



MRN

Sustainability
2023

**A commitment
we all make.**



45
YEARS

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45 YEARS



45 years ago, MRN took on not only the challenge of mining in the heart of the Amazon, but also the commitment to find its most responsible approach to everything and everyone involved.

With the rivers, the forest and its deep breathing teaching us how to maintain balance and inspiring us with its unique biodiversity, one action supports another.

And, along with its huge home, the people who were already here.

Year after year, the company has embraced this ecosystem with respect and pride. And the attitudes and initiatives that have passed from hand to hand since the beginning are translated into projects that connect preservation, dialog and transparency with opportunities and ownership.

Growth with sustainability. Belonging with universality.

In 2024, it will be 45 years since thousands of people reaffirmed their commitment to sustainable growth, with respect for the environment, neighboring communities and society every single day.

Learn more about the company's sustainable practices in this report.

MRN Sustainability 2023
A commitment we all make.





Chapter 1

A word from the CEO
Materiality Matrix
MRN Profile



A word from the CEO

We are launching this report in the year in which MRN celebrates its 45th anniversary. And the initiatives and results we'll see below reveal something that has been with the company since the first steps of its journey, back in 1979: its commitment to sustainability.

Written by the hands of each of the thousands of people who, in some way, lived with this unique way of being. Attitudes that are part of a culture driven by the virtuous cycle of the Amazon, where one action supports another, building a responsible present and a positive legacy for the future.

In 2023, we renewed and strengthened this commitment in many ways, on behalf of many people and for all of them.



The commitment to people.

- Three years of 'The MRN pra Todos' [MRN for Everyone], our diversity, equity and inclusion program.
- Increased representation of Quilombolas and women.
- Creation of the New Apprentice Talent Bank.
- The headcount is made up of more than 80% of Pará-born workers.
- In the Great Place to Work ranking, MRN is in the top five companies in northern Brazil.
- More than R\$1 million invested in training and development.

Commitment to the environment.

- More than R\$36 million invested in environmental management.
- More than 300 hectares reforested with native species.
- More than 400 thousand seedlings produced.
- 84% water recirculation.
- More than 13 thousand fauna specimens rescued.
- More than 16 thousand flora specimens rescued.
- 98% of industrial waste is destined for reuse, recycling or treatment.

Commitment to innovation.

- Adherence to the decarbonization project for the mining sector, developed by the Brazilian Mining Institute (IBRAM) and Mining Hub.
- More than R\$145 million invested in dam safety and new equipment.
- 24-hour Dam Monitoring Room.
- Reuse or disposal of dry tailings in pits, a more sustainable methodology for the tailings management process.



Commitment to the best market practices.

- Maintaining the ASI Performance and Chain of Custody Seals.
- Integrated Management System in compliance with ISO standards.
- Compliance and Anti-Bribery Management System in compliance with ABNT NBR ISO 37001:2017 certifications and ABNT NBR ISO 37301:2021 guidelines.

Commitment to local communities.

- R\$50 million invested in sustainable development programs, projects and actions.
- More than 60 socio-environmental initiatives.
- Permanent dialog panels with 69 communities.
- More than 80 communities engaged.

We are proud to present
**MRN's 2023
Sustainability Report.**

Guido Germani

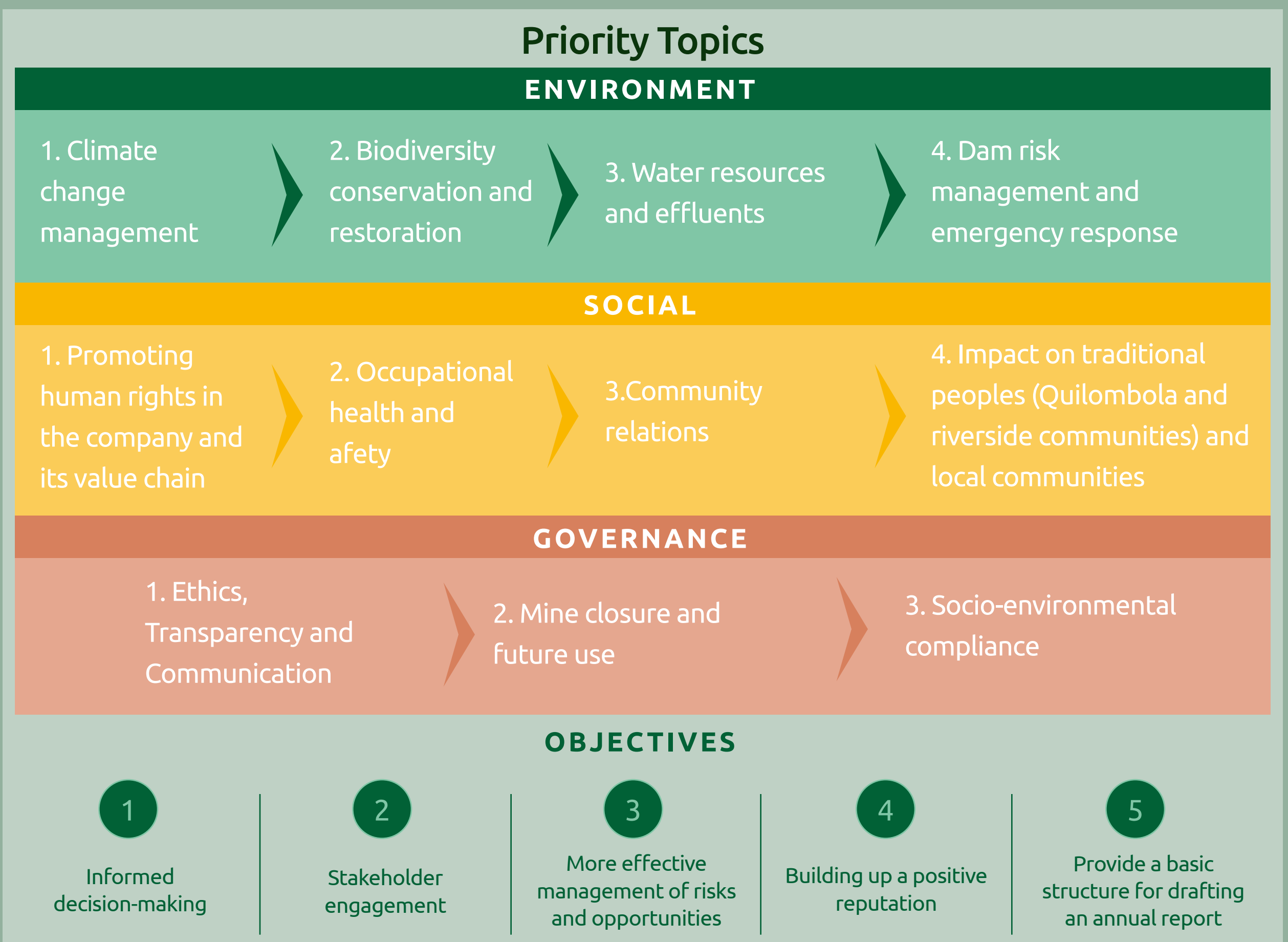


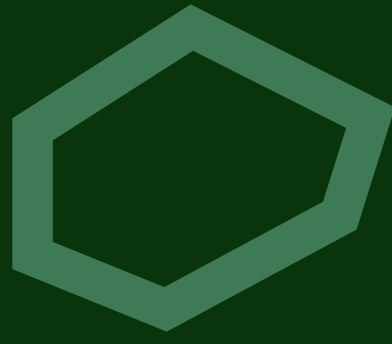


SUSTAINABILITY REPORT AND MATERIALITY MATRIX.

MRN presents its Sustainability Report through a reflection on the actions taken and lessons learned in recent years and its contribution to the maturity of its management, with results that contribute to more responsible mining.

Materiality analysis is a method used to identify the most relevant issues for a company and its stakeholders. Through this tool, it is possible to evaluate and prioritize these material issues, with a focus on sustainability, reputation and financial performance.





A SUSTAINABLE WAY OF BEING.

There are countless factors that make MRN a unique company in many ways. Its location, in the heart of the Amazon, teaches us on a daily basis how to associate evolution with sustainability; its people, those who were already there and those who arrived to start their families around this great project, live and renew their commitment to environmental preservation, care and respect for others; its purpose, to offer the world this fundamental element, bauxite (the raw material for aluminum), in a responsible way, leaving a legacy for those to come.

Get to know a little more about this MRN way of being.

MRN IN NUMBERS



6+ thousand professionals



12+ million tons of bauxite produced/year



More than **60% of its production** sold domestically



3 Continents supplied: America, Europe and Asia



60+ socio-environmental **initiatives**

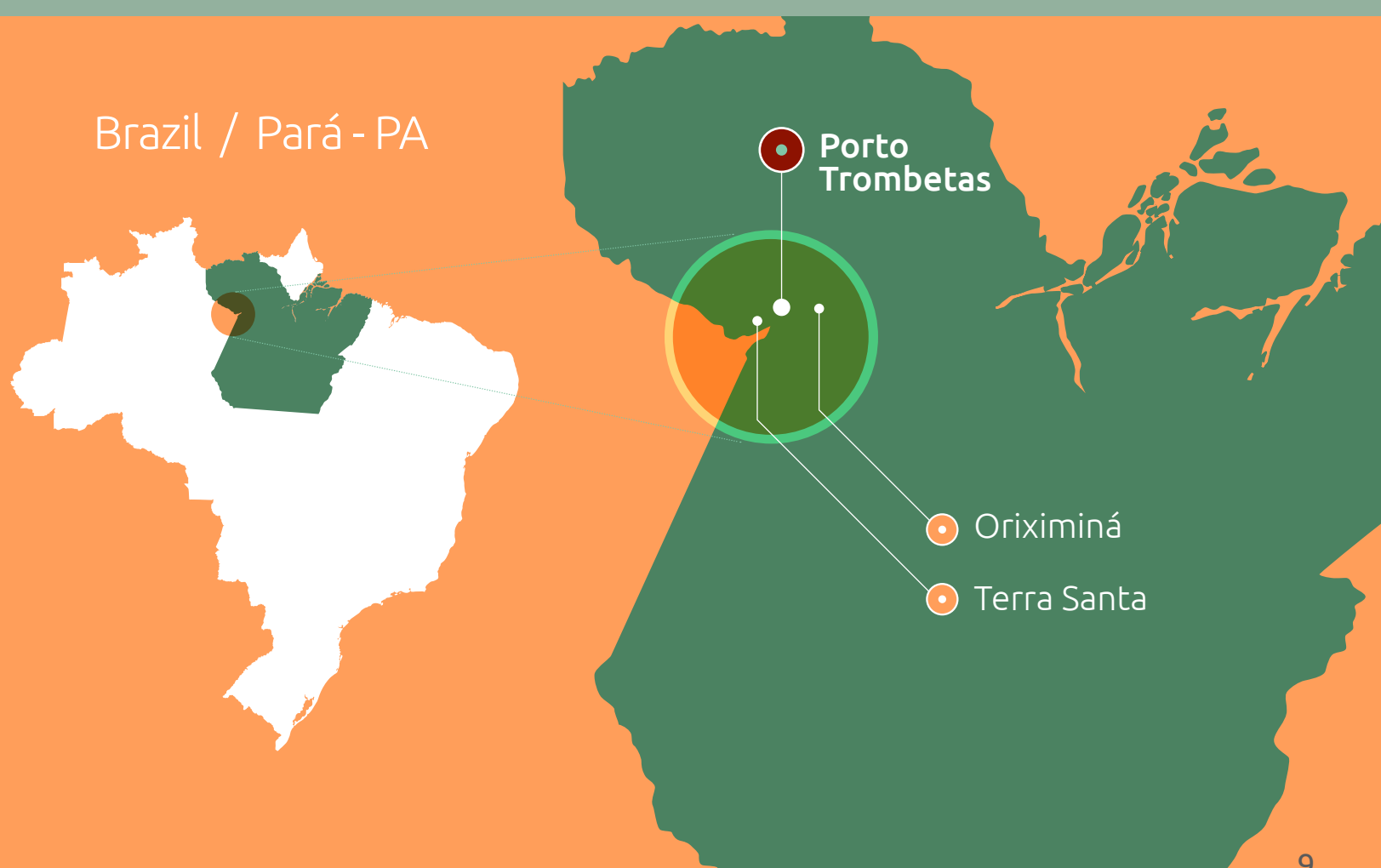


45 years of socioeconomic development in the region

LOCATION: WESTERN PARÁ | DESTINATION: THE WORLD

Located close to important economic and tourist centers in the northern region, such as Santarém (Pará State), Parintins and Manaus (Amazonas State).

Headquartered in the district of **Porto Trombetas**, in Oriximiná city, in the west of the state of Pará, MRN also has operations in the municipality of Terra Santa, in the same region. These municipalities produce the bauxite that supplies more than 60% of the Brazilian market. The remainder is exported to North America, Europe and Asia.





Vision

To be an excellence-oriented, sustainable company and a benchmark in the mineral sector throughout the life cycle of the business.



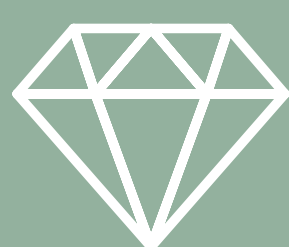
Mission

To produce bauxite while meeting customer's needs and generating return to its shareholders and respecting people and the environment.



Purpose

Produzir bauxita que contribua para o mundo sustentável.



Values



SAFETY

In the workplace, with genuine care.



RESPECT

With diversity, inclusion and recognition.



INTEGRITY

Transparency, ethics, fairness and good corporate governance practices.



