsApp groups with local residents, and post-work satisfaction surveys.

Active listening action with the community in Barra do Pirai (RJ)





## Two-way street

Active listening enables the MRS team to understand the local context, assess the levels of understanding and satisfaction of the communities, evaluate the implementation environment, and identify critical points that may require more immediate action.

## Planning and action

In 2023, the initiatives outlined in the plan were implemented in ongoing projects in Barra do Piraí (RJ), Cubatão (SP), and Conselheiro Lafaiete (MG), where projects for improving urban mobility face significant challenges during their execution. Through the planning process, we were able to enhance social dialogue channels, including public hearings, home visits, meetings with community leaders, social assistance, and a Communication Channel (0800-979-3636) to receive feedback, address concerns, and seek solutions to the impacts generated.



**STOP, LOOK, WATCH!**

Follow the “Bridge Work”, in Barra do Piraí (RJ)

The construction of the overpass in Conselheiro Lafaiete (MG)

### Barra do Piraí (RJ)

**4 Public Hearings held**

**300+ interactions with the community and merchants** for project presentation and active listening.

Public Hearing



Social Session for clarification on the works



### Conselheiro Lafaiete (MG)

**37 interactions with the community**

**Monthly meetings** with the local executive branch for analysis, approvals and planning of the work.

Institutional visit to the Viaduto construction site



Presentation of the Viaduto project





## Works delivered – commitments fulfilled

### Barra Mansa (RJ)

**WHAT:** Implementation of active signaling at four level crossings.

**BENEFIT:** Safe pedestrian and vehicular crossing.

**IMPROVEMENTS:** signaling, safety devices and access roads, pavement and geometry, adaptation of three pedestrian crossings with signage and flow directors, complete and continuous fencing of the easement strip.

### Ibirité (MG)

**WHAT:** Deployment of active level signaling.

**BENEFIT:** Safe pedestrian and vehicular crossing.

**IMPROVEMENTS:** active signage at the level crossing in the Várzea district, connecting Augusto Spiazzi Street to Morada da Serra Road. Installation of automatic gates, sound and light signals and vertical signs.

### Cubatão (SP)

**WHAT:** construction of an overpass

**BENEFIT:** Improving urban mobility and reducing accidents in the community; operational safety; interconnection with municipal work to build a housing complex to relocate people from the mangrove area to decent housing.

**IMPROVEMENTS:** definitive closure of the level crossing for vehicles in Vila dos Pescadores.



Furthermore: separation works were carried out in Cubatão (SP) and Santos (SP) to shield the Railway Yard, ensuring the safety of the communities and the operation.



## Initiatives that bring us closer together

**Dialogue Committees:** with the presence of local leaders, residents and representatives of the Public Administration, in the search for shared solutions and the promotion of mutually beneficial actions.

**Open Space:** dialog forums to strengthen relationships with local leaders, social project partners, community opinion formers and public administration representatives.

**Management of complaints and demands** from the community using a computerized system.

**Meetings with representatives of the public administration and the legislature** (councilmen) to establish partnerships for mutually beneficial actions.

**Awareness-raising actions** to promote safe behavior and accident prevention.

**Investments for accident prevention**, such as improvements to level crossings for vehicles and pedestrians, and construction of special works of art (overpasses, walkways, and fences).

**Actions to promote dialogue and mitigate negative impacts** related to the execution of works.

**Socio-cultural and Sports Investments** in communities intersected by the railroad, through incentive-based resources.

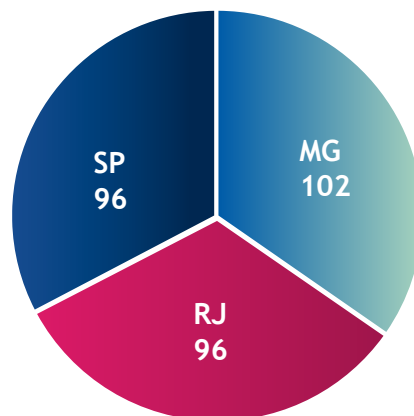
**Donations and sponsorships with own resources** for relationship actions with community leaders and institutions.

## Dialogue Committees

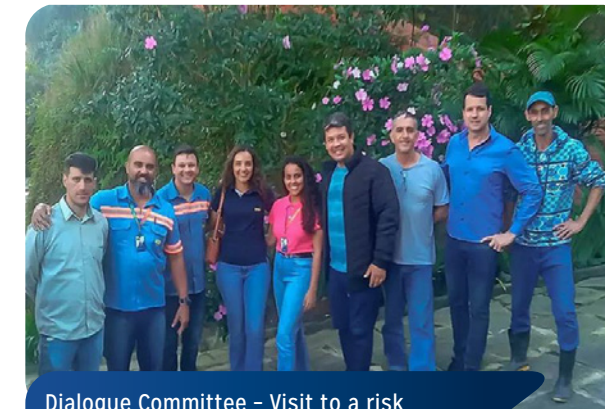
337 meetings

**Focus:** alignment of community demands, such as those registered on the toll-free channel, follow-up and search for shared solutions.

## DIALOGUE COMMITTEES (Number of Committees)



Dialogue Committee - Community of the Industrial District - Juiz de Fora (MG)



Dialogue Committee - Visit to a risk area with the city hall of Eng. Paulo de Frontin (RJ)



Dialogue Committee - Secretary of Culture - Volta Redonda (RJ)



Dialogue Committee - Housing Secretariat - Franco da Rocha (SP)

## Social Management Manual

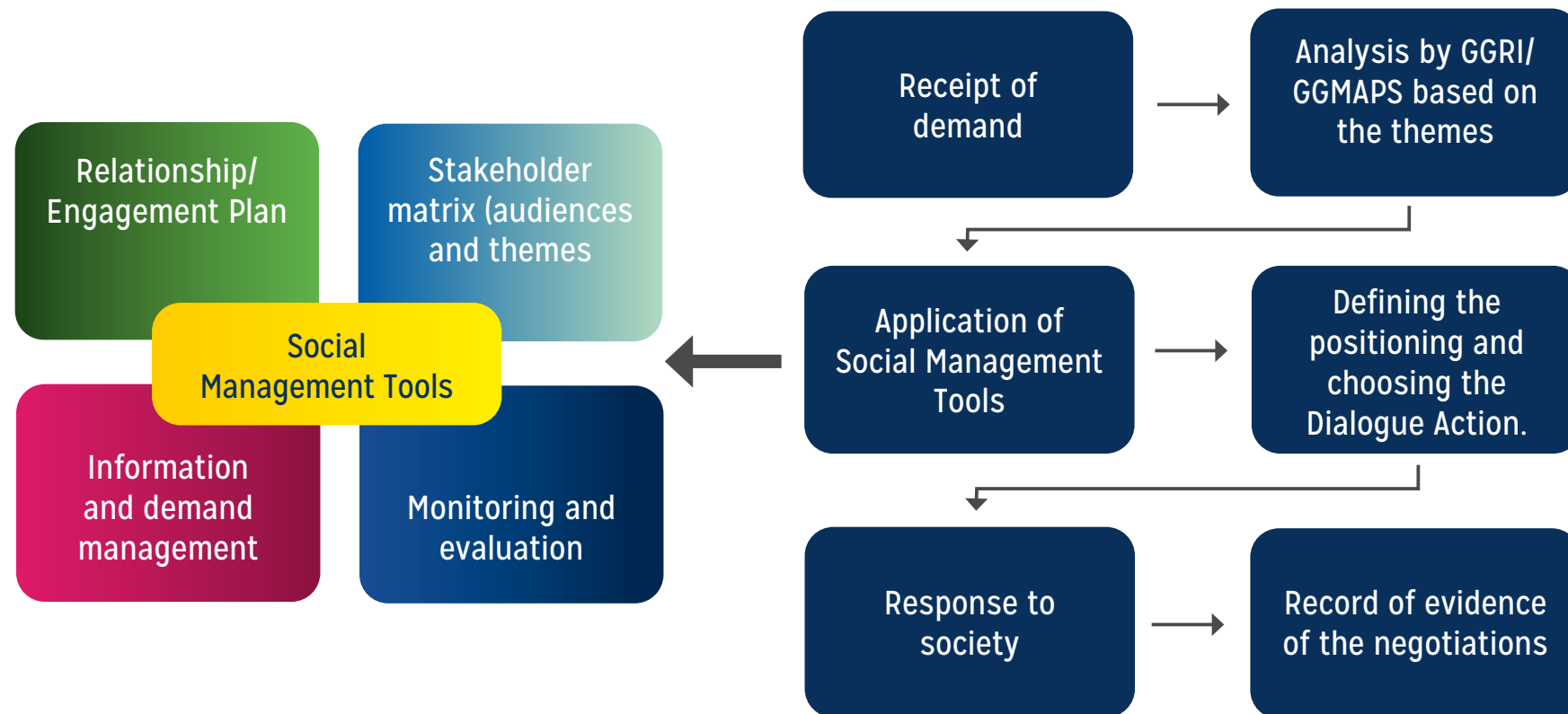
In 2023, we began to develop the Social Management Manual, a document aimed at establishing the Company's guidelines and practices for the development of social action strategies, promoting continuously ethical and sustainable management. The Manual will include managerial and normative procedures, as well as the Social and Institutional Management Dashboard. Through the dashboard, it will be possible to track activities and collect data and information to be accountable to society about how social impacts are being addressed.

Our social and institutional management structure encompasses all processes of social and institutional dialogue, investments, and impact management. The development of the Manual continues in 2024, with the definition of indicators to monitor and evaluate the effectiveness of actions and identify opportunities for improvement.

## Social Dialogue, our way of integrating

Our railway operations in 107 municipalities across the country aim to strengthen relationships of trust and legitimize dialogue as an integral and fundamental part of our business. We have revamped the entire Social Dialogue process to enhance and expand the tools that facilitate transparent interactions, aligned with our principles of integrity and ethics, and in accordance with the guidelines of the Code of Ethical Conduct and applicable legislation.