SUSTAINABILITY

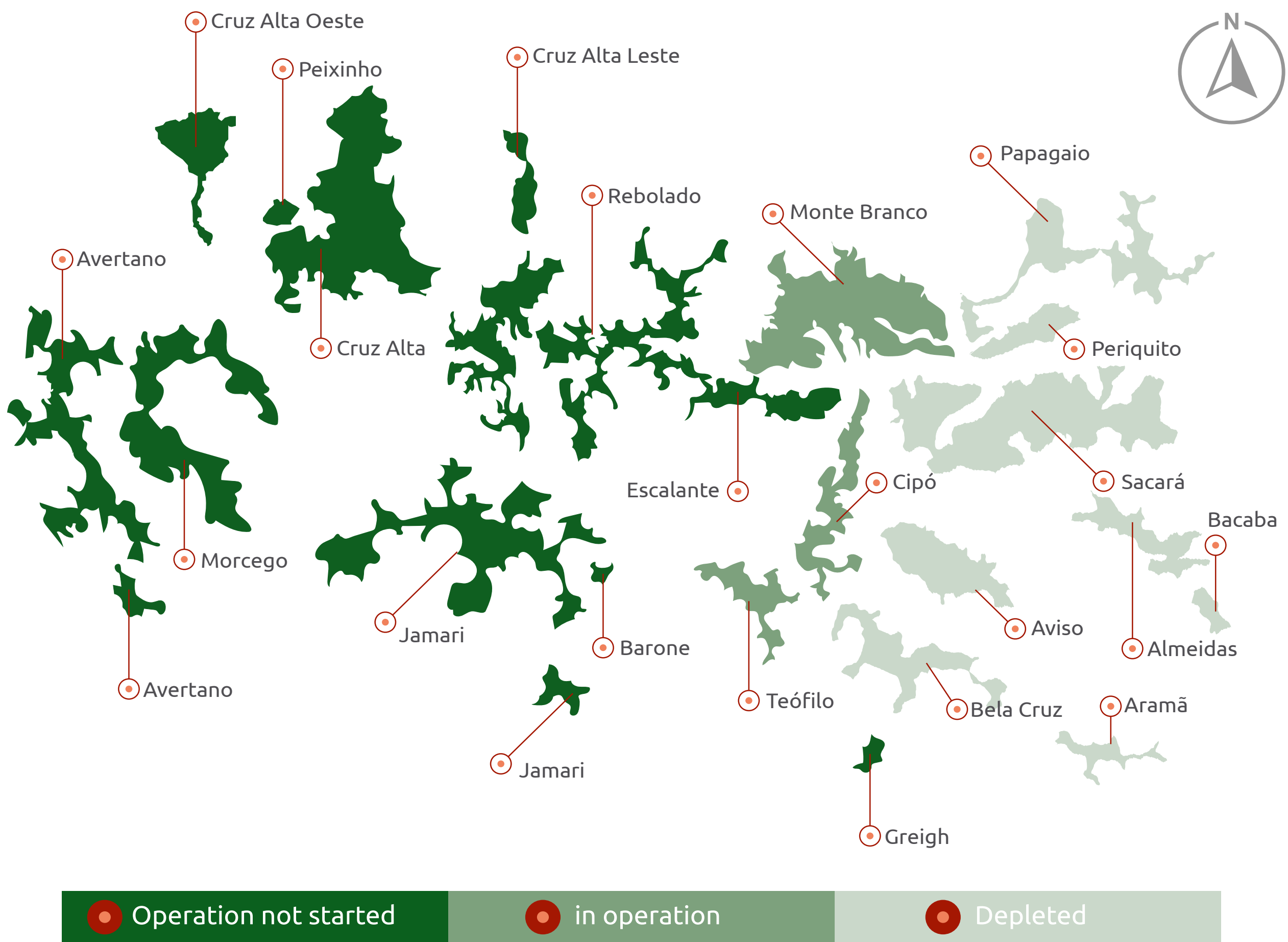
Economic development with social and environmental commitment.



CONTINUOUS IMPROVEMENT

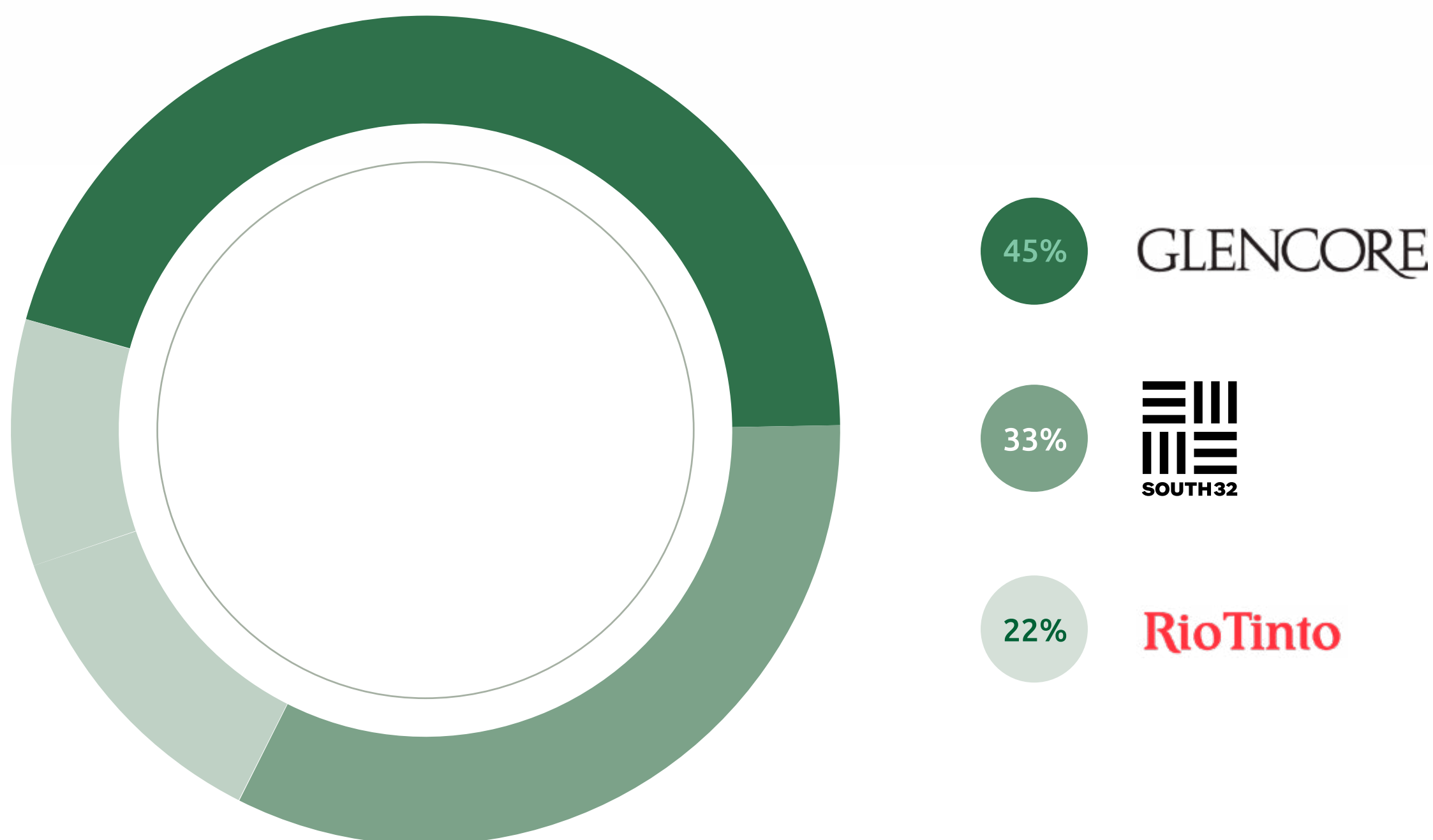
With austerity and discipline.

MAP OF MRN'S MINES



SHAREHOLDING STRUCTURE

MRN's shareholding structure is currently made up of three companies that believe in sustainable mining as a platform for the responsible development of the local economy.



TO UNDERSTAND THE IMPORTANCE OF ALUMINUM

You may not even realize it, but aluminum is one of the most common metals in our daily lives, found in products ranging from electronics and household appliances to cars, infrastructure and a myriad of other objects essential to modern life. Its main source is bauxite, a reddish rock found underground.

Due to its good conductivity and mechanical resistance, aluminum is indispensable for infrastructure and telecommunications, as it enables the efficient transmission of electricity over long distances, which makes it essential for the energy transition.

In addition, due to its thermal insulation, impermeability and anti-corrosion properties, the metal is widely used in the automotive industry, in construction, in the food industry and in the manufacture of pharmaceutical products.

Its high recyclability makes it an important source of income for many people, while its lightness and infinite recyclability reduce its carbon footprint, making it more sustainable for society.

THE VIRTUOUS CYCLE OF ALUMINUM

Check out the endlessly recyclable cycle of this metal.





2023 Aberje Award. This time, enshrining promotion of education.

Education has always been a precious topic for MRN as an instrument for concrete and sustainable improvement in the lives of many people and families, helping to build stories with more opportunities and equality for everyone. And in 2023, its PAEB/PAES educational programs were recognized with the Aberje Award (Brazilian Association of Corporate Communication), an initiative that celebrates great communication actions in the country by companies, institutions, the media and professionals who combine creativity, resources and strategies in organizational communication to generate better results for business and positive impacts for society.

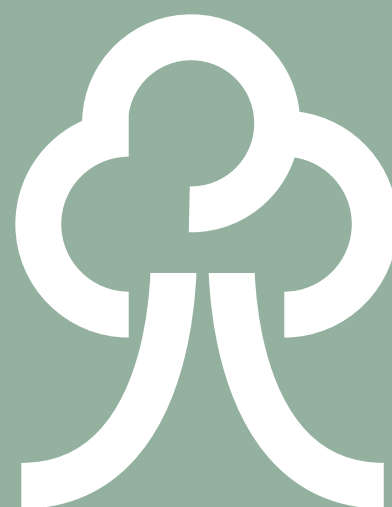
A year after seeing its “MRN for everyone” program win in the “Diversity and Inclusion” category, MRN won again in the regional stage (North and Northeast) of the 2023 Aberje Award. This time, in the “Society” category, with the case “PAEB E PAES: transforming the future through education for over two decades”.



Programs aimed at the Quilombola in the Boa Vista and Alto Trombetas II territories.

The PAEB (Basic Education Support Program) was created in 1997 to develop a solid educational foundation for young people in the Boa Vista community. Later, students from the Quilombola territory of Alto Trombetas II also began to benefit from the program's structure, which includes comprehensive education, school supplies, transportation and food.

In 2000, the PAES (Higher Education Support Program) was created as an extension of the support offered in basic education, giving support to students who wanted to enter undergraduate studies. Beneficiaries receive scholarships for higher education courses, either on-site or remotely, as well as annual vacation air/river tickets to visit family, as the courses are usually held in other cities, such as Santarém, Belém and Manaus.



I benefited from the two programs that the company supports and it was very important for me to graduate. It's an example for other fellow Quilombolas to learn about and occupy these spaces.

Sara Quaresma, born in the Boa Vista Quilombola community, graduated in Forestry from the Rural University of Amazonia (UFRA), went through educational initiatives for social transformation and today works at MRN.

Beneficiaries in 2023:



PAEB
129 scholarship holders



PAES | 52 students
with the possibility to access higher education and new opportunities



These programs give a lot of support to the children in the communities and I hope that in the future we will have more and more people trained thanks to this initiative.

Cledinaldo Durão, machine operator and father of Clemerson's, a beneficiary of the programs.

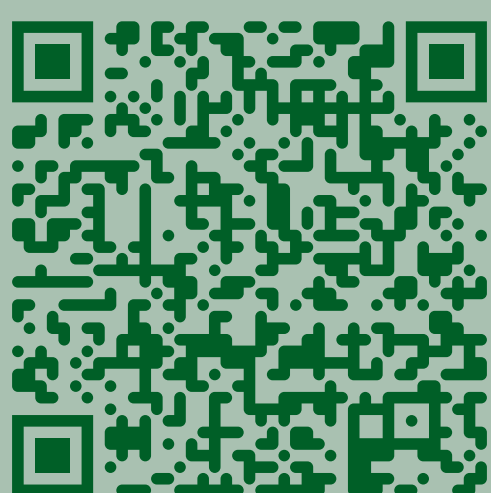
Winning campaign

In April 2022, MRN began to publicize the two programs and their positive impacts on various internal and external communication platforms, with a comprehensive approach, presenting the inspiring stories of program beneficiaries and using a combination of official channels already established for communicating with employees, leaders, community representatives and communities.



Receiving the Aberje Award by running with an education case is a reason for overwhelming pride for us. Seeing these stories of overcoming as they are told by the people themselves is touching! The prize is certainly theirs too,

says Fabiana Gomes, MRN's communications analyst, who was in charge of the education campaign.



80+ thousand views

Watch the web series
"How to keep developing together with Education?"



MRN's achievement at the Aberje Award is more than recognition, it is a celebration of the company's commitment to transforming lives through education.

Guido Germani, MRN's CEO.