### GENERAL FLOW OF SOCIAL DIALOGUE



#### STAKEHOLDERS

- Public authorities
- Communities
- Community Leaders
- Entities (organised civil society)

#### INPUT CHANNELS

- Site
- 0800
- Phone (team)
- Email (team)
- Official letter
- Personal contact

#### THEMES

- Impacts of the Operation
- Social and environmental responsibility
- Territorial development
- Involuntary relocation
- Urban Mobility

#### DIALOGUE ACTIONS

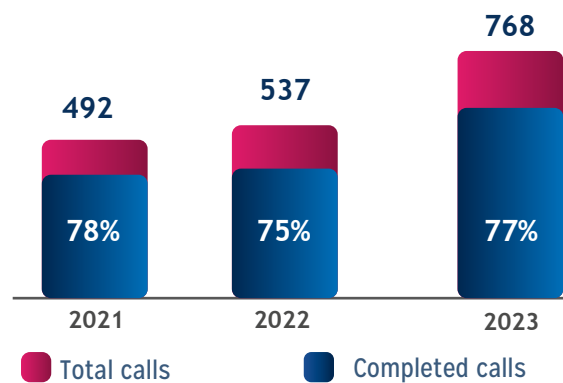
- Toll-free Channel
- Committees
- Open Space
- MRS Magazine
- Direct Dialogue
- Public hearings



# Management of Complaints and Demands

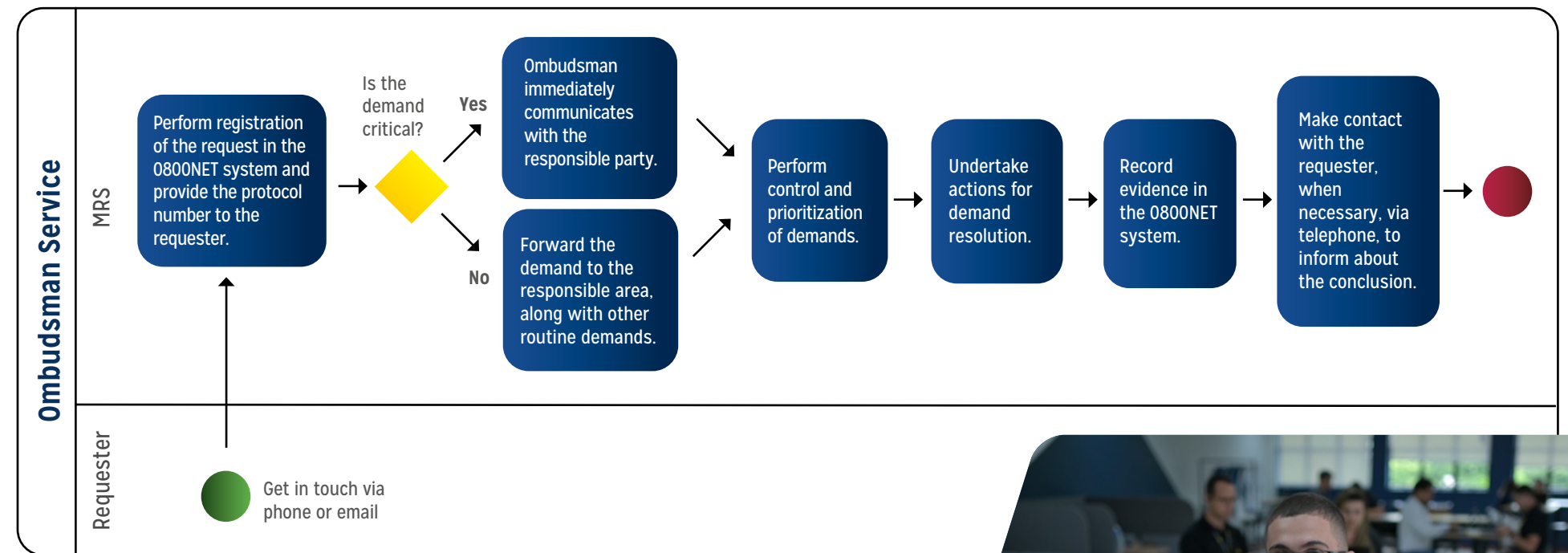
We encourage dialogue and the shared search for solutions to minimize the impacts of railway operations, with the primary tool being the 0800NET System, implemented in 2012. Through this system, we register, monitor, store, and control the entire process. Our “Manual for Handling Complaints and Demands” involves all internal interface areas.

## 0800NET CALLS

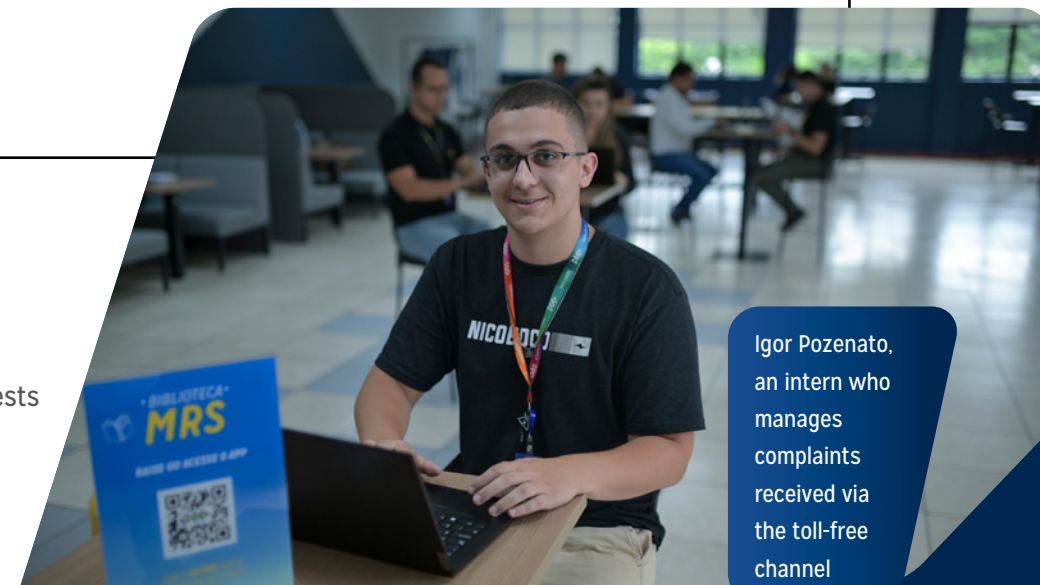


\* Note: The criteria for presenting the results have been changed compared to the 2022 Sustainability Report, which considered the period from January to September. This was because it was considered that, from September onwards, there would not be enough time to resolve some of the more complex calls by the end of the year in question. In the table above, the total period of the year is being considered, to conform to the period portrayed in the Sustainability Report (Jan. 1 to Dec. 31). With the change, it is natural that the percentage of calls answered will be a little lower than what had been reported, precisely because it covers calls opened throughout the current year. The figures for 2022 and 2021 have been recalculated and follow the same pattern to ensure comparability of information.

## FLOW OF RESPONSE TO COMMUNITY COMPLAINTS AND DEMANDS



Despite the increase of about 43% in the number of calls compared to the year 2022, the percentage of calls answered was higher in 2023. When comparing the results of 2023 with those of 2021, there is only a 1 percentage point reduction in response, despite a 56% higher volume of calls. The performance in response underscores the attention given to community demands and the commitment of our entire team to address them. Examples of service requests received include mowing, weeding, and pruning of trees, maintenance of easement strip, walkways, and level crossings, as well as noise and impact from construction works.

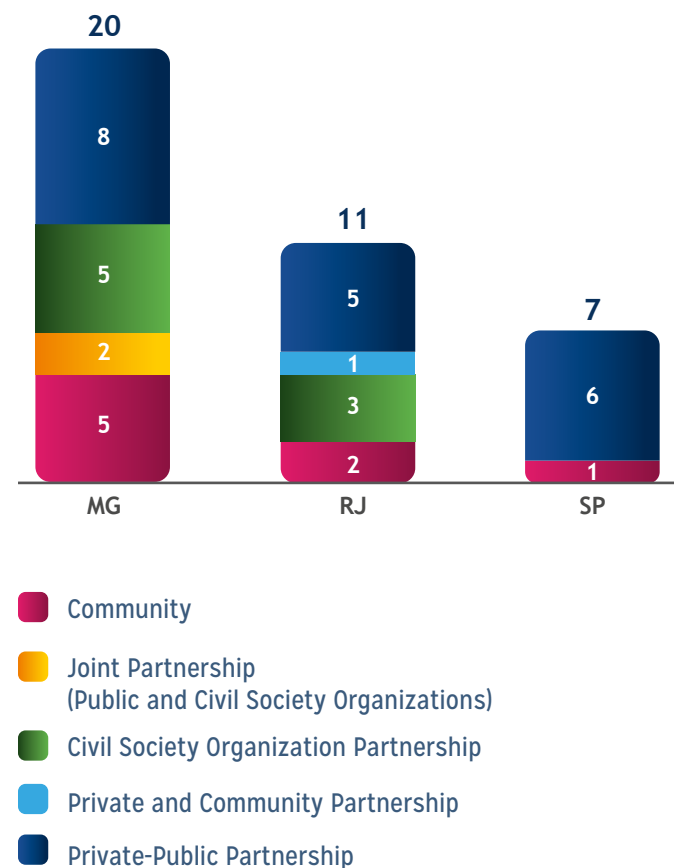


Igor Pozenato, an intern who manages complaints received via the toll-free channel



## Partnerships and Sponsorships

We established 38 partnerships with municipalities and local stakeholders in the states of São Paulo, Minas Gerais, and Rio de Janeiro.