Chapter 2

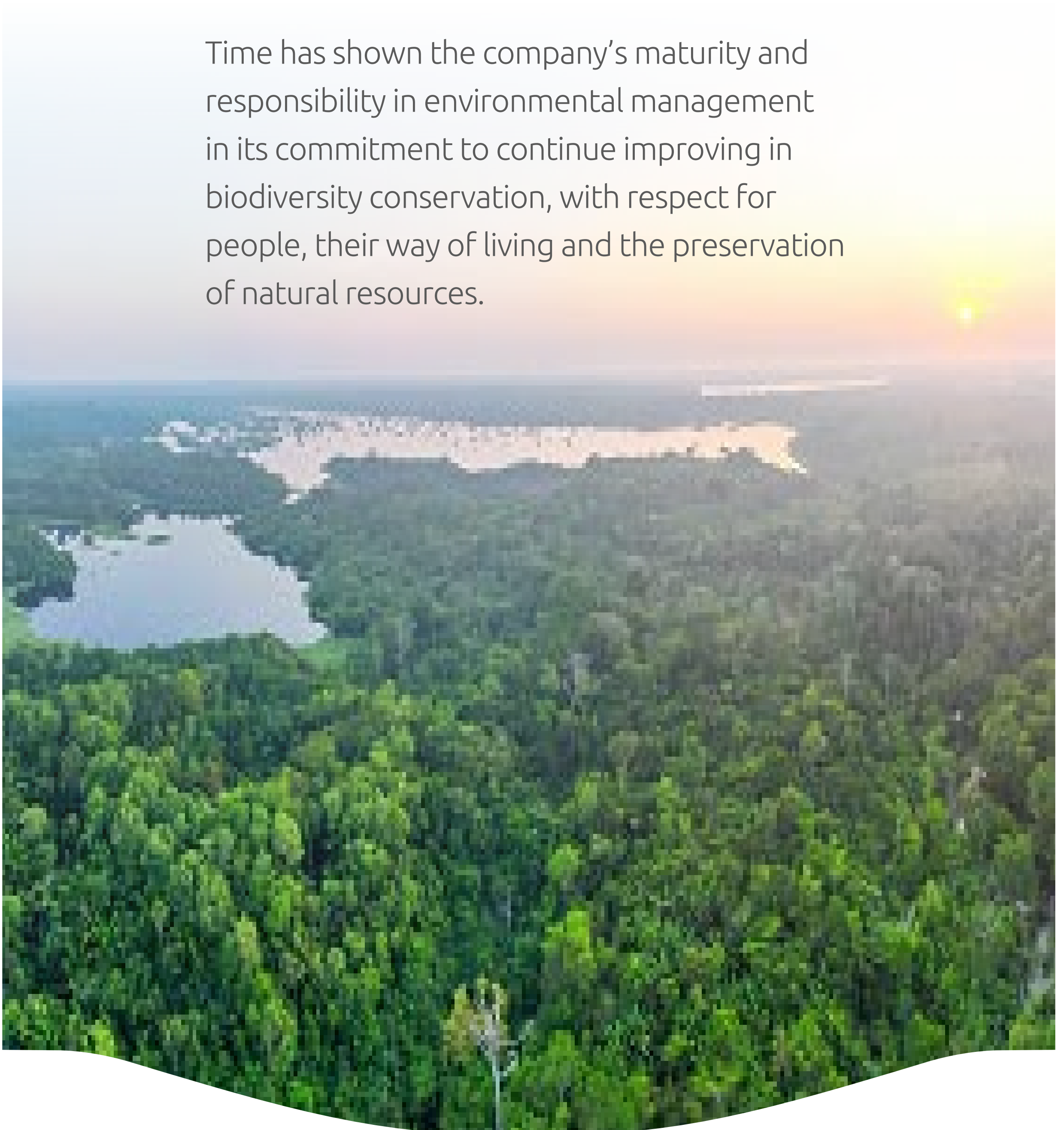
Environment



MRN and Biodiversity: Knowledge, Coexistence, Care, Respect.

Over the course of 45 years of operations in the Saracá-Taquera National Forest, hundreds of environmental professionals have worked for MRN and contributed to producing and gathering a vast amount of knowledge about local biodiversity. This valuable legacy has also enriched the global understanding of the region, recognized as one of the richest and most relevant in the world.

Time has shown the company's maturity and responsibility in environmental management in its commitment to continue improving in biodiversity conservation, with respect for people, their way of living and the preservation of natural resources.





The word innovation is often mentioned in various forums. It could not be otherwise because, as Charles Darwin observed: those who don't innovate are excluded from the evolutionary process.

For MRN's Environment team, innovation is literally a natural condition. Guided by observation and respect for nature, innovation is not just a strategy, but a core value at MRN since its foundation.

International pressure for environmental preservation and conservation is growing every day, and MRN, throughout its 45 years of operation, is proud to confirm the good results of its environmental efforts on a daily basis.



1. Water use

Responsible management of water resources and effluents is part of MRN's operational routine. We are constantly seeking to innovate consumption and disposal practices, water and liquid effluent monitoring and treatment systems, as well as evaluating alternatives to increase water recirculation. Since we operate in the most privileged region on the planet in terms of water quality and quantity, respecting and conserving this invaluable asset is one of the pillars of our management.

The company operates in 10 river basins and uses water from the Trombetas River and streams located inside the Saracá-Taquera National Forest. Surface water abstraction is authorized by the National Water Agency (ANA), while groundwater extraction is authorized by the Pará State Department of Environment and Sustainability (Semas).

Total water abstraction in 2023:

Source	Volume (m ³)
Surface water	17.354.671
Groundwater	172.534

*Results based on the sum of surface and groundwater abstractions.

Water consumption by use:

Consumption	Volume (m ³)
Industrial	16.063.022
Human	1.464.184

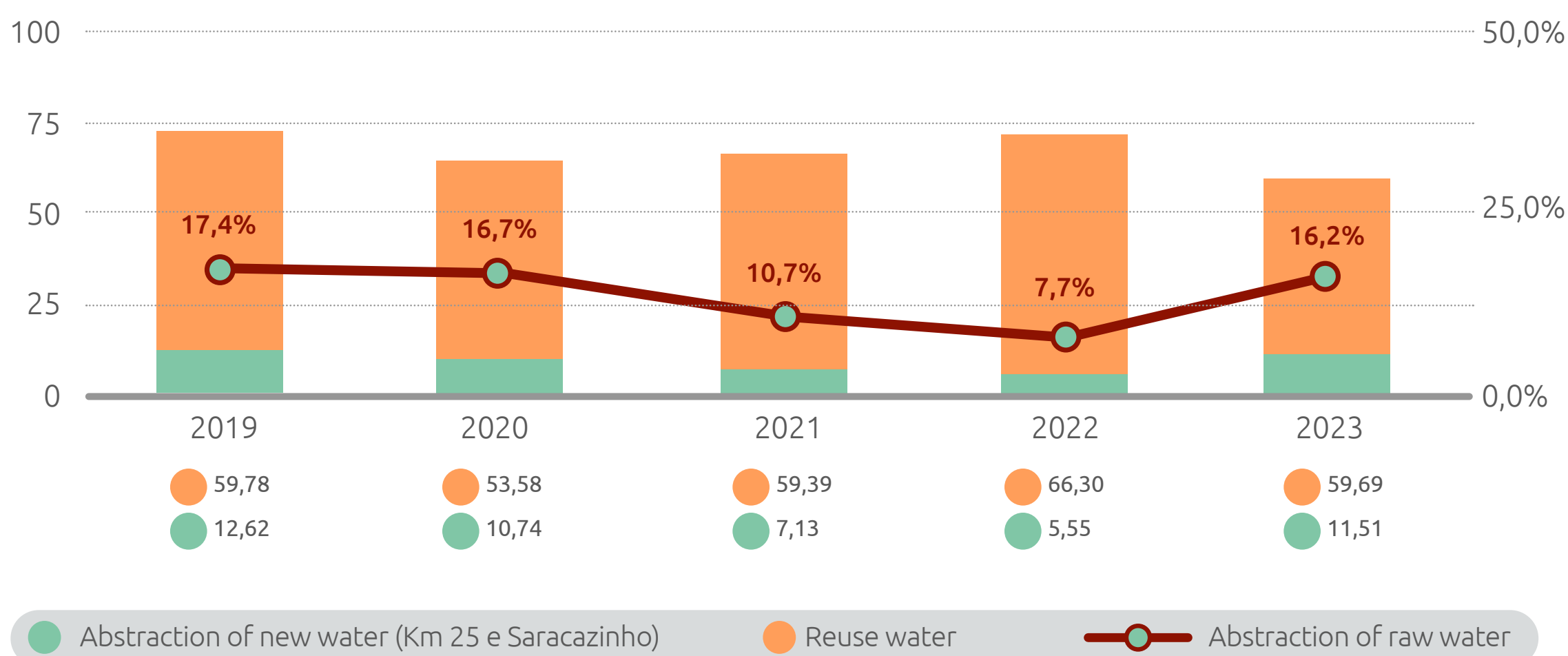


New water abstraction

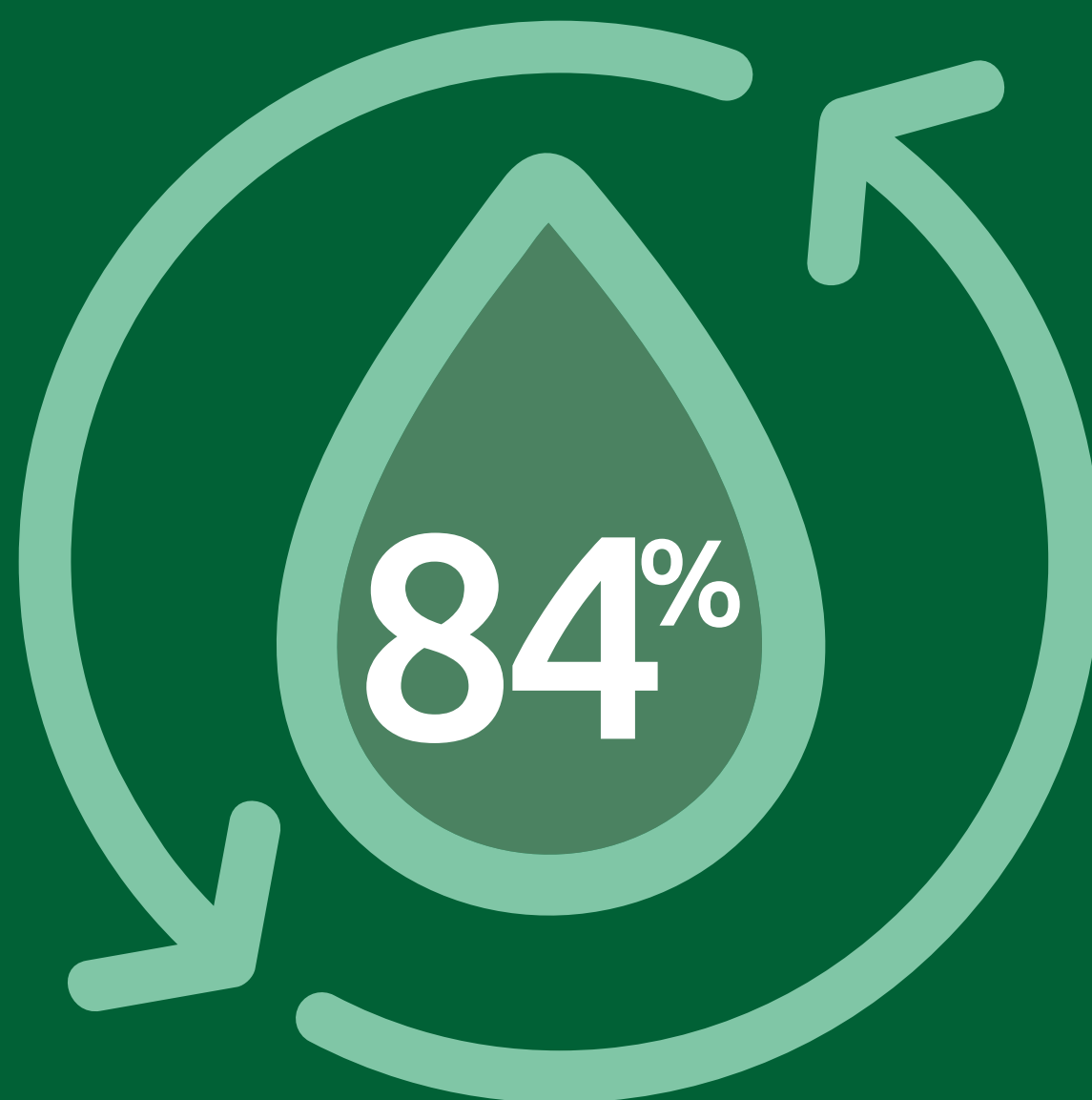
Due to the extreme drought in the Amazon in 2023, there was an increase in the abstraction of new water for the ore beneficiation process during the period. The low rainfall rate during the summer had a direct impact on the water recovery rate for reuse, thus leading to higher new water abstraction.

The share of new water in total water increased from 8% in 2022 to 14% in 2023, still below the historical levels of 20% of the operation's total consumption.

Year	Raw water abstraction (m ³)	Rainwater run-off (m ³)	*Total water (m ³)
2019	12.615.135	59.782.037	72.397.172
2020	10.742.851	53.579.429	64.322.280
2021	7.133.049	59.385.655	66.518.704
2022	5.553.882	66.298.177	71.852.059
2023	11.510.837	59.687.137	71.197.974



In addition to the volumes abstracted from the Saracá creek, the beneficiation plant also uses rainwater precipitated on the tailings system and water recovered from the tailings. This practice plays a fundamental role in securing the effective use of resources for the activities.



The average recirculation rate reached in 2023 is equivalent to 59,687,137 m³.

Water management risks:

Risk	Mitigation strategy
Uncontrolled overflow	<ul style="list-style-type: none"> - Rainfall Monitoring - Water quality monitoring - Implementation of equipment and channel maintenance procedures
Unavailability of water for the production processes	Optimization of water consumption, implementation of recirculation projects



Water Quality

To ensure compliance with the parameters required by water resources legislation, the company invests energy and resources in monitoring water quality. All potential sources of altered water quality are mapped out and control and mitigation systems are installed and maintained. Effluents are also monitored, as per below. The data, both from the systems and from the streams and the Trombetas River, are organized in an integrated management system.

Water quality analyses performed in 2023:



Water monitoring is conducted monthly at 181 points and the data showed no change in the quality of the watersheds, reflecting the efficiency of MRN's operations control systems.