## Transforming spaces

The residents of São Benedito district in Conselheiro Lafaiete (MG) gained a complete leisure area with a walking path, socializing area, bike path, and football field. The place, previously used as a parking lot, scrap metal yard, and point for illegal disposal of debris, was completely isolated from the railway platform by a fence. The new square, delivered by MRS to the community, has become a meeting point, attracting people of all ages, offering well-being and safety, including for railway operations.

**2,934 m<sup>2</sup>**  
the largest community square ever built by MRS

**80 linear meters**  
of railway line fence

Furthermore: a BMX track, interactive gaming tables, a football field, a walking path, gym equipment, and playground equipment.



This allowed for a remarkable and improved image of the district entrance, providing a safe space for people. The community has become engaged in sports activities.”

Joanita do Carmo Vitorino,  
President of the São Benedito district Residents’ Association

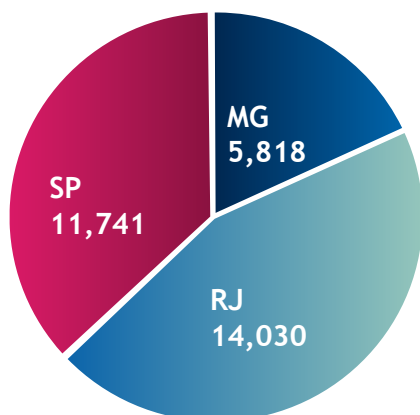


## Celebrate

Committed to improving its social impact through structural actions, MRS also pays close attention to short-term initiatives, providing direct assistance, emergency response, and support for community events, aiming to strengthen ties with communities. We pay special attention to popularly celebrated holidays.

In 2023, community events for Easter, Children's Day, and Christmas resulted in the distribution of 31,610 items, including staple food baskets, boxes of chocolate, toys, and school supplies, to 36 interface municipalities. The donations also included an educational card game with information about safety and environmental protection, produced internally and distributed to the communities.

### DONATION SUMMARIES (number of donations)



Musical Education Project at Instituto Padre Antônio in Marias Barbosa (MG), funded by FIA



Sports Support in São João de Meriti (RJ) - Semear Sports Project



Incentivized Project Arte e Vida em Movimento - Jiu-jitsu Classes for Children in Três Rios (RJ)



Creating legacies through incentive laws

**BRL 100 million+**  
invested between 2012 and 2023

**BRL 23 million**  
invested in 2023

**67**  
incentive-based projects

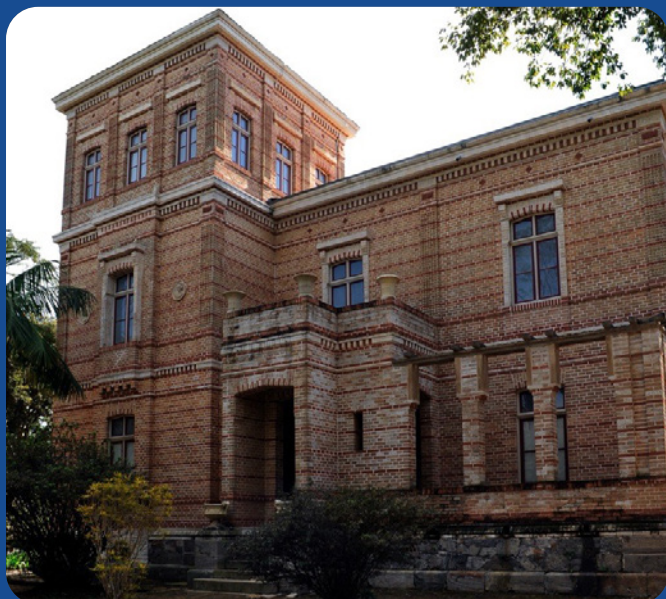
Between 2012 and 2023, we allocated BRL 100.8 million for the execution of incentive-based projects through federal laws related to health, social issues, culture, and sports. In 2023 alone, BRL 23 million were allocated to 67 projects, including: 19 cultural projects supported by the Federal Culture Law; 7 sports projects supported by the Federal Sports Incentive Law; 6 projects supporting health care for people with disabilities; 2 projects supporting oncological care; 18 projects through the Childhood and Adolescence Fund; and 15 projects via the Elderly Fund.



## CULTURE INCENTIVE LAW HIGHLIGHTS

### MINAS GERAIS:

We invested BRL 1.4 million in the Rehabilitation Project of the Mariano Procópio Museum in Juiz de Fora (MG), which houses the second largest collection of the Brazilian Empire, with approximately 53,000 items. The BNDES initiative “Rescuing History” is the largest program for preserving memory and historical heritage ever carried out in the country. Additionally, in Minas Gerais, we are supporting the restoration works of the railway stations of Santos Dumont and Souza Aguiar, with an expected completion date in 2024.



Mariano Procópio Museum, Juiz de Fora (MG)



Souza Aguiar Station, Simão Pereira (MG)

### RIO DE JANEIRO:

On December 1, 2023, we inaugurated the restoration of the Engenheiro Paulo de Frontin Railway Station. The project, valued at BRL 3.7 million, started in 2020 and was fully sponsored by MRS. With ample space, the facility has the potential to offer courses in handicrafts, music lessons, theater, and other cultural and artistic activities.



Railway Station, Engenheiro Paulo de Frontin (RJ)

Furthermore:  
In 2023, through the same BNDES program, we initiated two restoration projects. The first one is the Taubaté Railway Station (SP), and the second is the Barão de Sahy Manor in Mangaratiba (RJ).



### STOP, LOOK, WATCH!



MRS, EDP, Gestamp MRS, EDP, Gestamp and BNDES invest in the revitalization of the Taubaté Railway Complex (SP)



## HOW WE SELECT OUR PROJECTS

The process of analyzing and allocating MRS resources is conducted systematically and involves multiple levels of approval to ensure transparency and adherence to applicable legal requirements. Validated criteria established by the Board are used for project evaluation and selection, ensuring the quality and relevance of the supported initiatives.

### Investments for everyone: from children to the elderly

Resources allocated to the Childhood and Adolescence Fund (FIA) and the Elderly Fund consider the reputation of the beneficiary entities and seek strategic partnerships with Municipal Councils in the covered areas. This practice has a social impact on underprivileged communities and directly contributes to the

human development of the regions served, as well as strengthens the Councils, entities that truly understand Municipal needs and address local demands.

### Advancing public health

Regarding resources directed to the National Program to Support Oncological Care (Pronon) and the National Program to Support Health Care for People with Disabilities (Pronas/PCD), we adopt a broad and strategic approach. In addition to the acquisition of equipment and devices to improve and expand oncological diagnosis and rehabilitation services, we also invest in the training of professionals in the field, contributing to the advancement of public health in the country.

### Sports is life

Regarding sports projects, our approach values both the immediate impact and the legacy for the communities served. To achieve this, we consider their nature, expected impact, and total potential beneficiaries. We prioritize initiatives that promote the development of sports centers in communities with high social vulnerability, offering activities during school hours, providing opportunities for learning, integration, and personal development over an extended period, typically between 10 and 12 months.

### Culture and history

In the cultural sphere, we are committed to preserving the memory related to railway heritage by supporting restoration and conservation projects of railway assets and spaces.



## Easement strip and housing issues

Ensuring the safety and promoting the well-being of communities near our easement strip requires close attention and ongoing actions. In 2023, we restructured internal processes with the creation of the Social Policies Area, preceded by the creation of the Interferences and Real Estate Business Area the previous year. Under the new structure, the managerial procedure that regulates the Relocation Process of People in situations of social vulnerability was implemented. Since then, socioeconomic studies on properties treated as the subject of relocations/evacuations in the easement strip or expropriations have been applied, and in cases of social vulnerability, assistance plans are developed, and the technical team works to support families, minimizing the impacts of relocation and monitoring their socioeconomic indicators.

In this work front, efforts are focused on coordinating with local government and partnerships that enable alternatives for reestablishing housing conditions for these families.

### Easement strip management and work methodology

In addition to technical field teams that work daily on monitoring the strip and mapping occupations, we seek technologies in the market and are developing a pilot project for satellite and drone monitoring. With this, we gain even more agility in guaranteeing the integrity of the easement strip and the safety of communities near the railway. In all processes of clearing the easement strip, we use a criticality matrix that allows for multidisciplinary evaluation of sections requiring swift interventions, thus structuring projects for the relocation of families.

### Recognized and awarded

A successful example is the Relocation and Resettlement Project in Guarujá (SP), the Prainha community. In partnership with the municipality, we have collaborated in resettling over 400 families since 2023, with completion in 2024. The project was recognized by the National Land Transport Agency (ANTT) in the

2023 Highlights Award due to the improvement in the population's quality of life, ensuring access to basic infrastructure and sanitation services. For the railway operation, the transfer of families resulted in a significant reduction in operational risks in the railway/yard/port flow. The public-private partnership, based on clear definition of roles and responsibilities, was decisive for a new territorial dynamic, benefiting all parties.

### In Suzano (SP)

The easement strip clearing project in Suzano (SP), started in 2023 and scheduled for completion in February 2024, includes specialized services for social diagnosis (registration/relationship). The diagnostic stage is essential for MRS to understand the profile of the impacted public, better plan the relocation phases, and propose alternatives more aligned with local demand. The partnership with the municipality will generate significant advances in the relocation and resettlement process of families.

District  
Monte Sion -  
Suzano (SP)



Jardim Restinga  
District -  
Suzano (SP)





## Expropriation and impact management - works

For us, it is essential to manage expropriations and conduct impact management in communities along the railways, in order to ensure that expropriations occur in a fair and transparent manner, respecting the rights of individuals, minimizing socioeconomic and environmental impacts, through dialogue and participation of affected communities, and providing fair compensation.

In 2022/2023

**95**  
families  
expropriated

**23**  
merchants  
indemnified

Note: The area expropriation process does not end pre-construction. The Land Management team also maps and monitors residences adjacent to the works to anticipate risks.