Participatory Social Monitoring

Promoting more transparent community participation in water monitoring and sustainable water management has always been a guideline for the company. In 2023, this involvement was expanded with an approach that actively involves the local community during the collection and dissemination of water monitoring data results.

2. Wastewater management

To bolster its commitment to securing water quality around its operations, MRN has defined control systems for the correct treatment and disposal of effluents; it monitors quality indicator parameters and improves its wastewater treatment systems on a monthly basis.

In 2023, it continued monthly monitoring of the liquid effluents generated by the operations. A total of 6,184 analyses were performed at 25 points, including sanitary and industrial effluents. The results showed no change in the quality of the watersheds and are the result of the efforts made by the entire company, which continues to work actively to improve processes and control systems.

The use of equipment made of oleophilic material* has been adopted for the oil and water separators. A simple solution consisting of a disk that, when rotated, removes the supernatant oil in the first tank of the treatment system, relieving the following stages and increasing the efficiency of the entire assembly.

Around 2.75 tons of dry sludge from the effluent treatment was destined for the SP4 tailings pond, a sustainable form of reforestation on the tailings.



* Oleophilic: Material that absorbs oily substances.

3. Conservation and sustainable use of biodiversity

The Environmental Impact Assessment (EIA) is a fundamental tool for assessing the effects of human activities on biodiversity and ecosystem services in the area of influence of the project. Based on this study, it is possible to establish specific programs and measures to mitigate, compensate and monitor the identified impacts.

MRN recognizes its responsibility to mitigate environmental impacts by acting with transparency and responsibility throughout the value chain. To this end, it has several programs in place, developed by qualified specialists and approved by environmental agencies such as IBAMA, SEMMA, SEMAS etc. The implementation of these programs relies on the participation of collaborators from the region, such as in the Wildlife Management Program, which aims to minimize the impacts of plant suppression on wildlife.



2023 | WILDLIFE RESCUE



13,592 wildlife **specimens** rescued in suppression areas and subsequently returned to the natural environment without the influence of suppression.

The tools used to understand the effectiveness of the measures we have taken include the Wildlife Management Program indicators, which account for the number of individuals rescued and returned to the FLONA's natural environment, with a survival rate of 99% of the fauna rescued and returned to the forest in 2023.



2023 | FLORA RESCUE



16,563 specimens rescued

9,175 viable seeds and seedlings*
for propagating nine tree species

1,037 specimens saved in geological
survey areas

*Seedling is the first stage of the plant, after sprouting from the seed



During the vegetation suppression phase, various programs are implemented, one of the highlights being the native bee rescue program. In 2023, this program was responsible for rescuing a total of 340 hives, 185 of which were sent for maintenance at the apiary. The hives are carefully kept in a suitable environment within the forest in preparation for their reintroduction after reforestation. Over the course of the year, 56 hives were reintroduced after spending one year and six months under care at the apiary.

Fauna is also monitored on the roads and on the railroad to mitigate wildlife being run over through the activities of the Road Impact on Fauna Monitoring Program, which provides important information on the records of incidents that have occurred and the implementation of appropriate measures. During the year, several actions were carried out to raise awareness of the issue, including educational blitzes, daily safety dialogs and discussion groups, including the production and distribution of educational booklets, the installation of radar and road signs on the railroad.



Among the measures implemented, the company also monitors wildlife crossings, both overhead and on the ground, with significant results over the past three years. A total of **1,846 individuals of 46 species** of fauna were recorded using these alternatives for crossings.

With regard to awareness-raising activities for workers at the MRN project, residents of the Porto Trombetas district, as well as neighboring communities located on the banks of the Trombetas River and Sapucuá Lake, the company highlights the importance of the Environmental Education Project (PEA), which in 2023 covered the topics of “Minimizing Collisions with Terrestrial Fauna” and “Risks with Wild Animals” for 3,184 and 1,610 people, respectively. The project also affected around 50% of MRN’s direct and indirect workers.

In addition to the PEA actions, the company provides training to its employees on assessing the implications of the socio-environmental risks arising from the project on the physical, natural and social environments in its area of influence, through the Workers’ Environmental Education Program (PEAT). In 2023, 1,795 workers were trained, including direct and outsourced workers.

In line with its responsibility to reclaim mined areas, in 2023 MRN purchased 4,893 kg of seeds from residents of riverside and Quilombola communities with a view to fostering income generation. Thus, from the seeds acquired and seedlings* rescued, 410,758 seedlings were produced in the company’s Forest Nursery, of which 49,491 were individuals of threatened, protected and/or vulnerable species based on Brazilian legislation, and a further 7,676 seedlings were acquired from residents of the communities in the Alto Trombetas II Quilombola Territory. It is worth noting that the seedling production activity is carried out with 100% of the region’s employees.





394,512 seedlings
of 98 native species
in mined-out areas.



318.8 hectares rehabilitated
using the techniques of planting
seedlings and disposing of
branches on small islets.

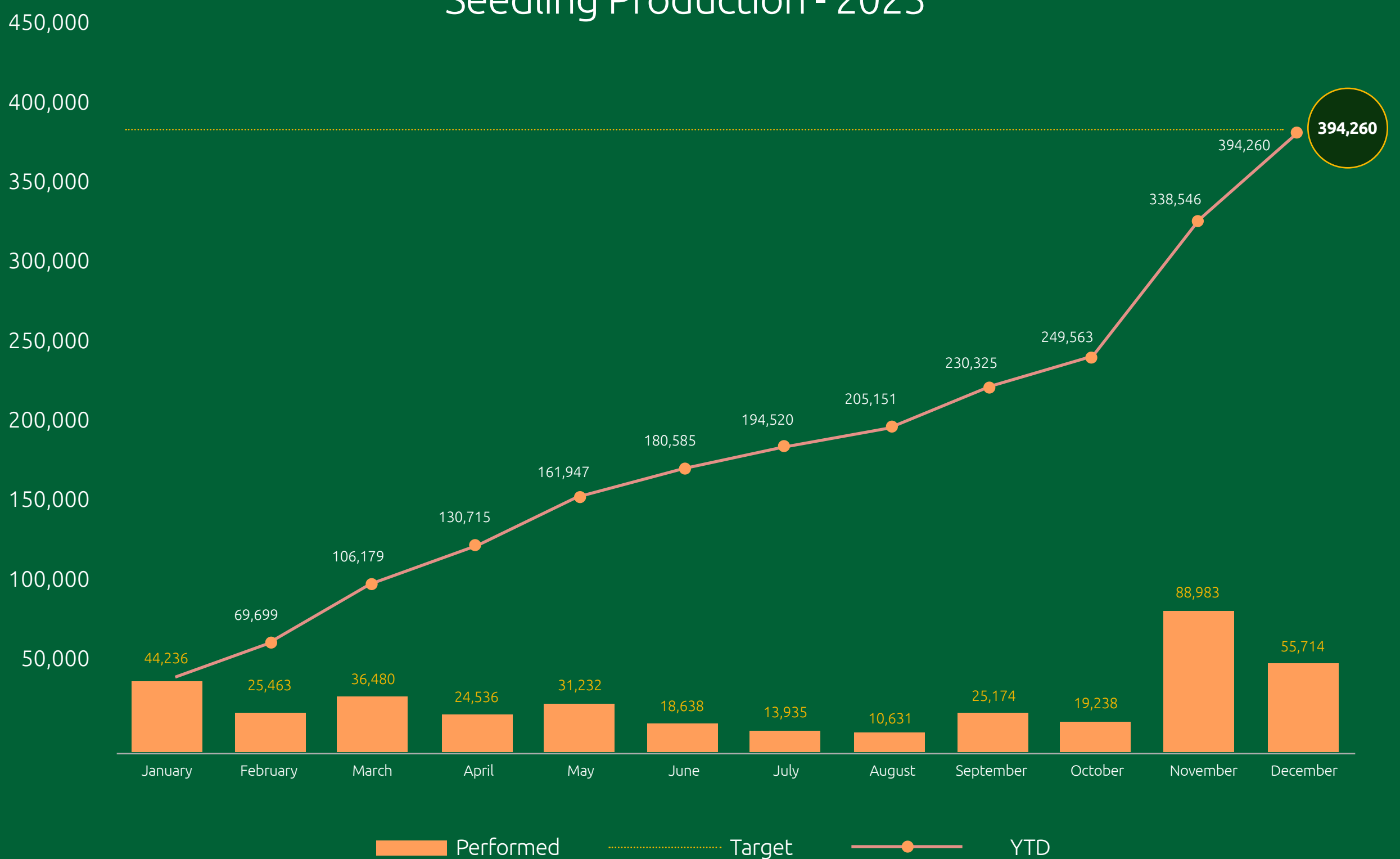


Local labor:
60 community members

Seedling production target met:
394,260 individuals by December 2023.



Seedling Production - 2023



In compliance with the Normative Instruction of the Chico Mendes Institute for Biodiversity Conservation (ICMBio) No. 11, dated December 11, 2014, MRN follows an area reclamation methodology that uses the planting of native species and does not include exotic species in the Flona in its activities. The company does not use pesticides or chemicals as part of its commitment to the conservation of fauna and flora.

The company encourages research and undertakes various studies in its areas of operation in order to implement improvements in its processes, such as the proposal for the recovery of tailings deposits through the Protocol for the Recovery of Bauxite Washing Tailings Ponds. The proposed actions are being carried out on an experimental basis by MRN, with the aim of identifying the most viable and effective practices for restoring these environments. The work has shown excellent signs of success, such as the presence of spontaneous species in the first years of reclamation.

Adopting a proactive approach is fundamental to securing the sustainability of the enterprise and the preservation of the ecosystems in which the company operates. By investing in research and knowledge generation, the impacts of activities can be better understood and effective strategies developed to reduce them. This includes the application of preventive, control and mitigation measures during operations, as well as efforts to reclaim affected areas.

In 2023, community representatives were trained to act as multipliers of knowledge about the entire process of identifying, collecting, processing, storing and planting seeds of native Amazonian tree species. These integrated efforts reflect MRN's comprehensive strategy of promoting environmental sustainability and biodiversity conservation, while boosting the socio-economic development of the region where it operates, always considering the interests of local communities.



4. Waste Management

Waste management observes the guidelines established by the National Solid Waste Policy. Management is carried out internally by the company, except for waste destined for external final disposal, which is managed by third parties. The strategy encompasses campaigns, initiatives and process improvements, all aimed at prevention, reduction, reuse, recycling, recovery and, finally, the proper disposal of waste.

Throughout the year, 1,047 environmental education actions were undertaken, which addressed the importance of proper waste management and involved not only employees, but also the residents of the Porto Trombetas district, thereby bolstering the commitment to the environment and sustainability.



With regard to the management of industrial waste, MRN has the Disposable Industrial Residues Facility (CRID), where this waste is received, weighed, checked and temporarily stored. CRID plays a key role in the environmental management approach, ensuring the proper and responsible treatment of industrial waste produced in operations.

To manage urban waste, the company maintains the Waste Treatment Plant (CTR), which received 9,188 tons of urban waste in 2023. As part of this process, it demonstrates its commitment to sustainability by recycling 324 tons of inorganic waste and sending 408 tons of organic waste to the composting system, whose organic compost is later used in vegetable gardens and green areas in Porto Trombetas and in local communities. In addition, MRN disposed of 1,150 tons of non-recyclable waste at the landfill, while 6 tons of health service waste (class I) was sent for incineration, thus securing public health and safety.



9,188 tons of urban waste

324 tons of inorganic waste recycled

408 tons of organic waste delivered to the composting system

1,150 tons of non-recyclable waste disposed of at the landfill

6 tons of healthcare waste (class I) were incinerated.

2,490 tons of construction debris were reused

4,810 tons are still in temporary storage for future reuse

In line with its mission to promote environmentally responsible practices, the company has reused 2,490 tons of construction waste, while another 4,810 tons have been temporarily stored for future reuse.

Total waste generated in 2023 (t)

Scope	Industrial	Urban
Hazardous waste (Class I)	797.88	25.37
Non-hazardous waste (Class II)	1,824.11	9,163
Total	2,621.99	9,188

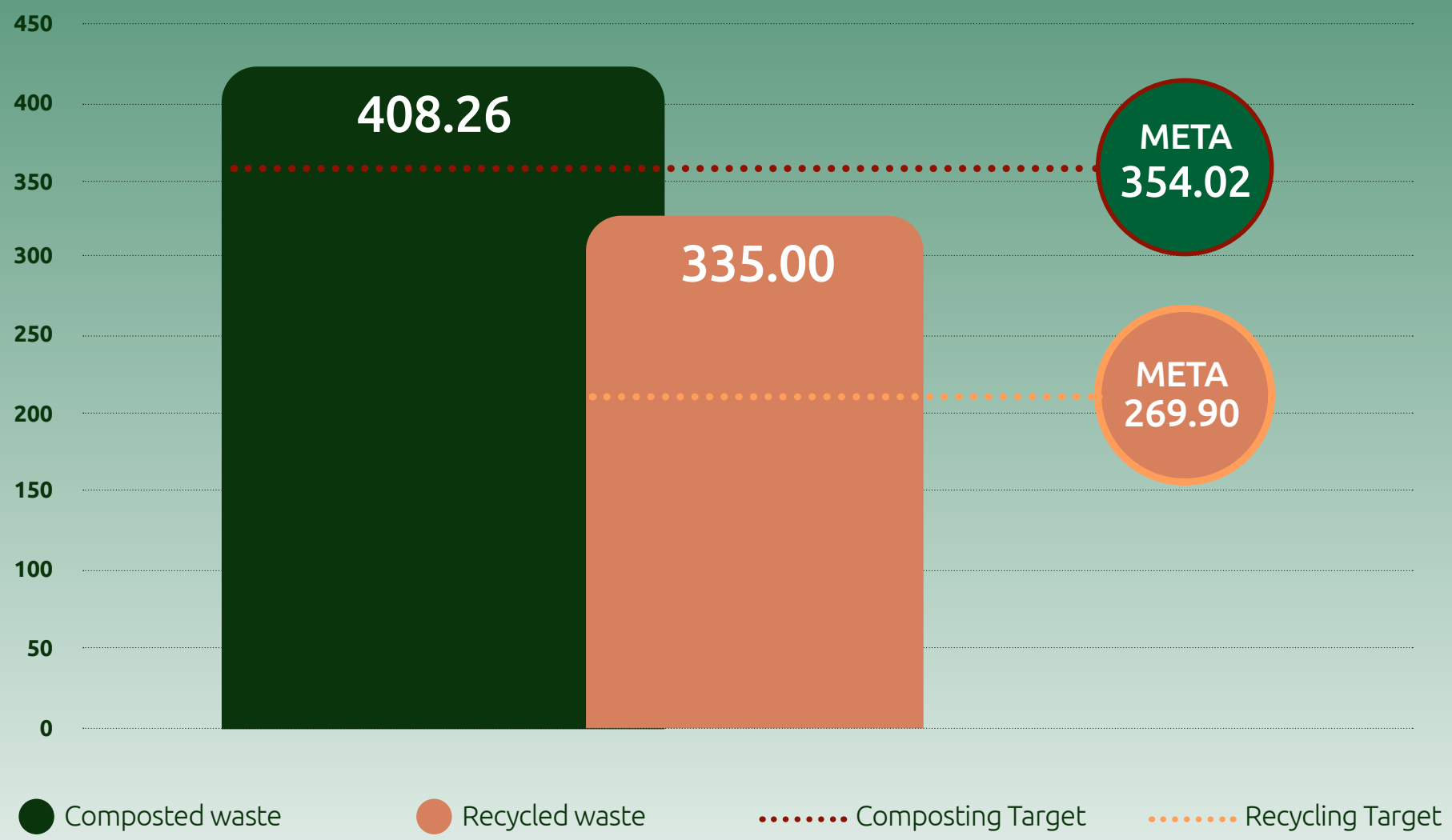
Commitment to sustainability and responsible waste management:



of the total industrial waste generated was **destined for reuse, recycling and/or treated** through reprocessing.

Among its various targets, the company has set itself the goal of increasing the amount of organic waste sent for composting by 35% in 2023 and increasing the proportion of inorganic waste sent for recycling by 5% by December, compared to the base year of 2022. These targets were exceeded, as shown in the chart:

Organic waste for composting and recycling | 2023



5. Air Quality

To mitigate the dispersion of dust in operational areas due to truck, car and machine traffic, weekly monitoring and analysis of total suspended particles and inhalable particles was carried out at 16 air quality stations around the operations. In 2023, 1,158 samples were taken, showing results within the limits allowed under the relevant legislation.

One strategy to control the dispersion of these particles is frequent wetting of the mining areas and accesses between mines and correct maintenance of the roads, as part of the actions outlined in the Dry Period Preparation Plan.



6. Commitment to Climate Change Management

The emission of Greenhouse Gases (GHG) has been monitored since 2015 by MRN, which is constantly looking for measures to promote its reduction in all operations.

Emissions are accounted for through annual GHG inventories. MRN is committed to developing initiatives that enable it to act preventively with regard to the established target.



The target is to **reduce** greenhouse gas (GHG) emissions **by 23%** by 2030.



The listings break down the company's GHG emissions by category/scope for the year 2023.

Disaggregated emissions by scope and category (tCO2e - Kyoto Gases)

Scope	Category	TCO2e Emissions
Scope 1	Agricultural	42.76
	Stationary combustion	177,829.87
	Mobile combustion	90,370.42
	Fugitive	3,630.05
	Land use change	179,897.55
	Solid residues and liquid effluents	3,575.81
Scope 2	Purchase of electric energy	0.46
Scope 3	Leased assets (the organization as lessee)	2,210.46
	Purchased Assets and Services	3,179.72
	Residues generated in the operations	5,704.08
Total		466,441.19

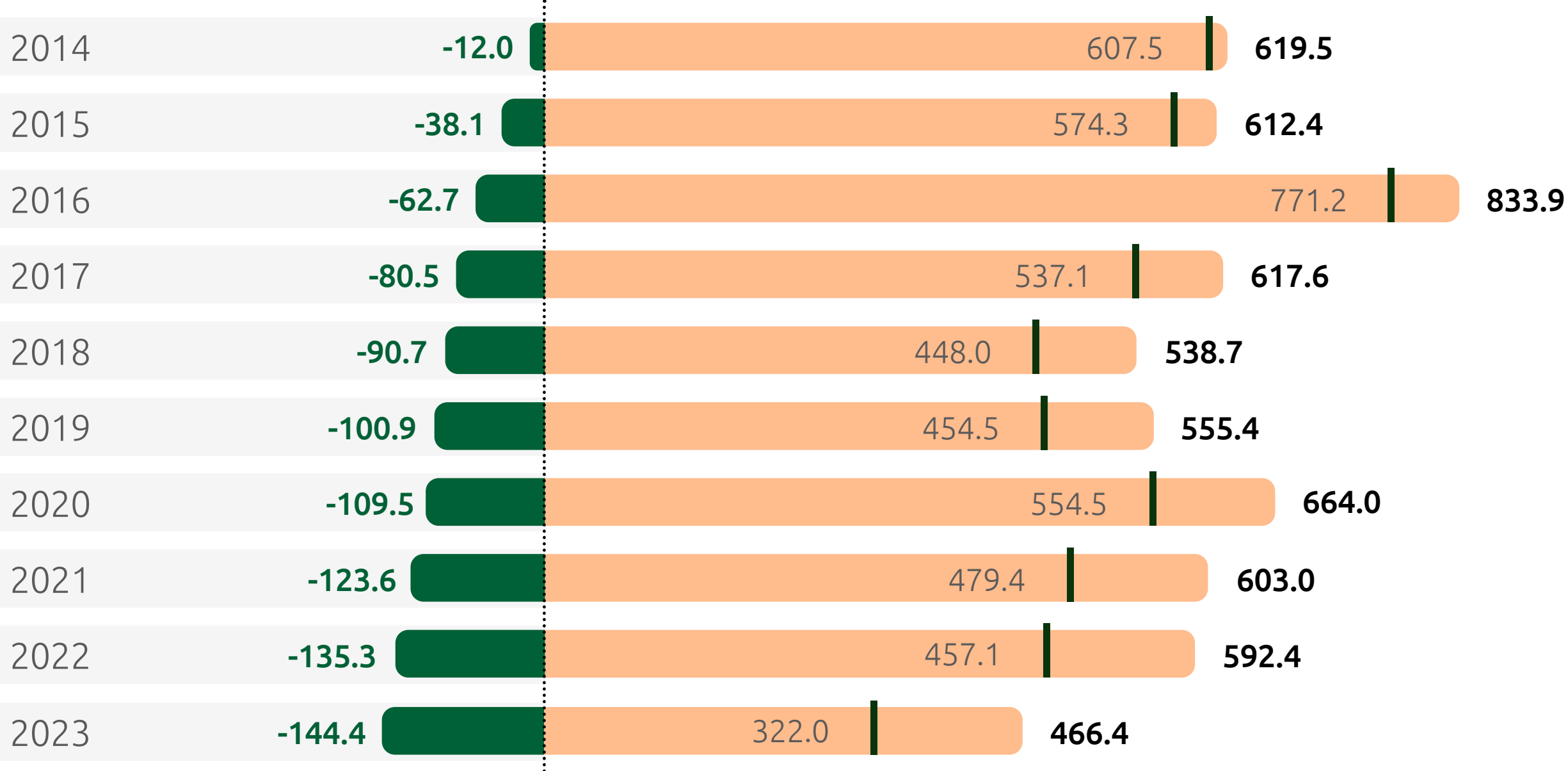
Renewable CO2 removals (tGHG)

Scope	Renewable CO2
Scope 1: Land use change	-144,410.00*

* Removal of CO2 is associated with the reforestation of MRN's areas, both in the planting of plant species and in their maintenance during growth. This result is cumulative from 2014 to 2023.



CO2 Emission/Removal Chart.



● Development of Emissions (k tCO₂e)
 ● Capture from Reforestation (k tCO₂)
 — Net Development of Emissions (k tCO₂e)

Main reduction strategies:

Our decarbonization roadmap* has relevant initiatives to meet the GHG emissions reduction goal, such as:

Initiatives	Status
Review the emission factors related to plant physiognomy and carbon capture ¹	Complete in 2023
Convert the dryer's energy source to natural gas;	Ongoing
Build and operate a transmission line connected to the national grid;	Forecast 2027

¹ reviewed for the 2023 Inventory: the Vegetation Suppression factor from 737.4 to 547.5 tCO₂/ha, considering a regional factor.

* Roadmap - this is a visual tool that works like a map to guide teams through a project. It resembles a timeline and is used in companies to organize and manage product development, strategic planning for the year, people development, and other applications.



Data by scope and category

Scope	Category	MRN GHG Inventory - 2021	MRN GHG Inventory - 2022	MRN GHG Inventory - 2023
Scope 1	Agricultural	87,89	53,14	42,76
	Stationary combustion	174.079,85	170.350,34	177.829,87
	Mobile combustion	100.151,61	89.025,03	90.370,42
	Fugitive	2.725,49	2.981,10	3.630,05
	Land use change	305.955,69	314.671,37	179.897,55
	Solid residues and liquid effluents	4.953,07	6.112,97	3.575,81
Scope 2	Purchase of electric energy	1,04	0,40	0,46
Scope 3	Leased assets (the organization as lessee)	2.858,23	1.984,16	2.210,46
	Purchased Assets and Services	5.323,27	2.453,71	3.179,72
	Residues generated in the operations	6.875,95	4.756,88	5.704,08
TOTAIS		603.012,10	592.389,10	466.441,19

Characterization of GHG emission inventory scopes

Scope 1:



Direct GHG emissions – GHG Emissions under the responsibility and control of the company, such as emissions from the firing of fuel in stationary sources or in vehicles;

Scope 2:



Indirect GHG emissions – Emissions resulting from the generation of electric power;

Scope 3:



Other indirect GHG emissions – All other emission sources possibly attributable to the company's activity. This scope may include transportation services provided by third parties (gasoline and diesel), waste treatment performed by contractors, among other sources.

7. Significant spills

Mitigating environmental impacts resulting from possible leaks or spills of products such as BPF oil, diesel, gasoline, lubricating oil and grease is a priority for MRN, which implements a series of operational control measures. These measures are established considering the characteristics of the products, activities and potential environmental impact, including:

Containment bays for temporary storage of products;

Waterproofed floors;

Regular inspections;

Warning devices;

Measuring instruments;

Preventive maintenance of equipment and vehicles;

Operational training;

Emergency drills;

Valve lock-out;

Containment ditches;

Environmental emergency kits.

The company follows an internal procedure for investigation in case of any environmental accidents, and any spill or leakage that causes damage to the environment is subjected to analysis. In addition, in accordance with current regulations, the competent environmental agency is notified.



No spills with the potential to cause significant damage to the environment **were recorded** in the year.

8. Environmental Management

The commitment to environmental management goes beyond legal requirements and MRN's operational limits, seeking to contribute to the integration between operations, biodiversity and the interests of the local communities where it operates.

This work earned the company ISO 14001 certification in 2001, which is internationally recognized and defines the criteria for establishing an Environmental Management System. Regarding the environmental licensing of the New Mines Project (PNM), a project to continue MRN's operations that covers the Rebolado, Escalante, Jamari, Barone and Cruz Alta Leste plateaus, distributed over the municipalities of Terra Santa, Faro and Oriximiná, the company held public hearings in May in these municipalities, an important step to ensure the participation of the population in the approval of the project and its Environmental Impact Report (RIMA). The Preliminary License (PL) application process is currently being analyzed by IBAMA.



The company has software for the efficient management of its environmental licenses and constraints duly established to secure legal compliance. To undertake activities under Environmental Management, the company made a **total investment of R\$36,365,453.18** in 2023. By integrating cutting-edge technology with best management practices, the company demonstrates its commitment to maintaining responsible operations in harmony with the environment.



Chapter 3

People

Occupational Health and Safety

Communities



Leading players on a sustainable path.

Proud to be and to belong. More than that, it means knowing that in the 45 years of MRN, the entire journey has been, and continues to be, built by thousands of hands, by diverse talents. After all, people are the main driving force within a company by adding ideas, innovative initiatives, a spirit of cooperation and an enormous desire to make things happen. This is the MRN team, who seeks to strengthen itself with every challenge and to inspire new professionals to contribute to a world with more respect, equity, diversity and inclusion. Welcome to an MRN that is meant for me, for you, for everyone.

Ranking GPTW (Great Place to Work).

Once again, ranking among the best companies to work for.

For the third time in a row, MRN was elected one of the five best companies to work for in the northern region of Brazil, according to the GPTW ranking. In the Industry category, the company is among the 50 best companies to work for in the country.

This recognition demonstrates how the commitment to sustainable mining invariably involves valuing the personal and professional development of its employees.





PEOPLE TRAINING AND DEVELOPMENT

The Continued Education activities offered to employees are conducted in partnership with educational institutions throughout Brazil. They aim to use the best people development methodologies and incorporate the main market trends into their processes.

Annual calendar to comply with the requirements of the NR-22 Standard
 834 occupational safety training classes
 Employees of both MRN and outsourced companies
 12,000+ participants engaged



In 2023, the '**LG - Lugar de Gente**' learning platform was released, which stands out for its user-friendly interface and the autonomy it provides to the employees.

Training and Development:

Attendance in **training and development** activities:



1,770
employees

Investment in **training:**



R\$ 1.1
million

Total Hours invested in **Training:**



90,854
hours

PROFESSIONAL IMPROVEMENT

Get to know the main initiatives for the development of MRN employees.