So far, none of the evictions have been carried out with conflict. All negotiations are always guided by dialogue and focused on mutual benefit. Managing the impacts on buildings near the worksites is a measure implemented by MRS, which is controlled through the execution of precautionary reports on the properties.

### FOR A MORE HUMAN AND DIGNIFIED APPROACH

One of the most emblematic cases that illustrates our careful work in expropriations is that of Jorge Lúcio Ferreira, a resident of Conselheiro Lafaiete (MG). In September 2023, he received the deed for his new residence after MRS contributed over BRL 93,600 to purchase the property valued at BRL 230,000. "I am very grateful to MRS for welcoming me and giving me a new home. You were very generous and humane with me and with other people who were in situations of social vulnerability. You changed my life for the better and gave me hope and dignity. Thank you very much for everything!", declared Jorge.

## Requalification

The remaining vacant areas, following the relocation of populations, continue to receive our attention through investments in requalification projects to provide the population with appropriate and safe use of these urban spaces, such as transforming them into green areas, parks, and gardens.

Leisure square  
built in the Cantão  
neighborhood, in  
Barra do Piraí (RJ)



# Rights of indigenous and traditional populations

GRI 411-1

## Each person is unique and all are important

Caring for traditional peoples is crucial for preserving cultural diversity and promoting social justice. We seek to enhance our social relationship processes by respecting the specificities of each community and region.

In 2023, our technical teams conducted territorial mapping and identified indigenous peoples, quilombola communities, and other traditional communities neighboring our railway operations in the municipalities within our area of operation. This survey is a fundamental step in mapping potential impacts of operations on these communities and supporting the structuring of the company's environmental licensing processes, as well as in strengthening relationships and improving communication with these groups.

### 1. Quilombola Communities

A preliminary diagnosis, based on information obtained from the websites of the Ministry of Development and the Palmares Foundation, identified 56 communities in the vicinity of the railway line, for example:

- Community of Tamandaré, Guaratinguetá/SP - 1km;
- Community of Santana, Santana/RJ - 1.6 km;
- Jaraguá Community, Nazareno/MG - 2.5 km;
- Bacanal, Mato Félix and Casinhas Communities, Jeceaba/MG - 1 km;
- Chacrinha dos Pretos Community, Belo Vale/MG - 0.4 km;
- Rodrigues Community, Brumadinho/MG - 1 km;
- Community of Sapé, Brumadinho/MG - 0.2 km;
- Community of Marinhos, Brumadinho/MG - 0.4 km;
- Community of Candendês, Barbacena/MG - 3 km;
- Community of Baú, Antônio Carlos/ MG - 1 km;
- Community of Cachoeirinha, Santos Dumont/ MG - 0.4 km;
- Caixa d'Água Community, Barra do Piraí/MG - 0.4 km;
- Communities of Fazenda Santa Justina and Santa Isabel, Mangaratiba/RJ - 2.5 km;
- Community of Serrinha, Rio de Janeiro/RJ - 1 km;
- Community of São José Pinheiro, Pinheiral / RJ - 0.8 km.

\*The kilometers represent the distance of the communities from the MRS network.

### 2. Indigenous communities

We mapped, based on data from the FUNAI website, an indigenous community.

- Parque Estadual Jaraguá, in São Paulo, belonging to the Guarani ethnicity, located 1 km away

### 3. Rural Settlements

The diagnosis identified 28 rural settlements in the vicinity or intersected by the railway network. Below, we highlight those located in the immediate vicinity or traversed by the railway operation:

- PA Itapeti, Mogi das Cruzes/ SP - 0.5 km;
- PDS SANTO ÂNGELO, Mogi das Cruzes/ SP - 1.3 km;
- PA TREMEMBÉ, Tremembé/SP - adjacent to the line;
- PA FAZENDA DO SALTO, Barra Mansa/RJ - 0.3 km;
- PA IRMÃ DOROTHY, Quatis/RJ - cut by the line;
- PA TERRA DA PAZ, Piraí/RJ - 2.5 km;
- PA SABUGO, Paracambi/RJ - 0.3 km;
- PIC SANTA ALICE, Seropédica/RJ - cut by the line;
- PA BOA ESPERANÇA, Japeri/RJ - adjacent to the line;
- PA SÃO BERNARDINO, Nova Iguaçu/RJ - 2.0 km.

\*The kilometers represent the distance of the settlements from the MRS network





## Georeferencing System

To enhance the management of social and environmental information, we are developing a specific georeferencing system for environmental, community, and cultural heritage themes of these peoples, which gathers data provided by governments at the federal, state, and municipal levels, as well as current legislation. Computerization will allow quick and easy access to this information. The system will be continuously updated with research and monitoring by our teams.

## Engaging with everyone

We are developing a specific communication plan for communities and traditional peoples, taking into account the principles of Free, Prior, and Informed Consultation, as advocated by the International Labour Organization (ILO 169). Active listening will be a fundamental premise in carrying out works and managing MRS impacts in these territories. The Communication Plan will address specific aspects related to the dynamics, way of life, and cultural and social expressions of each group and will be essential for minimizing possible impacts in the implementation of new projects.

### REFERENCE DOCUMENTS

-  Palmares Cultural Foundation
-  Quilombola Certification (Palmares Cultural Foundation)
-  ILO Convention No. 169 concerning Indigenous and Tribal Peoples
-  National Foundation for Indigenous Peoples (Geoprocessing and Maps)
-  Incra





## Cultural Heritage

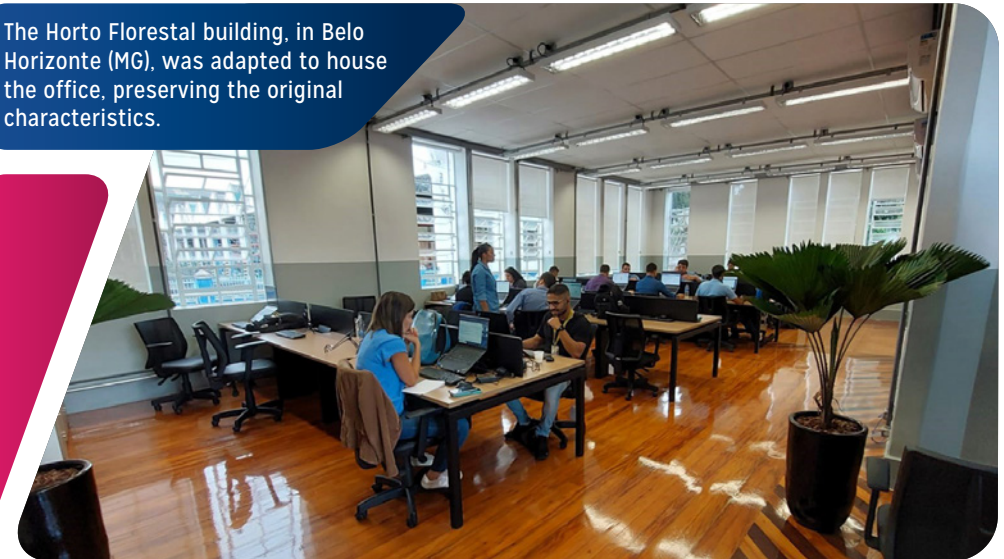
The United Nations Sustainable Development Goal (SDG) number 11 focuses on “making cities and human settlements inclusive, safe, resilient and sustainable.” Specifically, target 11.4 aims to “strengthen efforts to protect and safeguard the world’s cultural and natural heritage.”

In addition to the actions described regarding the use of cultural incentive laws to preserve the railway’s historical heritage, we also restore buildings and structures under our protection. Operational complexes that also have historical significance are being revitalized to meet safety and accessibility standards. This initiative reinforces the connection between heritage and the right to citizenship in the daily lives of employees and surrounding communities, making historical factors tangible rather than exceptional.

Revitalization of the old building in Horto Florestal in Belo Horizonte (MG).



The Horto Florestal building, in Belo Horizonte (MG), was adapted to house the office, preserving the original characteristics.



The old art deco warehouse in Horto Florestal has been restored with a new roof.



Historic structures of the operational system in São José dos Campos (SP) have been restored for current use.





## 2024 Projections

The georeferencing data system mentioned earlier will also provide information on material, immaterial, and archaeological heritage at the municipal, state, and federal levels within the territories of our area of operation. A specific diagnosis of the assets under our protection is currently being developed. This information will be part of the database, preventing any intervention without the necessary technical guidance for the preservation of these assets. The restoration of historical structures and buildings is a sustainable practice because it reduces the environmental impact of new constructions, such as waste generation and the consumption of more natural resources.

## Internal Mobilization

Our employees will be sensitized and engaged in actions to preserve cultural and environmental heritage, aiming to clarify sustainable practices for the use of historical buildings within the company's assets, considering the history of the assets, the history of MRS, and reflections on the topic.

## Institutional Relations

### Partnerships to stimulate cooperation within the sector

For us, ethical, transparent, and collaborative relationships with regulatory public bodies and civil society associations in our sector are opportunities to establish solid partnerships for the development of the railway sector, share knowledge, and improve our quality and safety standards.



## Press Relations

A good relationship with the press enables us to communicate our actions and efforts to prevent, reduce, and mitigate accidents in a clear, transparent, extensive, and comprehensive manner to our stakeholders. Therefore, we maintain close relationships with journalists and media outlets in the three states where we operate, primarily for service provision, dissemination of awareness campaigns, and educational activities.

With our own methodology for measuring and monitoring positive and negative media placements, we aim to maintain a weighted average between them through the Press Quality Index. In 2023, the average was 2.04, meaning that for every criticizing placement, two others had a positive tone. Positive placements are those that promote/strengthen the overall reputation of MRS and railway activities. The index includes articles published in nationally circulated media, highly relevant specialized publications, and regional outlets in the main cities where we operate. Last year, there were 700 MRS placements in news reports. The most prominent topic was safety, followed by infrastructure and socio-cultural support.

Luciano Meirelles,  
train operation  
instructor



Leticia Mota,  
specialist in  
Railway Safety  
Intelligence



# CUSTOMER EXPERIENCE

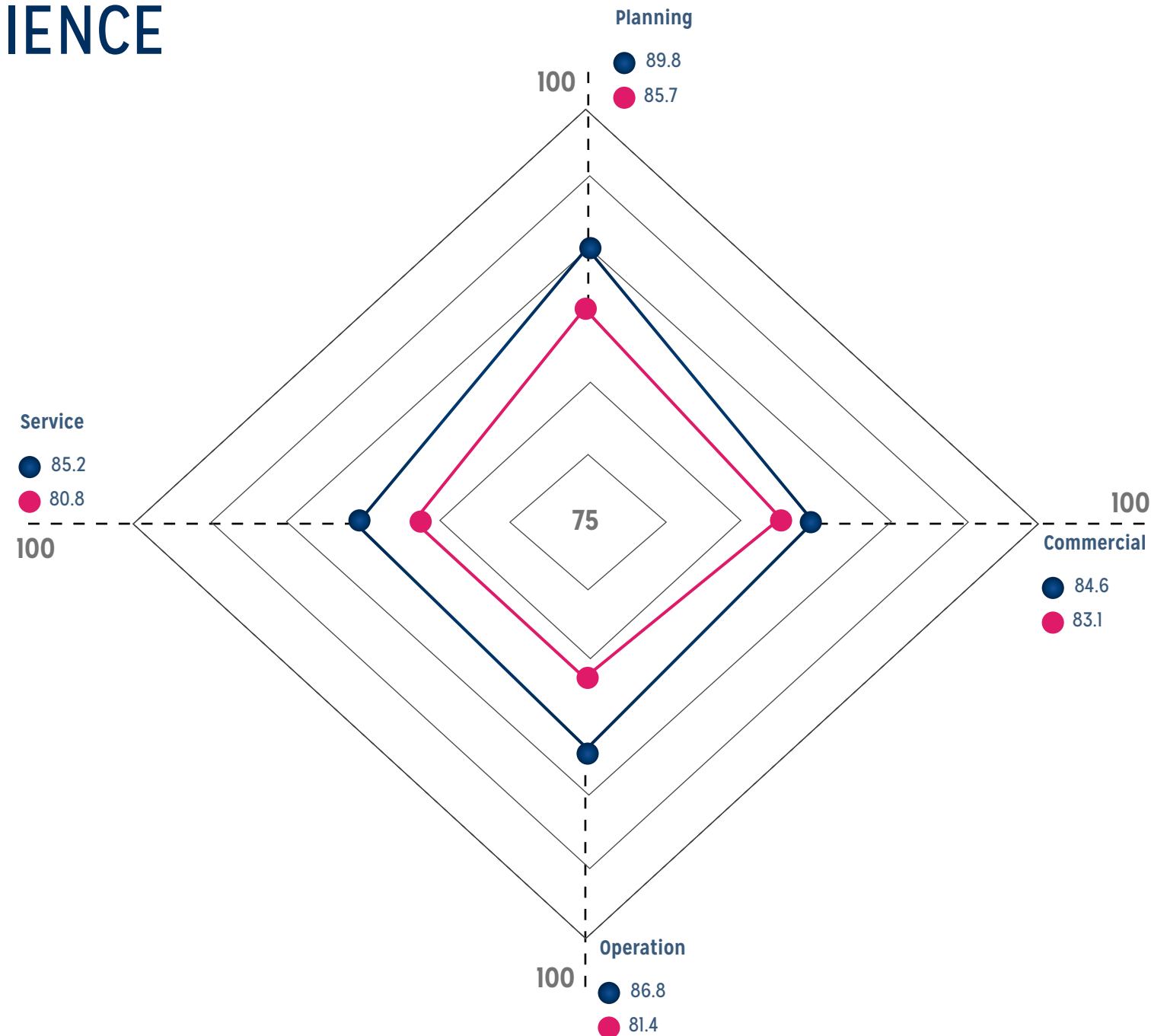
GRI 3-3 - CUSTOMER RELATIONSHIP MANAGEMENT

Establishing enduring relationships with our customers involves providing safe, high-quality transportation at competitive prices, ensuring punctuality, and delivering suitable and innovative solutions tailored to the needs of each segment. This approach not only generates more value for our customers but also fosters growth for our country.

## Satisfaction Rating

Committed to consistently achieving excellence, we conduct an annual satisfaction survey to assess the performance perceived by our General Cargo customers, identifying opportunities for improvement. In 2023, we resumed conducting the survey 100% on-site, a move widely praised by our customers, and achieved our best result since the survey began in 2018, with a score of 86.6 compared to 82.5 in 2022 and 86.3 in 2021. Given the methodology adopted, this progression demonstrates an excellent level of performance among our customers (with scores above 85).

The survey also revealed a significant improvement in the four attributes we examined (planning, operation, commercial, and service) compared to the historical average, as shown in the following figure.



In 2023, we achieved a favorability score of **86.6** from general Cargo Customers, our best result since the start of measurement.

Based on the insights gained, we developed action plans across seven work fronts to address the issues raised by our customers and create solutions aimed at enhancing the perception of exceptional service. These plans mapped out 48 actions, executed by a multidisciplinary group encompassing five general management areas. Of these actions, we completed 33 in 2023, while 6 are ongoing and 12 remain in progress.



## Complaint Monitoring and Recording

We also monitor customer perceptions through complaints registered and reported semi-annually to the National Land Transport Agency (ANTT), along with the measures implemented to mitigate any impacts. Customers can submit their complaints via the website [www.mrs.com.br/fale-conosco/](http://www.mrs.com.br/fale-conosco/) or through direct instant messages on the official social media accounts @mrslogistica.

## Customer Experience Program

The creation of the Customer Experience Area in 2023 marks the launch of the Customer Experience Program, designed with the clear purpose of providing the best experiences through the best routes, based on three pillars:

- **Technology:** A continuous pursuit of technological solutions to enhance customer service.
- **Customer-Centric Culture:** Implementation of a customer-centric culture throughout the organization, empowering our team to make daily decisions that add value for customers.
- **Voice of the Customer:** We established a dedicated pillar for active listening through satisfaction and loyalty surveys.

## Transparency and Reliability

In 2023, we provided 100% of our active customers with access to a new portal offering dashboards with detailed data on production, cycle times, loading, and unloading. We also approved the continuation of developing new functionalities to eliminate friction and provide even more convenience in daily operations.

Additionally, reinforcing our commitment to expanding our business and offering competitive and reliable integrated logistics solutions, we conducted a Satisfaction Survey regarding the Ore Projects, achieving a score of 93.

Multidisciplinary team meeting with customers at the MRS administrative headquarters in Juiz de Fora (MG)



# PARTNERSHIP WITH SUPPLIERS

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

Committed to sustainability goals, our supplier management plays a crucial role from an ESG perspective. The responsible and effective management of over 1,700 suppliers, registered on the Linkana platform, includes selecting business partners committed to sustainable practices and respect for fundamental rights.

Since 2022, before any contract or addendum is signed, suppliers undergo a background check. They must complete questionnaires and provide documents covering topics such as compliance, governance, environmental issues, social concerns, and financial health. Additionally, they are introduced to our Integrity Program tools, including the Anti-Corruption Agreement and the Code of Ethics, which they must agree to. When responses or documents deviate from standards, they are submitted for interface analysis, which may involve the company's Ethics Committee.

To enhance the monitoring of the value chain and traceability of input origins, suppliers of environmentally critical items are monitored even more closely and require approval from the Safety and Environment Area to provide services to the Company.

## Verification of sanctions and contractual clauses

The verification of suppliers includes all necessary legal requirements, with weekly monitoring of public consultations regarding national, international, and socio-environmental sanctions for all suppliers in our database. This includes checks such as Leniency Agreements, the Registry of Ineligible and Suspended Companies, the Registry of Expulsions from Federal Administration, the National Registry of Civil Convictions for Administrative Improbity and Ineligibility, the National Registry of Punished Companies, the List of Disqualified Public Officials, the List of Unfit Bidders, the List of Responsible Parties with Irregular Accounts, the General List of Disqualified Individuals, Environmental Fines and Embargoes, and the Registry of Employers with Workers in Conditions Analogous to Slavery.

Our contractual instruments mandate our suppliers' commitment to the Anti-Corruption Law, adherence to ethical and social standards, and guarantees of minimum conditions for dignified service provision.

We also include specific contractual clauses related to Human Rights, prohibiting forced, compulsory, child, and/or slave-like labor, with provisions for contract termination in case of non-compliance. These clauses and requirements apply to both the company and its subcontractors.

For all service contracts to be performed on MRS premises, all labor issues are verified, and regular submission of documents proving the payment of these obligations is required.

## Blocking Procedures

The background check platform updates public compliance consultations weekly. If any new issue arises, the supplier is blocked from proceeding with any contract or addendum until the issue is evaluated by the audit team. Extreme cases are escalated to the Ethics Committee. Currently, we verify 100% of the suppliers in our qualification base, and we have 32 companies blocked.





## Sharing ESG

In 2023, we expanded the reach of our ESG initiatives in supplier relations within our supply chain through the following initiatives:

### ESG Engagement Program

In December, we held the first edition of the ESG Engagement Program, aimed at business partners whose operations are critical from a socioenvironmental perspective. The session lasted 1 hour and 20 minutes and featured presentations by Larissa Santos, our Sustainability/ESG manager, and a professional from Linkana (our main SRM monitoring tool). We invited 85 companies, of which 21 participated. The program covered ESG concepts, highlighted MRS's requirements for its suppliers, and emphasized the importance of paying special attention to their supply chains. Another key topic discussed with the suppliers was the importance of transparency in corporate actions regarding climate change. This includes conducting greenhouse gas emission inventories and implementing actions to reduce emissions in the value chain. The discussion also addressed the disclosure of other relevant socio-environmental indicators aligned with the ESG Agenda.