The company invests pragmatically in the development of its professionals, at all levels and in various ways. Training, engagement, equity, inclusion and diversity are some of the words that represent the programs you will see below.



Leadership Development Program

It addresses a diverse range of topics that are essential for the success of contemporary leaders. The main topics covered are psychological safety, leading hybrid teams, promoting diversity and getting new leaders on board.



Successor Development Program

Aimed at improving the skills and competences of those employees mapped out to assume their first management position or more complex positions. The program has customized tracks for each leadership transition and has held conversation circles, training sessions and lectures.



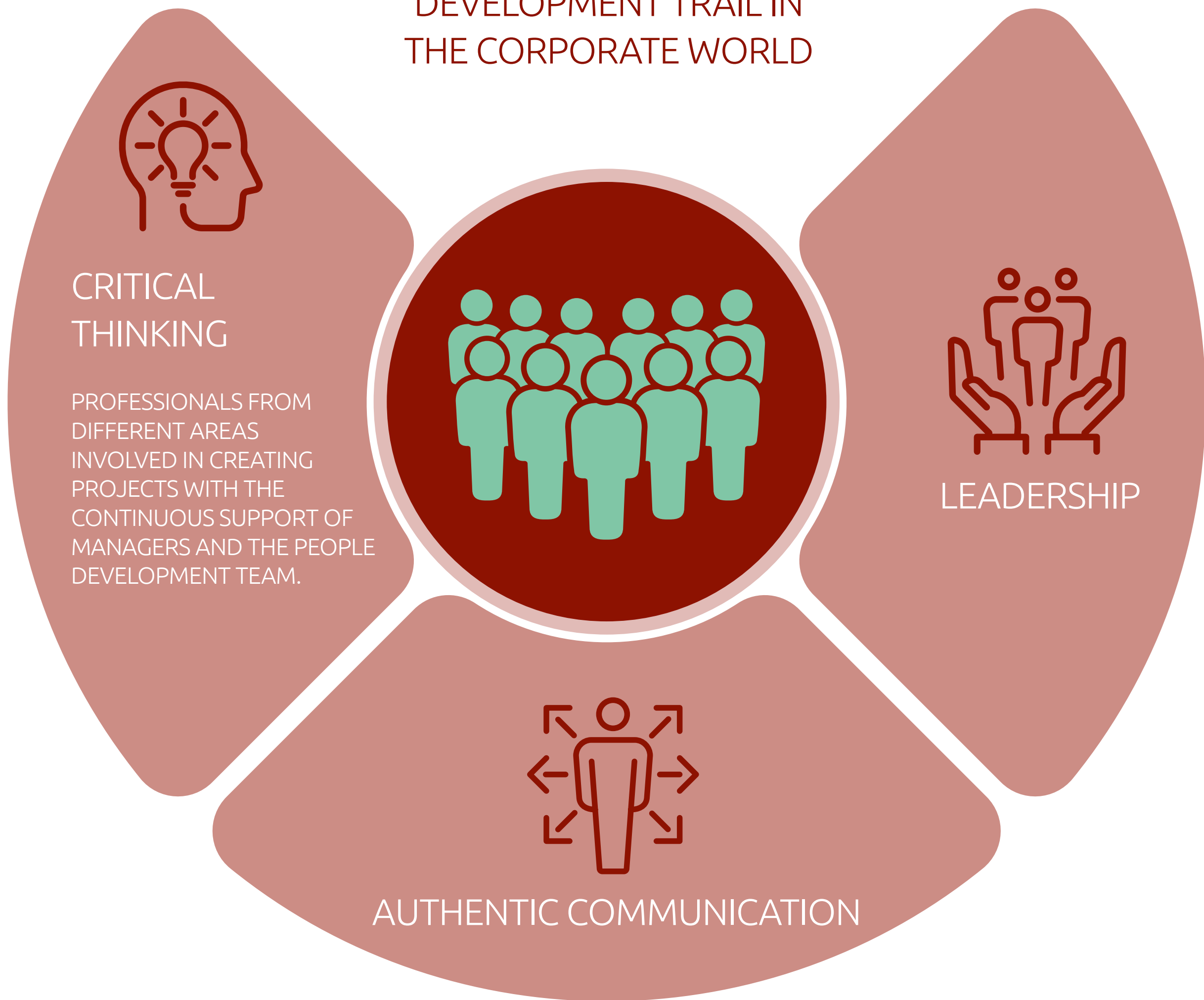
Trainee Program: Amazon's Multicultural Talents

The Amazon region is not only a natural treasure, but also a storehouse of talents for building sustainable and meaningful careers. In this context, the **Trainee Program - Multicultural Talents of the Amazon** has emerged as an innovative initiative dedicated to empowering and developing local professionals, while celebrating diversity in all its essence.

More than a career opportunity, the program is a commitment to inclusion and representation of the Amazon. And it aims to amplify not only individual skills, but also the cultural and ethnic richness of the region.

11 SELECTED TALENTS

DEVELOPMENT TRAIL IN THE CORPORATE WORLD

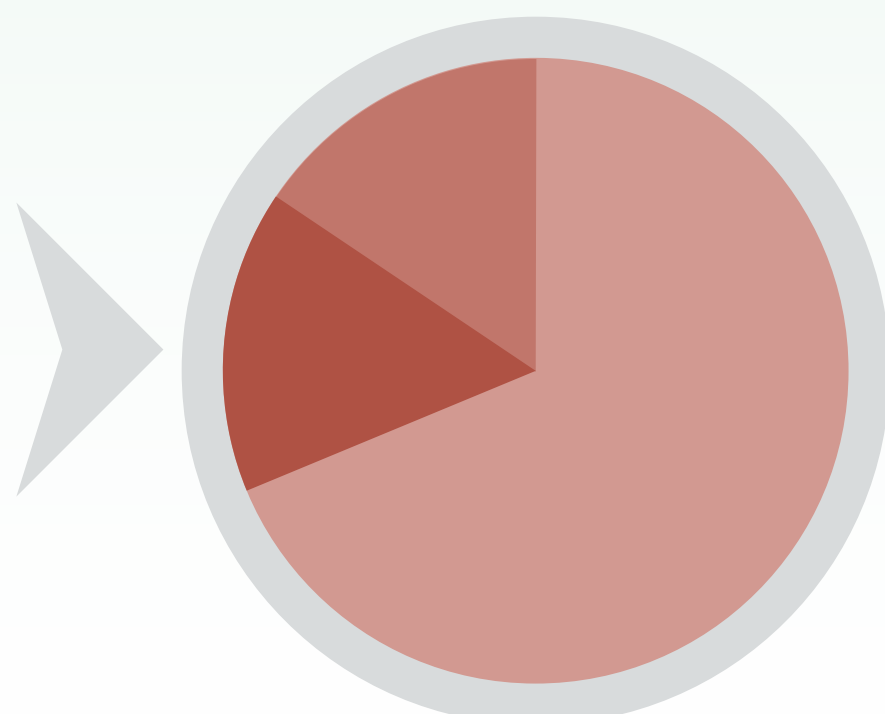


These initiatives boost the personal and professional growth of the participants, as well as contributing to a sustainable legacy in the Amazon region, in line with the company's purpose and values.

Empowerment through Diversity



Out of the 11 applicants approved:



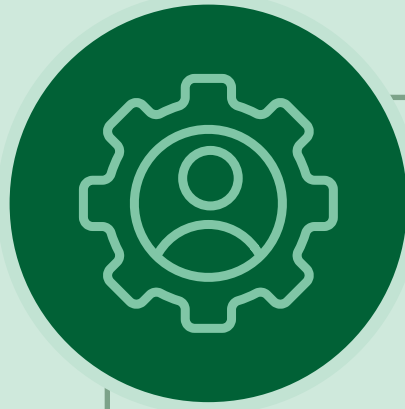
- 64% are women
- 18% identify themselves as black people belonging to Quilombola or riverside communities
- 18% are members of the LGBTQIAPN+ community
- 100% are from Pará State



Jovem Aprendiz (Young Apprentice) Program

Vocational training is a priority for young people looking to enter the job market. In partnership with the National Industrial Learning Service (SENAI), the program is designed to provide young people with solid preparation to face the challenges of their first job by combining theoretical and practical knowledge.

- 60 young apprentices benefited
- Courses:
 - Industrial Maintenance Electricians
 - Industrial Maintenance Mechanics
- 20% incorporated into the MRN's workforce



KIP - Komatsu Immersion Program

The KIP (Komatsu Immersion Program) is an innovative initiative by Komatsu (a Japanese heavy machinery manufacturer) designed to provide a unique hands-on immersive experience for students and professionals in a state-of-the-art industrial environment.

- 1st edition – July-October/2023
12 students (5 women, 7 men)
- Lago do Ajudante and Lago do Batata Communities
- 472 hours of intensive learning
- 60% have been integrated into the Komatsu team in Porto Trombetas



Engagement Program

Over the past four years, MRN has been on a path of engagement and strengthening its organizational culture. In 2023, employees committed themselves to implementing strategies that bolster the company's core values and practices.

Through a fortnightly survey applied to measure the climate, the score reached 9, thus reflecting the care and attention the company pays to its internal environment and a space where everyone feels valued and inspired to contribute to collective success.

DIVERSITY & INCLUSION – MRN FOR EVERYONE

In its third year, the “MRN para Todos” [MRN for Everyone] program consolidates its objective of inspiring, training and supporting the company’s different areas and units in understanding its principles of appreciating diversity, respecting differences and equity in people management policies and practices and in business strategy. With the 2023 initiatives, the affinity pillars were further strengthened and showed significant results.



3 YEARS OF THE PROGRAM



FOCUS OF THE YEAR:
ENHANCING THE DEVELOPMENT
OF AFFINITY PILLARS



IMPLEMENTATION OF ACTIONS TO
INVOLVE AND TRAIN LEADERSHIP



AWARENESS CAMPAIGNS



Positive Results



IN 5 YEARS:
FEMALE REPRESENTATIVENESS:
FROM **6.7% UP TO 10.5%**

IN 2023:

EXCLUSIVE TALENT BANK FOR WOMEN:
MORE THAN 400 APPLICATIONS

NEW ACCOMMODATION FOR WOMEN

NURSERY RENOVATION: IMPROVING
WORKING CONDITIONS AND MAKING
IT EASIER TO RECONCILE WORK AND
FAMILY LIFE



IN 5 YEARS:
QUILOMBOLA REPRESENTATIVENESS:
FROM **2.8% TO 5.3%**

IN 2023:

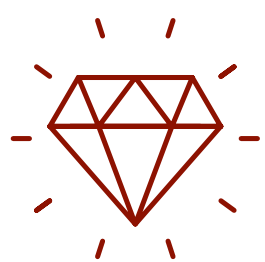
CREATION OF THE **YOUNG APPRENTICE
TALENT BANK.**

BEGINNING OF COMMUNITY **PROFILE
MAPPING**

CATEGORY "D" DRIVER'S LICENSE FOR 19
COMMUNITY MEMBERS

60 COMMUNITY MEMBERS ENROLLED
IN ENCCEJA (NATIONAL YOUTH AND ADULT
COMPETENCY EXAM)

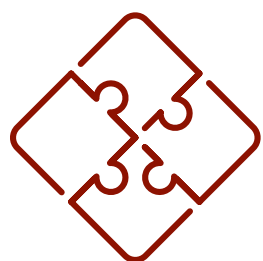
Main actions



Learning Trails and Knowledge Pills: to broaden horizons and deepen knowledge about diversity and inclusion in a constructive learning environment



Women's Meeting with the Executive Board: creation of a safe and welcoming space for open exchanges about their experiences, generating connection, empathy and action plans to make MRN inclusive.



Diversity, Equity and Inclusion Week: an event created with the aim of raising people's awareness of issues related to DEI, reinforcing MRN's position as an inclusive company and valuing diverse knowledge, valuing the representativeness and visibility of the diversity pillars.