### Sustainability in Supply Management

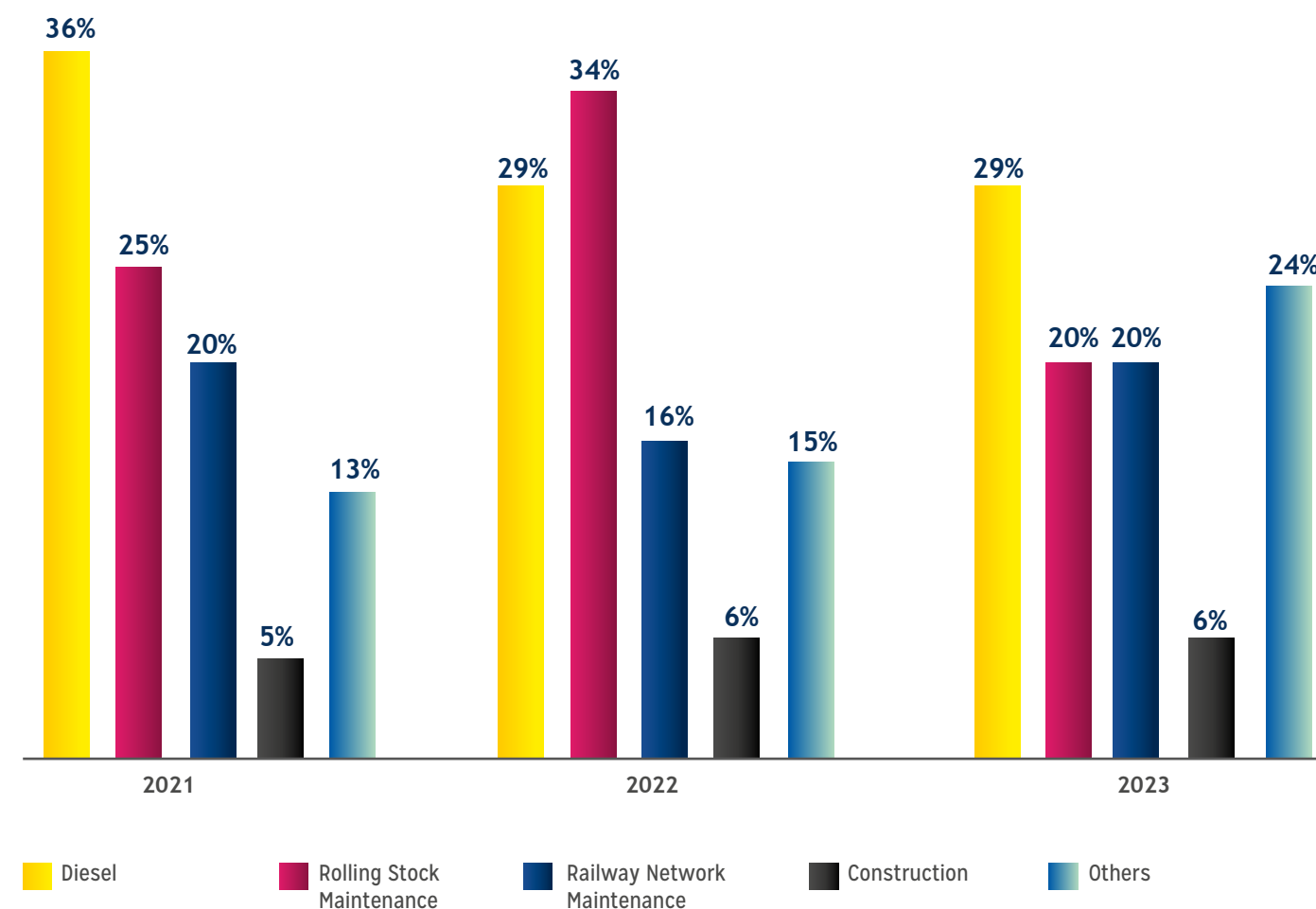
We have invested in hiring a specialized consulting firm to structure Sustainability practices in Supply Management. Based on their assessment, we will categorize suppliers by socio-environmental risk groups, outline the necessary measures for each group, and establish a specific checklist for on-site audits of those classified as critical.

### Document Management

We have developed a prototype of a document management platform to more rigorously monitor the validity of training for third-party employees working at MRS facilities. This initiative also aims to ensure compliance with labor obligations for third-party workers.

In 2023, aiming for the sustainable maintenance of our business, we conducted 50 development processes for new manufacturers of the most critical items and services for the company. This search is conducted in the market for alternative supply options, aiming to achieve savings, reduce dependency, and address obsolescence.

## SUPPLIER EXPENSES





# ATTACHMENTS



# ▶ ATTACHMENTS

## Environment

### BIOGENIC EMISSIONS

(tCO<sub>2</sub>eq)



## Social

### TOTAL EMPLOYEES BY GENDER

	2021	2022	2023
Women	795	930	1,079
Men	5,419	5,609	5,836
Total	6,214	6,539	6,915

This indicator includes: permanent own staff; temporary own staff (employees working on projects, trainees, on leave, and apprentices). It does not include interns or statutory directors.

The criterion for presenting the data has been changed compared to the 2022 Sustainability Report to adjust the report considering all employees under the CLT regime. With the change in criteria, the numbers for 2022 and 2021 were recalculated to ensure comparability of information.

### TOTAL EMPLOYEES BY REGION

GRI 2-7

State	2021	2022	2023
Minas Gerais	3,528	3,713	3,867
Rio de Janeiro	1,297	1,361	1,462
São Paulo	1,389	1,465	1,586
Total	6,214	6,539	6,915

This indicator includes: permanent own staff; temporary own staff (employees working on projects, trainees, on leave, and apprentices). It does not include interns or statutory directors.

The criterion for presenting the data has been changed compared to the 2022 Sustainability Report to adjust the report considering all employees under the CLT regime. With the change in criteria, the numbers for 2022 and 2021 were recalculated to ensure comparability of information.

The variations observed in the number of own employees in the fiscal year 2023, compared to the fiscal year ending in 2022, were mainly due to the adjustment of the operational staff to meet the volume of transport and the demands of maintaining railway assets (rolling stock and network) and the continuation of the company's structuring in response to commitments made with the concession renewal.

### TOTAL EMPLOYEES THIRD PARTIES

GRI 2-8

	2021	2022	2023
Staff	1,071	1,270	1,591
Control Center	66	65	74
Operational	147	147	150
Station, Courtyards and Terminals	118	132	132
Material Maintenance	1,551	1,628	1,527
Signaling, Telecommunications and Electrical	96	132	165
Traction, Traffic and Movement	214	251	267
Manager	0	0	0
Total	3,263	3,625	3,906

## % OF EMPLOYEES BY FUNCTIONAL CATEGORY, BY GENDER

GRI 405-1

		2021	2022	2023
Analysts and similar	Women	46.1%	47.3%	47.0%
	Men	53.9%	52.7%	53.0%
Assistants	Women	49.1%	49.0%	49.1%
	Men	50.9%	51.0%	50.9%
Specialists and Similar	Women	19.6%	21.4%	24.1%
	Men	80.4%	78.6%	75.9%
Managers	Women	19.8%	22.0%	23.8%
	Men	80.2%	78.0%	76.2%
Operational	Women	2.9%	4.1%	5.2%
	Men	97.1%	95.9%	94.8%
Technicians	Women	5.2%	5.9%	5.7%
	Men	94.8%	94.1%	94.3%

Notes:

1. This indicator includes own permanent staff and temporary staff. It does not include interns, apprentices, and statutory directors.
2. Review of the opening of the functional category that best represents the company's job structure. The figures for 2022 and 2021 have been recalculated and follow the same standard to ensure comparability of information.

## % OF EMPLOYEES BY FUNCTIONAL CATEGORY, BY AGE GROUP

GRI 405-1

		2021	2022	2023
Analysts and Similar	Under 30 years of age	37.8%	36.0%	36.6%
	30 to 50 years of age	54.3%	57.2%	5.7%
	Over 50 years of age	7.9%	6.8%	57.7%
Assistants	Under 30 years of age	43.9%	39.7%	41.4%
	30 to 50 years of age	51.1%	55.4%	53.4%
	Over 50 years of age	5.0%	4.9%	5.2%
Specialists and Similar	Under 30 years of age	9.3%	8.5%	6.9%
	30 to 50 years of age	73.8%	74.1%	77.4%
	Over 50 years of age	16.9%	17.5%	15.7%
Managers	Under 30 years of age	5.7%	4.0%	4.7%
	30 to 50 years of age	88.6%	86.2%	86.8%
	Over 50 years of age	5.7%	9.8%	8.4%
Operational	Under 30 years of age	22.9%	24.7%	25.9%
	30 to 50 years of age	68.9%	67.1%	65.5%
	Over 50 years of age	8.2%	8.2%	8.6%
Technicians	Under 30 years of age	14.1%	16.1%	16.2%
	30 to 50 years of age	72.1%	71.0%	72.3%
	Over 50 years of age	13.8%	12.9%	11.5%

Notes:

1. This indicator includes own permanent staff and temporary staff. It does not include interns, apprentices, and statutory directors.
2. Review of the opening of the functional category that best represents the company's job structure. The figures for 2022 and 2021 have been recalculated and follow the same standard to ensure comparability of information.