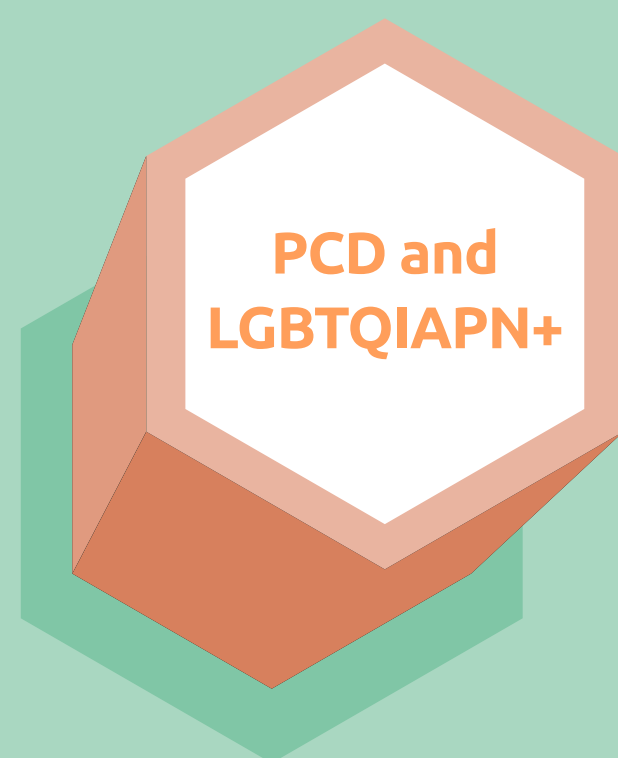
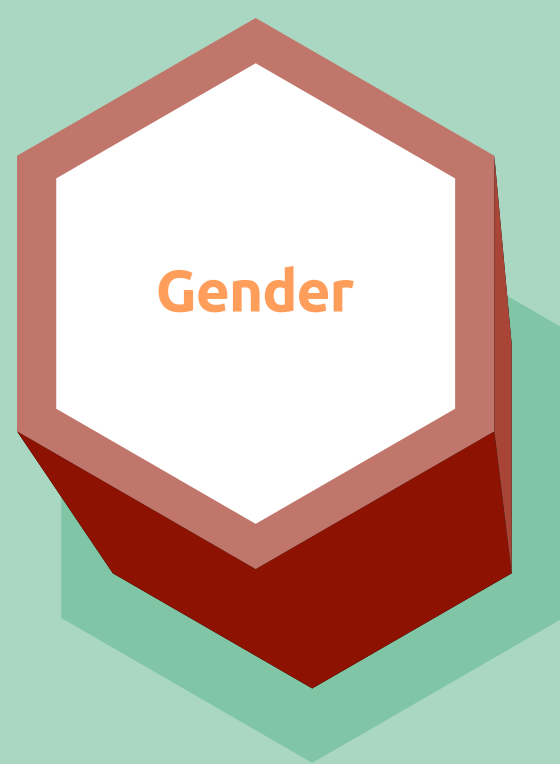
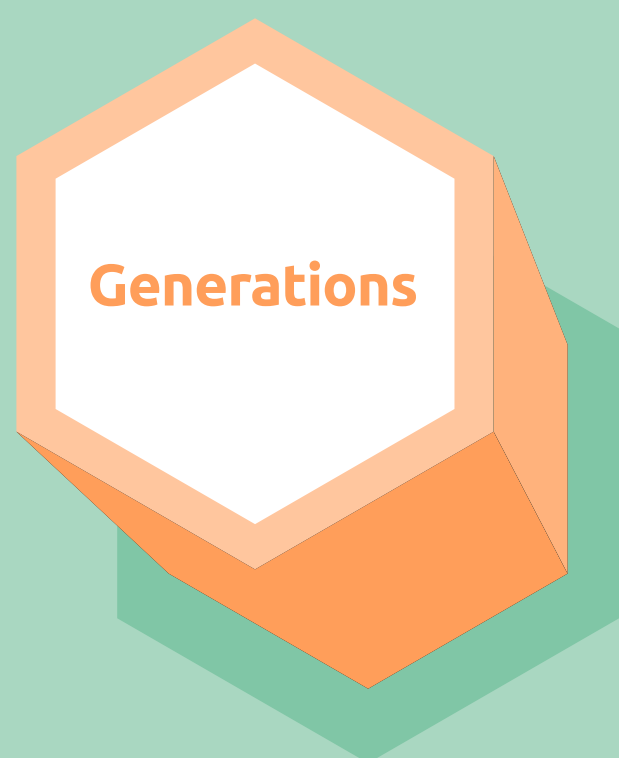
Quilombola Fair: the event was created in allusion to Black Awareness Day and reached an audience of around 250 people. Eleven exhibitors from the Boa Vista, Último Quilombo and Jamari communities sold handicraft products.

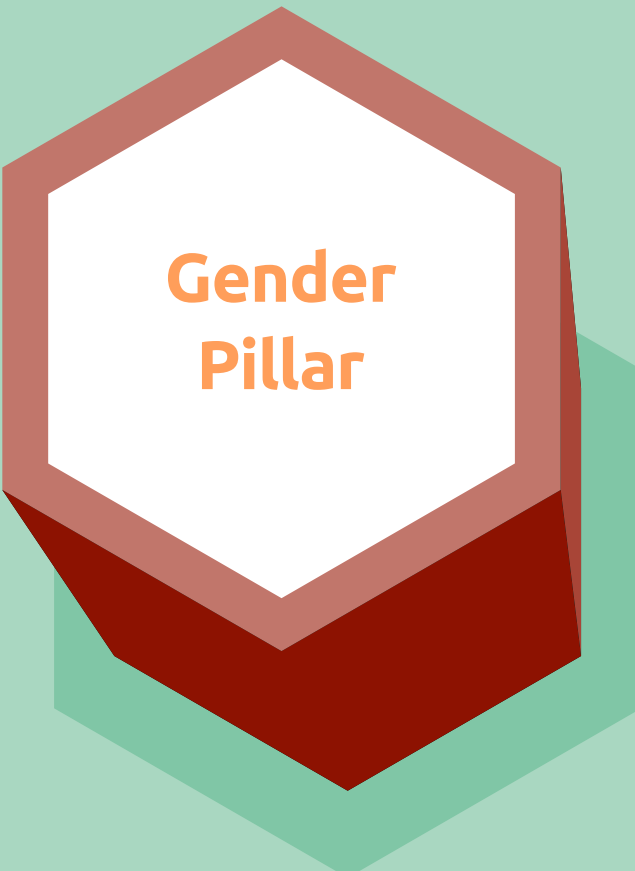


Being able to work on the PCD pillar of the MRN for Everyone Program is a privilege, as it allows us to be part of a historic moment of transformation within the company related to inclusion and diversity.

In addition to representativeness, we can contribute to the development of projects and ideas that will make the company increasingly attractive to this public, thus promoting new hires, valuing professionals with disabilities and their consequent retention by the company.

Elson Gomes Souza, MRN administrative assistant and member of the PCD Pillar of the MRN for Everyone Program.





'Lidera Mulher' Project

It empowers and qualifies women to face the challenges of the market by encouraging them to take on leadership roles. It seeks to establish a solid support network by promoting the development and empowerment of all women in the region through actions that encourage development.







600 women trained

Porto Trombetas, Quilombola communities and neighboring cities, such as Terra Santa.

Meetings and 2-hour modules every 15 days, hybrid format

Another highlight of the pillar was the "Bora Mana" women's entrepreneurship movement, in which around 40 entrepreneurs from the region came together to hold fairs and exhibitions.

EXPECTED RESULTS

-  Increased female participation in C&S*
-  Reduction in female turnover
-  Increased positive perception of the brand in the community (employer branding)
-  Creation of a talent pool for R&S* of women
-  Promotion of the D&I* Culture
-  Top management involvement

Race and Ethnicity Pillar



Quilombola Fair

The second edition of the Quilombola Fair held in November 2023, in the Porto Trombetas main square, to celebrate the Black Awareness Day.

The event featured a wide range of activities, including cultural attractions, craft exhibitions, parades and typical food sales.



Sale of handicraft products produced by Boa Vista, Último Quilombo and Jamari community members.



Encouragement of local entrepreneurship.



Appreciation of Quilombola culture and knowledge.



Amount raised from the sales by the 11 participating communities: R\$6,937.50



Public registered: Approximately 250 people

PWD & LGBTQIAPN+ Pillar



LGBTQIAPN+ Pillar

The company aims to create a safe, welcoming and inclusive environment for all members of the LGBTQIAPN+ community and their allies. MRN recognizes that the diversity of gender identities and sexual orientations enriches the work environment, bringing different perspectives and experiences that contribute directly to the company's innovation and success.

ACTION IN THIS PILLAR:



Presentation of the update of the new Security Briefing and proposal for a quarterly event for 2024;



International LGBTQIAPN+ Pride Day lecture;



Participation in MRN's Diversity, Equity and Inclusion Week;



Let's talk about Red December.



OTHER OUTSTANDING INITIATIVES

Compensation Survey

It is intended to support and underpin the strategic formatting of the company's Remuneration Management, providing clear information and parameters for an informed analysis and comparison with market practices. In this way, it is possible to determine a competitive salary position for attracting and retaining talent.

MRNprev

The MRN Supplementary Pension Plan allows employees to build up financial reserves that can be used and adapted for various purposes, such as guaranteeing a supplementary income, fulfilling dreams, goals and life projects.

Baby Kit:

Given to parents to celebrate this important moment in everyone's life: the birth of a child. This benefit applies to all MRN employees.

100% cotton



- 1 Body
- 1 Bathrobe
- 1 Towel
- 1 Pillow
- 1 pair of shoes
- 3 Mouth wipes
- 1 Bag
- 1 Welcome card

Financial support for higher education

Promotes the educational and professional development of MRN employees' dependents, with financial support for technical or higher education, career guidance and internship opportunities to help students gain practical experience.

163
beneficiaries
in 2023



Humanized dismissal:

The process takes a more sensitive and humane approach to employee layoffs, so that they feel welcome at this delicate time. Layoff is communicated and explained carefully, taking into consideration the respect for the employees and their entire history in the company, thus demonstrating the clarity, transparency, and ethics of all those involved during the steps of the process.

Corporate Volunteering Program

Designed to encourage interaction between people and experience in the Amazon region through meetings between professionals and local communities. The initiative promotes the exchange of knowledge and the building of a shared legacy.

The program is structured on three fronts, with the participation of employees from various areas, both permanent and outsourced. Volunteers play an active role in the design and execution of each stage.

Around 524
people positively
affected

Approximately
25 volunteers
involved

More than
2,800 dedicated
hours



NON-DISCRIMINATION AND EQUAL OPPORTUNITIES

At MRN, discrimination of any kind is forbidden, whether of social or cultural origin, religion, country, gender, ethnicity and race, LGBTQIAPN+ identification or people with disabilities.

The company promotes fair treatment, non-discrimination and equal opportunities for employees through a number of practices:

- Compliance with national labor and employment legislation;
- Protection of vulnerable categories of employees;
- Promotion of safe and healthy working conditions;
- Forced labor and child labor are not tolerated;



MRN does not make employment decisions based on personal characteristics unrelated to the requirements inherent to the job profile. The choice is based on the employment relationship, the principle of equal opportunity and fair treatment and does not discriminate with regard to any aspect of the employment relationship, such as recruitment and hiring, remuneration (including wages and benefits), working and employment conditions, access to training, job assignment, promotion, termination of employment or retirement and disciplinary practices. Measures to prevent and deal with issues of harassment, intimidation and/or exploitation, especially with regard to women, are contained in the code of conduct and can be reported through the Ombudsman's channels.

Affirmative Talent Bank: special measures with the "affirmative vacancy" modality, seeking to increase the participation of minority profiles such as women, people with disabilities and local communities, according to hiring strategies.

REPUDIATION OF FORCED LABOR

MRN has a Labor Relations Manual, which guides its professional conduct and establishes that the relations with in-house and contracted employees are conducted in strict compliance with the labor legislation. The company provides the infrastructure, remuneration, and training support, with professional appreciation and safety required to perform the jobs, and it does not condone activities related to modern slavery. Embracing respect for people is a fundamental principle of the company.

Forced or compulsory labor

The ILO Forced or Compulsory Labor Convention defines any work or service exacted from a person under the threat of a penalty and for which the person has not offered himself/herself spontaneously.

As a way to combat any form of forced labor, MRN has resolved to “reproach the practice of forced or compulsory labor” and has implemented internal and external policies to ensure that the possible existence of such behaviors can be countered.

For example, all its employees are guaranteed the freedom to terminate their employment contracts in accordance with the labor legislation in effect in the country. The broad right to leave the workplace at the end of the workday or when there is imminent serious danger is also guaranteed.

Upon hiring, all employees and leaders are informed about the prohibition of threatening, abusive and exploitative behaviors, including gestures and language.

This commitment is also applicable to MRN’s suppliers, who are informed of these conditions in the selection and procurement processes. To ensure that these regulations are met, the company has several reporting channels, and no complaints regarding forced or child labor have ever been registered.



Local labor:
76% of MRN’s employees come from Oriximiná, Terra Santa, Faro, Óbidos, Alenquer, Juruti and Santarém, municipalities in the Western Pará Region.

Collective Labor Agreement:
Applies to **100% of employees** who meet the eligibility criteria.

Equality:
The Career Plan Policy secure that men and women who perform similar or equivalent roles receive **fair and equitable remuneration**, regardless of their gender.



Total number of workers by type of employment, employment contract and region, broken down by gender:

Headcount/total number of employees	2023		2022		2021	
	Men	Women	Men	Women	Men	Women
Total number of employees including young apprentice	1,521	206	1,483	153	1,393	173
Contract employees (third parties) Permanent + Works	3,753	808	3,774	624	3,206	571
Total Headcount	5,274	1,014	5,212	777	4,599	744

Headcount by type of employment contract	2023		2022		2021	
	Men	Women	Men	Women	Men	Women
Fixed time* young adults	25	28	3	1	27	30
Indefinite time	1,496	178	1,364	152	1,366	143
Total by gender	1,521	206	1,367	153	1,393	173

* 4 Male and 28 Female Young Apprentices

Headcount by region and gender

Headcount by region	2023		2022		2021	
	Men	Women	Men	Women	Men	Women
Porto Trombetas (Pará)	1,485	183	1,406	135	1,364	159
Belém, Pará State	4	9	1	4	2	4
Other regions	32	14	31	14	27	10
Total by gender	1,521	206	1,438	153	1,393	173

* 56 collaborators working from home 36 men and 20 women
 **3 employees working in the Belém office



Prevention and Protection for an increasingly safe and healthy working environment.

MRN believes that employee safety, health and well-being are directly linked to operational reliability. Therefore, it continuously invests in the care, prevention, conservation and maintenance of productive and safe working environments. Beyond legal compliance, the company also encourages genuine care among people and works on safety as an integral part of its culture.

More than 20 Safety Alerts to prevent accidents such as:



- Management of daily risks;
- Care among the teams;
- Care with the hands;
- Prevention in traffic;
- 5S;
- Personal care; self-care;
- Safety with equipment and tools.

EVERYDAY EVENTS

Safety shutdowns on special dates;
 Daily Safety Meetings in all areas;
 Use of the ART (Job Safety Analysis), PTAR (High Risk Work Permit) and PARE (Right to Refuse) forms.



Being physically and mentally well, knowing how to identify dangers, assess risks and make safe decisions are essential practices adopted by MRN teams.

Flavio Trioschi - Occupational Health & Safety General Manager

TECHNOLOGY IN HEALTHCARE

More than 600 telemedicine consultations.
 The technology solves several logistical and operational challenges in the health system of Porto Trombetas by redirecting simpler cases to outpatient services, thus minimizing the overload in highly complex services, organizing the service flows safely and quickly, and offering quality assistance.