## % OF EMPLOYEES BY FUNCTIONAL CATEGORY, BY RACE

GRI 405-1

		2021	2022	2023
Analysts and Similar	Yellow	0.0%	0.4%	0.8%
	Mixed race	15.7%	18.3%	18.8%
	White	78.3%	73.5%	69.6%
	Not informed	2.7%	0.0%	0.0%
	Black	3.3%	4.9%	7.4%
	Indigenous	0.0%	2.9%	3.4%
Assistants	Yellow	0.0%	0.2%	0.2%
	Mixed race	29.7%	28.2%	28.9%
	White	54.6%	54.8%	55.9%
	Not informed	2.8%	0.6%	0.6%
	Black	12.9%	13.0%	11.6%
	Indigenous	0.0%	3.2%	2.7%
Specialists and Similar	Yellow	0.0%	0.6%	0.5%
	Mixed race	16.9%	19.4%	19.6%
	White	79.0%	75.2%	74.5%
	Not informed	1.5%	0.6%	0.3%
	Black	2.7%	3.4%	3.8%
	Indigenous	0.0%	0.9%	1.4%

## % OF EMPLOYEES BY FUNCTIONAL CATEGORY, BY RACE (CONT)

GRI 405-1

		2021	2022	2023
Managers	Yellow	0.3%	0.0%	0.0%
	Mixed race	15.1%	13.2%	12.7%
	White	81.7%	83.6%	84.2%
	Not informed	0.3%	0.0%	0.0%
	Black	2.6%	2.9%	2.6%
	Indigenous	0.0%	0.3%	0.5%
Operational	Yellow	0.0%	0.2%	0.4%
	Mixed race	33.3%	34.0%	34.5%
	White	50.1%	48.8%	47.4%
	Not informed	1.6%	0.1%	0.2%
	Black	14.8%	15.1%	15.9%
	Indigenous	0.1%	1.9%	1.8%
Technicians	Yellow	0.0%	0.0%	0.0%
	Mixed race	27.9%	30.3%	32.0%
	White	60.0%	56.4%	54.1%
	Not informed	0.5%	0.7%	0.5%
	Black	11.6%	11.9%	12.1%
	Indigenous	0.0%	0.7%	1.3%

Notes:

1. This indicator includes own permanent staff and temporary staff. It does not include interns, apprentices, and statutory directors.

2. Review of the opening of the functional category that best represents the company's job structure. The figures for 2022 and 2021 have been recalculated and follow the same standard to ensure comparability of information.

# NEW HIRES BY GENDER

GRI 401-1

	2021		2022		2023	
Women	214	27.1%	292	31.6%	292	27.1%
Men	743	13.9%	783	14.2%	794	13.6%
Total	957	15.6%	1,075	16.7%	1,086	15.7%

Notes:

1. This indicator includes permanent and temporary own staff. It does not include interns and statutory directors.
2. The calculation of the rate considers the number of new hires per category divided by the total number of employees in the category.

# NEW HIRES BY AGE GROUP

GRI 401-1

	2021		2022		2023	
Under 30 years of age	624	39.7%	644	38.9%	603	33.3%
30 to 50 years of age	313	7.6%	417	9.7%	464	10.3%
Over 50 years of age	20	3.6%	14	2.4%	19	3.1%
Total	957	15.6%	1,075	16.7%	1,086	15.7%

Notes:

1. This indicator includes permanent and temporary own staff. It does not include interns and statutory directors.
2. The calculation of the rate considers the number of new hires per category divided by the total number of employees in the category.
3. For this indicator, data reported in previous years have been corrected due to a rounding error in decimal places.

# NEW HIRES BY REGION

GRI 401-1

	2021		2022		2023	
Minas Gerais	577	16.6%	570	15.6%	543	14.0%
Rio de Janeiro	145	11.3%	201	15.0%	242	16.6%
São Paulo	235	17.1%	304	21.0%	301	19.0%
Total	957	15.6%	1,075	16.7%	1,086	15.7%

Notes:

1. This indicator includes permanent and temporary own staff. It does not include interns and statutory directors.
2. The rate calculation considers the number of new hires per category divided by the total number of employees in the category.



# TURNOVER BY GENDER

GRI 401-1

	2021		2022		2023	
Women	132	16.7%	157	17.0%	142	14.1%
Men	522	9.7%	598	10.8%	561	9.8%
Total	654	10.6%	755	11.7%	703	10.5%

Notes:

1. This indicator includes: permanent own staff and temporary own staff. It does not include interns and statutory directors.
2. For the calculation of the rate, the number of terminated employees / total number of employees is being considered.

# TURNOVER (DISMISSAL), BY AGE GROUP

GRI 401-1

	2021		2022		2023	
Under 30 years of age	277	17.6%	329	19.9%	300	17.3%
30 to 50 years of age	317	7.8%	369	8.6%	349	7.9%
Over 50 years of age	60	10.8%	57	9.8%	54	9.1%
Total	654	10.5%	755	11.6%	703	10.5%

Notes:

1. This indicator includes: permanent own staff and temporary own staff. It does not include interns and statutory directors.
2. For the calculation of the rate, the number of employees terminated / total number of employees is being considered.
3. For this indicator, the data reported in previous years have been corrected due to a rounding error in decimal places.

# TURNOVER (DISMISSAL), BY REGION

GRI 401-1

	2021		2022		2023	
MG	345	9.9%	375	10.2%	374	9.9%
RJ	145	11.3%	137	10.2%	142	10.1%
SP	164	11.9%	243	16.8%	187	12.3%
Total	654	10.6%	755	11.7%	703	10.5%

Notes:

1. This indicator includes permanent own staff and temporary own staff. It does not include interns and statutory directors.
2. For the calculation of the rate, the number of terminated employees / total number of employees is being considered.

## TURNOVER BY GENDER

	2021	2022	2023
Women	22.9%	26.0%	21.6%
Men	11.9%	12.5%	11.8%
<b>Total</b>	<b>13.3%</b>	<b>14.3%</b>	<b>13.3%</b>

Notes:

1. This indicator includes permanent own staff and temporary own staff. It does not include interns and statutory directors.

2. For the calculation of the rate, the number [(employees hired + employees terminated) / 2] / total number of employees is being considered.

## INTERNS BY AGE GROUP

	2021	2022	2023
Under 30 years of age	88.0%	90.8%	91.4%
30 to 50 years of age	11.7%	9.2%	8.6%
Over 50 years of age	0.3%	0.0%	0.0%

## INTERNS BY GENDER

	2021	2022	2023
Women	53.1%	55.2%	55.1%
Men	46.9%	44.8%	44.9%

## INTERNS BY RACE

	2021	2022	2023
Yellow	0.9%	1.4%	1.2%
Mixed race	19.1%	25.9%	28.3%
White	57.5%	57.8%	57.4%
Not informed	17.8%	0.9%	0.0%
Black	4.7%	9.8%	9.3%
Indigenous	0.0%	4.3%	3.8%

## AVERAGE HOURS OF TRAINING PER EMPLOYEE, BY FUNCTIONAL CATEGORY

GRI 404-1

	2021		2022		2023	
	total hours	average hours	total hours	average hours	total hours	average hours
Analysts and Similar	22,068.53	40.79	32,573.74	57.15	23,375.20	34.99
Assistants	18,776.77	40.82	28,539.05	57.31	23,965.19	44.22
Specialists and Similar	18,954.49	37.91	22,222.71	39.75	21,919.25	31.95
Managers	9,932.82	26.92	25,284.17	67.6	14,996.05	39.26
Operational	256,390.37	66.05	233,995.67	57.65	311,507.41	73.75
Technicians	23,031.73	36.27	37,227.63	58.53	33,210.32	48.48

Notes:

1. This indicator includes permanent own staff and temporary own staff. It does not include interns, apprentices, and statutory directors.

2. Revision of the functional category breakdown that best represents the company's job structure; the numbers for 2022 and 2021 have been recalculated and follow the same standard to ensure information comparability.

## AVERAGE TRAINING HOURS PER EMPLOYEE, BY GENDER

GRI 404-1

	2021		2022		2023	
	total hours	average hours	total hours	average hours	total hours	average hours
Men	318,562.09	53.94	326,897.74	53.19	379,058.11	59.23
Women	46,081.37	41.10	73,537.15	56.74	72,967.01	50.18

Notes:

1. This indicator includes permanent own staff, temporary own staff, and the board of directors.

2. Revised criteria, now considering active employees and those terminated who were trained during the period. The numbers for 2022 and 2021 have been recalculated and follow the same standard to ensure information comparability.



## PERFORMANCE REVIEWS BY CATEGORY

GRI 404-3

	2021		2022		2023	
	Men	Women	Men	Women	Men	Women
Analysts and Similar	56.3%	43.7%	54.5%	45.5%	53.1%	46.9%
Assistants	50.7%	49.3%	51.4%	48.6%	52.2%	47.8%
Specialists and Similar	82.9%	17.1%	81.8%	18.2%	78.8%	21.2%
Managers	82.2%	17.8%	78.9%	21.1%	80.4%	19.6%
Operational	97.5%	2.5%	97.3%	2.7%	96.7%	3.3%
Technicians	95.1%	4.9%	94.8%	5.2%	94.4%	5.6%

- Notes:
1. This indicator includes own permanent staff and temporary staff. It does not include interns, apprentices, and statutory directors.
  2. Review of the opening of the functional category that best represents the company's job structure. The figures for 2022 and 2021 have been recalculated and follow the same standard to ensure comparability of information.

## COMPARISON OF AVERAGE FIXED + VARIABLE SALARY BY GENDER

	2021	2022	2023
	Average F+VS Women/Men	Average F+VS Women/Men	Average F+VS Women/Men
Analysts and Similar	1%	5%	2%
Assistants	-1%	0%	-3%
Specialists and Similar	-6%	-6%	-6%
Managers	-3%	1%	2%
Operational	7%	5%	4%
Technicians	-2	-7	-9
<b>MRS Overall</b>	<b>43%</b>	<b>42%</b>	<b>41%</b>

- Notes:
- . Fixed + Variable Salary (F+VS): considers the nominal salary, without any additional bonuses, in force in December of the year in question, multiplied by 13.33 (including the Christmas bonus and vacation bonus), plus the variable portion of the Profit-Sharing Program for the year in question (paid in February of the following year).
  - . Positive values (+): salary of women higher than that of men / Negative values (-): salary of women lower than that of men.
  - . The criteria for presenting the data have been changed compared to the 2022 Sustainability Report, where statutory directors were included. The table above portrays the scenario of employees hired under the CLT regime, including those on leave. Apprentices, interns, and statutory directors are not included, following the standard of the tables in the report where there is a separation by functional category. The numbers for 2022 and 2021 have been recalculated and follow the same standard to ensure comparability of information.
  - . The small variations between the percentages of Fixed Salary presented in "Compensation and Benefits" and Fixed + Variable Salary, indicated in the table above, are due to the difference between individual or departmental target benchmarks, which are gender-independent but are considered in the calculation of Fixed + Variable Salary.



# GRI/SASB INDEX



# GRI/SASB INDEX

## Statement of Use

MRS reported in accordance with the GRI Standards for the period from January 1, 2023, to December 31, 2023.

Applicable GRI Sector Standard(s)

CONTENT			CHAPTER/RESPONSE
GENERAL CONTENT			
THE ORGANIZATION AND ITS REPORTING PRACTICES			
GRI 2: General Disclosures 2021	2-1	Organizational details	About Us
	2-2	Entities included in the organization's sustainability reporting	Message from Leadership
	2-3	Reporting period, frequency and contact point	About the Report
	2-4	Restatements of information	MRS reviewed the way it calculates and presents some indicators with a view to improving the quality and standard of its reporting. Indicators related to functional groupings, executive remuneration, among others highlighted throughout the document, were reformulated.
	2-5	External assurance	About the Report
ACTIVITIES AND WORKERS			
GRI 2: General Disclosures 2021	2-6	Activities, value chain and other business relationships	Our Operations
	2-7	Employees	Our Team
	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 of the highest governance body	
	2-11	Chair of the highest governance body	
	2-12	Role of the highest governance body in overseeing the management of impacts	Executive Board
	2-13	Delegation of responsibility for managing impacts	
	2-14	Role of the highest governance body in sustainability reporting	Governance bodies and instances
	2-15	Conflicts of interest	MRS shareholding composition
	2-16	Communication of critical concerns	

CONTENT			CHAPTER/RESPONSE
GRI 2: General Disclosures 2021	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	With the aim of contributing to the attraction, retention and motivation of employees, MRS’s salary policy seeks to maintain the competitiveness of the salaries charged by the Company with the market and the internal consistency of the job structure. To maintain the competitiveness of its remuneration, MRS carries out consultations with the consultancy Korn Ferry / Hay Group, regarding the general market and railways in the region where MRS operates. STATUTORY BOARD (i) 12 fixed monthly fees, equivalent to prolabore; (ii) direct benefits, including a pension plan health, carrying out periodic medical check-ups, life insurance and private pension plan; and (iii) the variable remuneration of the statutory board is consisting of an annual bonus for results. NON-STATUTORY BOARD OF DIRECTORS (i) 13 fixed monthly fees, (ii) direct benefits, including health plan, check-up periodic medical, life insurance and private pension plan, and (iii) consistent variable remuneration in annual bonus for results.
	2-20	Process to determine remuneration	
	2-21	Annual total compensation ratio	
STRATEGIES, POLICIES AND PRACTICES			
GRI 2: General Disclosures 2021	2-22	Statement on sustainable development strategy	Message from Leadership
	2-23	Policy commitments	The Company’s commitments are aligned with Labor and Environmental Legislation, in addition to Regulatory Standards applicable to MRS activities.
	2-24	Embedding policy commitments	MRS Shareholding Composition, Ethics and Integrity
	2-25	Processes to remediate negative impacts	International Standard Auditing
	2-26	Mechanisms for seeking advice and raising concerns	In cases where an individual requires advice on how to implement the organization’s policies and practices for responsible business conduct in MRS, you can contact the Company’s Advisory Channel.
	2-27	Compliance with laws and regulations	There were no significant cases in which fines or sanctions were applied in the reporting period.
	2-28	Membership associations	Institutional Relations
STAKEHOLDER ENGAGEMENT			
GRI 2: General Disclosures 2021	2-29	Approach to stakeholder engagement	Related parties
	2-30	Collective bargaining agréments	Our Team
MATERIAL TOPICS			
GRI 3: Material Topics 2021	3-1	Process to determine material topics	ESG Agenda
	3-2	List of material topics	Materiality and Impacts



CONTENT			CHAPTER/RESPONSE
RISK MANAGEMENT			
GRI 3: Material Topics 2021	3-3	Management of material topics	Risk Management
SASB: Critical Incident Risk Management	TR-RA-540a.4.	Rail Frequency of internal railway integrity inspections	
ETHICS AND ANTI-CORRUPTION PRACTICES			
GRI 3: Material Topics 2021	3-3	Management of material topics	MRS shareholding composition
CORPORATE GOVERNANCE AND TRANSPARENCY			
GRI 3: Material Topics 2021	3-3	Management of material topics	Ethics and Integrity
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	
	205-2	Communication and training about anti-corruption policies and procedures	
	205-3	Confirmed incidents of corruption and actions taken	
GRI 206: Anti-competitive behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	
FUEL MANAGEMENT AND FLEET ECO-EFFICIENCY			
GRI 3: Material Topics 2021	3-3	Management of material topics	Climate Management and Energy Efficiency
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Energy Management
	302-3	Energy intensity	Our way of conducting
	302-4	Reduction of energy consumption	Energy Management
	SASB: Greenhouse Gas Emissions	TR-RA- 110a.3	Total fuel consumed, percentage renewable
ATMOSPHERIC AND GREENHOUSE GAS EMISSIONS			
GRI 3: Material Topics 2021	3-3	Management of material topics	Climate management and energy efficiency
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	
	305-2	Energy indirect (Scope 2) GHG emissions	
	305-4	GHG emissions intensity	
	305-5	Reduction of GHG emissions	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	
SASB: Greenhouse Gas Emissions	TR-RA- 110a.1	Gross global Scope 1 emissions	
	TR-RA- 110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	
	SASB TR- RA-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O) and (2) SOx, and (3) particulate matter (PM10)	

CONTENT			CHAPTER/RESPONSE
OCCUPATIONAL HEALTH			
GRI 3: Material Topics 2021	3-3	Management of material topics	Health and Safety
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Occupational Safety and Health
	403-5	Worker training on occupational health and safety	Always Training and Empowering
	403-9	Work-related injuries	Occupational Safety and Health
SASB: Employee Health & Safety	TR-RA- 320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate for (a) direct employees and (b) contract employees, and (3) near miss frequency rate (NMFR)	Accident Rate
EMPLOYEE TRAINING AND DEVELOPMENT			
GRI 3: Material Topics 2021	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	
DIVERSITY, EQUITY AND INCLUSION			
GRI 3: Material Topics 2021	3-3	Management of material topics	Promoting Diversity and Inclusion
GRI 405: Diversity and Equal Opportunities 2016	405-1	Diversity of governance bodies and employees	Board of Directors, Growing Presence of Women
	405-2	Ratio of basic salary and remuneration of women to men	Benefits and Remuneration
RELATIONSHIP WITH SURROUNDING COMMUNITIES			
GRI 3: Material Topics 2021	3-3	Management of material topics	Society
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Benefits and Remuneration
GRI 203: Indirect Economic Impacts 2016	203 -2	Significant indirect economic impacts	Society
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	Rights of indigenous and traditional populations
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Society
	413-2	Operations with significant actual and potential negative impacts on local communities	



CONTENT			CHAPTER/RESPONSE
RAILWAY SAFETY AND ACCIDENT PREVENTION			
GRI 3: Material Topics 2021	3-3	Management of material topics	Railway Safety and Accident Prevention
GRI 403: Saúde e segurança do trabalho 2018	403 -2	Hazard identification, risk assessment, and incident investigation	
	403 -7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
SASB Accident & Safety Management	SASB TR- RA-540a.1	Number of accidents and incidents	
	SASB TR- RA-540a.2	Number of accident releases and nonaccidental releases (NARs)	
CLIENT RELATIONSHIP MANAGEMENT			
GRI 3: Material Topics 2021	3-3	Management of material topics	Customer Experience
INNOVATION AND TECHNOLOGY			
GRI 3: Material Topics 2021	3-3	Management of material topics	Innovation and Technology
GRI EXTRA DISCLOSURES - INDICATORS NOT COVERED IN MATERIALITY 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 due to climate change	Climate Resilience
GRI 203: Impactos econômicos indiretos 2016	203-1	Infrastructure investments and services supported	Investments and Cargo Diversification
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Water Management
	303-2	Management of water dischargerelated impacts	
	303-3	Water withdrawal	
	304-4	Water discharge	In 2023, the total volume of water discarded and treated in our ETEs was 7,186 m³. Domestic effluents generated by the Company undergo treatment in order to ensure environmental compliance.
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected áreas	Biodiversity Protection
	304-3	Habitats protected or restored	

CONTENT			CHAPTER/RESPONSE
GRI 306: Resíduos 2020	306-2	Management of significant wasterelated impacts	Waste Management
	306-3	Waste generated	
	306-4	Waste diverted from disposal	
	306-5	Waste directed to disposal	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Partnership with suppliers
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Attachments
	401-3	Parental leave	Parental Care
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Labor and Union Relations
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	Partnership with Suppliers
GRI 415: Public Policy 2016	415-1	Political contributions	The Company does not make contributions or donations to political parties, in Under current legislation, financing of political campaigns by private initiative. The Sponsorship, Partnerships and Donations Policy contains prohibitions for operations involving events or actions of a partisan political nature and partnership for electoral movements.





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