WORKPLACE SAFETY

In order to maintain the safety of its operations, leaders conduct daily inspections in the areas to make sure that the conditions in the site are suitable for the safe performance of activities, and to encourage the adoption of preventive behaviors and active care among employees.

COMPLIANCE AUDITS

Periodically, internal and external audits are conducted to verify compliance with the management system. Deviations and opportunities are recorded and analyzed to implement improvement actions. In 2023, two complete cycles of internal audits and two cycles of external audits were undertaken. Also, support of a specialized consultancy is provided so as to keep up with the new legislation applicable to the management system. In this way, ISO 45001 certification is maintained.

2,250 new employees mobilized in more than 170 partner companies

In order to uphold the quality of training, both for its own employees and for contractors, the onboarding and training process is conducted by an in-house team dedicated exclusively to this purpose, which operates in two training cells.

Enhancement and empowerment of employees and of the Internal Accident Prevention Committee



The CIPAMIN (Internal Accident Prevention Commission) plays a crucial role in supporting accident prevention and employee representation. With active listening in all sectors, it holds internal campaigns, consultations, explanations and communication of the main actions undertaken by the Commission.

Excellence Week, in partnership with the Environment, Continuous Improvement, Community Relations, Health and Management teams.

One of the most important activities in 2023, the event involved the Port and Mines in-house and contracted employees in various activities such as talks, equipment demonstrations, seminars and lots of safety activities. The event also included family members, schools and the community.





The 'Pare' Card

Each employee is responsible for their own safety and that of their colleagues, based on the motto "If it's not safe, make it safe." This assumption also states that everyone has the right and the duty to stop any activity if they do not feel safe or perceive something that could compromise their safety or that of their colleagues. This action has already been in place for several years at MRN and is in line with the new NR-1 Standard, updated in 2024.

Tackling the basics is also important.

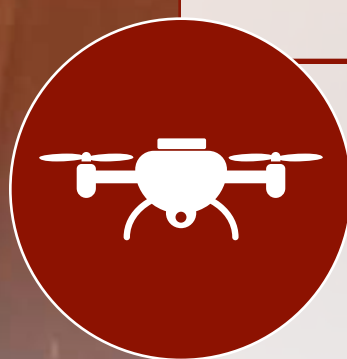
Safety tools

These tools help to control operational risks and hazards and prevent unintended occurrences.

Integration and training plan	Correct use of PPE
Commitment Matrix	Work permits
Daily Safety Meeting	Energy lock-out
Inspections	Job Safety Analysis
Volunteering Brigade	Safe vehicle condition / preventive driving
Safe practices for work at heights	Off-road driving
Safe practices for confined spaces	Driving trucks and heavy-duty vehicles



New ART Job Safety Analysis revised in its content and training format.



Drone inspection When driving vehicles in mines, with results above 95% compliance.



Number of work-related accidents

These actions support MRN in advancing this indicator and in maintaining healthier and safer work environments.

Rate	2020	2021	2022	2023
Non-lost time accidents	0.51	0.56	0.32	0.31
Lost time accidents	0.09	0.36	0.16	0.31
Global Rate	0.60	0.87	0.49	0.62
MHW	11,696,448	12,603,418	12,361,462	12,720,920

Note (1): Frequency rate based on 1,000,000 MHW (NBR 14280)

Note (2): In February 2023, we had an external fatality that was classified as a work-related accident.

The performance of these rates was below the one-digit indicator. These efforts keep MRN among the best indicators in the sector when compared to the benchmarking by the International Council on Mining and Metals (ICMM), which publishes its results on a yearly basis.



Prepared for Emergencies

MRN works and focuses on prevention, but also keeps the team prepared for emergency situations by mapping out the highest risk scenarios and performing prevention actions and drills. In 2023, 14 drills involving various areas and 228 inspections involving the MRN emergency brigade team were conducted.

Fatigue Control Program

The fleet assigned to the mines has a fatigue prevention system. The program takes a comprehensive approach to preventing operator burnout, offering attention tests, stimulation rooms and balanced meals. In addition, operators are encouraged to take voluntary breaks if they feel unable to perform their activities. This initiative recorded 266 breaks, thus demonstrating the commitment to safety.



146,922 preventive tests:

- 130,760 compliance results; 89%
- 15,133 attention results; 10.3%
- 1,028 non-compliance results (0.7%) immediately identified and assisted by supporting activities.
- 9 educational roadblocks
- 720 vehicles checked

OCCUPATIONAL HEALTH

In 2023, MRN reinforced its commitment to the health not only of its employees, but also of their families and of the local community by retaining a full-time ophthalmologist, a gynecologist and an obstetrician and by providing higher-complexity general surgery procedures.



Occupational Health and Medical Control Program

This is a legal requirement provided for in Regulatory Standard NR7, which is intended to prevent physical harm to employees when undertaking work activities. The company's entire occupational health structure is developed within the Porto Trombetas Hospital (HPTR), which has a wing dedicated to workers' health, where occupational and laboratory tests can be performed.

5,082 Occupational Health Certificates (ASOS) were issued to in-house and contracted employees.

Hearing Conservation Program

MRN provides personal audiometry follow-up for each employee. In case of any eventual change, the Health area verifies the existence of a causal link with the work activity or whether it follows a world trend, which is 1/3 of hearing loss in the population.

Ergonomics Program

MRN conducts on-site evaluations in the areas by observing the physical and ergonomic conditions of each employee, so as to prevent repetitive strain injuries, back problems, among others.

Health Monitoring Program

It evaluates the risk of cardiovascular diseases in employees based on pre-employment and periodic exams. Those with a higher degree of predisposition are included in a group with quarterly follow-ups.

Results for the year: 74% of the 96 employees who were followed up in 2023 showed an improvement in their clinical and laboratory data.

Apnea and bruxism

Frequent follow-up with tests to identify problems such as apnea and bruxism. It offers support for treatments, including physiotherapy and dental care support.


Alcohol and Drug Abuse Prevention Program

In partnership with the Human Resources area, the program provides daily tests to assess alcohol and drug consumption, referring people for treatment when necessary and prioritizing safety in the workplace.

EXPANDING ASSISTANCE

In 2023, MRN reinforced its commitment to the health not only of its employees, but also of their families and of the local community by retaining a full-time ophthalmologist and by providing higher-complexity general surgery procedures.

- 647** consultations in partnership with Mater Dei Hospital in Belo Horizonte thus securing access to health care even in remote areas.
- 50 mil** thousand general consultations in various specialties
- 486** surgeries performed at the hospital
- 12 mil** thousand outpatient consultations
- 231** surgeries out of this total for the local community



Number of Patients who used the Telemedicine Service
2021: 884 | 2022: 837 | 2023: 647



Occupational Health Indicators

Occupational health indicators show the success of these initiatives, with a reduction in absenteeism and an increase in presenteeism, reflecting the positive impact of these practices on employees' lives.

Occupational Health Indicators	2021	2022	2023
Presenteeism *	700	655	723
Absenteeism rate**	1.2	0.9	0.8
Audiometric testing rate***	39.4	44.1	39
Rate of Polysomnography tests ****	2.76	0.54	0

* Presenteeism - these are patients on work restriction, cumulative over the whole year.
 ** Absenteeism - consists of the annual average made by the formula: Number of Days Not Worked x 100 / Total Employees x Days Worked.
 *** Percentage of altered audiometry exams throughout the year.
 **** Percentage of polysomnography examinations with moderate or severe changes (Fatigue Program).



Commitment to jointly promoting everyone's development.

One of MRN's main guidelines is to build relations with the communities it interacts with, thus ensuring that the interests of the community are duly taken into account in the company's decision-making process, while always respecting the culture, traditions and ancestry of the territories.

Throughout 2023, various initiatives have been developed that reflect this ongoing commitment to improving the company's social performance, promote dialog and drive local sustainable development in the region.

Acting on several levels

The company's Corporate Social Responsibility and Relations area is connected to three lines of action:

Community Relations

Engaging people, local entities and communities in an environment of collaboration, respect, diversity, inclusion and equity.

Corporate Social Responsibility

Active participation in the region where we operate by collaboratively building projects that contribute to local and regional development.

Licensing and socio-environmental Management

Making sure the company acts in a responsible manner by actively consulting with and listening to the communities, thereby enhancing respect for the environment and for the people.

1. COMMUNITY RELATIONS & SOCIAL DIALOG

ACTIVE PARTICIPATION AND TRANSPARENT DIALOG

For MRN, listening to the communities and respecting their role is essential to consolidate the bonds of trust that have been built up over 45 years. For this reason, a few years ago the company adopted the Social License to Operate (SLO), a concept that aims to establish the social legitimacy of an enterprise. This license assumes that stakeholders recognize that the company operates in a responsible and sustainable manner, considering the generation of value beyond its shareholders and employees.

Other references to MRN’s positive social inclusion:

- United Nations (UN) Guiding Principles on Business and Human Rights
- Aluminum Stewardship Initiative (ASI) certification in the Performance and Chain of Custody Standard.

Strategies Underpinning the SLO:



Social License to Operate

SLO presupposes recognition by stakeholders that the company is acting in a responsible manner and generating value beyond its shareholders and employees.

INTEGRATED MANAGEMENT SYSTEM

The work performed by the Corporate Relations and Social Responsibility team, in collaboration with other areas, is based on engagement initiatives and continuous social interaction. To manage these actions, the company uses the Integrated Social Management System, a methodology that supports the structuring of the company's relationship with social actors, through a set of information obtained from the company's various interactions with stakeholders, including conversations, meetings, dialog tables and information gathered from the direct channel with communities to receive complaints, suggestions and claims. These interactions lead to the construction of agreements and commitments that seek to foster the development of communities and their territories and which result in the set of social investments made every year. In addition, this methodology allows for the construction of more consistent and long-term engagement plans with the communities neighboring the project.



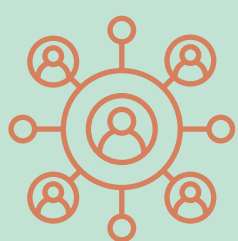
Stakeholder engagement



580+ Stakeholders mapped out.



Permanent discussion forums with 69 communities in the municipalities of Oriximiná, Terra Santa and Faro.



80+ communities engaged in 2023.



Institutional Strengthening

R\$2M+ in investments in infrastructure (water, energy, shed etc.), technical assistance, logistical support for the associations' institutional meetings with public entities.

41 communities visited MRN's operations.

2. CORPORATE SOCIAL RESPONSIBILITY, CONSTRAINTS & AGREEMENTS

THE FOUR AREAS OF SOCIO-ENVIRONMENTAL PROGRAMS, PROJECTS AND INITIATIVES

Education & Culture

Health & Safety

Environment

Income Generation & Institutional Strengthening



Based on these pillars, MRN is developing its role as a corporate citizen, not limiting its activities to the mandatory actions of socio-environmental licensing, but expanding to social responsibility initiatives that contribute to the well-being and guarantee of rights of the communities where it operates.

Investment in community development:

R\$ 49.6
million
invested

- Socio-environmental programs, projects and actions
- Agreements signed directly with Quilombola communities that manage the transfer of funds for the implementation of self-managed projects
- Bolstering community associations so that they can act autonomously in their territories

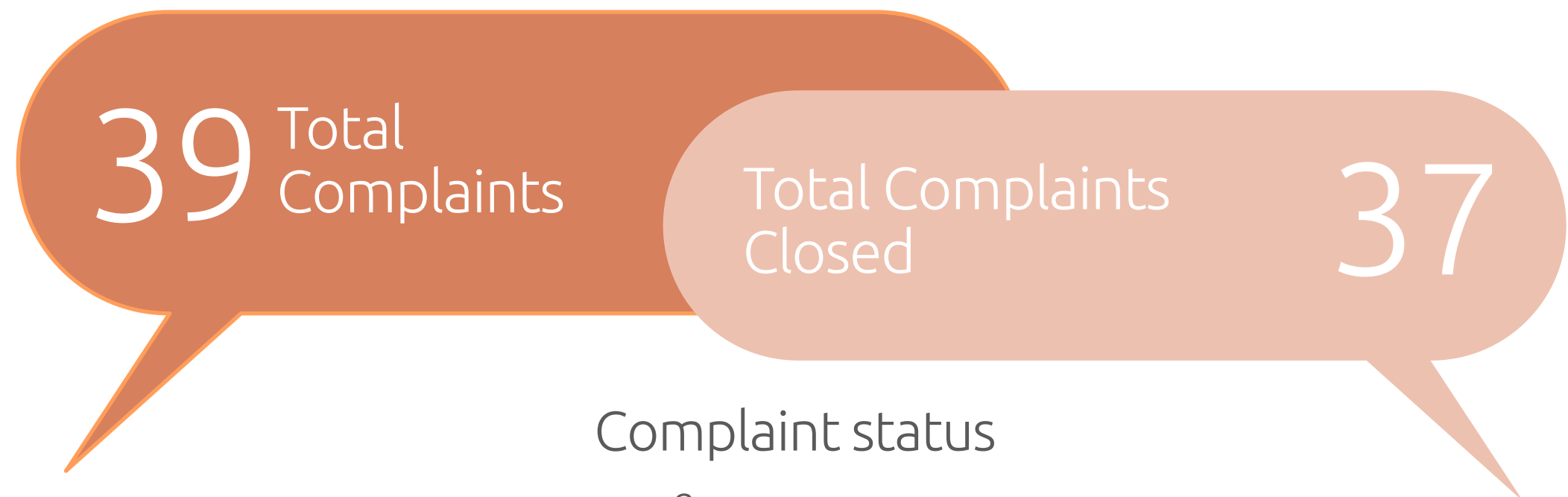
FALAI COMUNIDADE

MRN's direct community relations channel was implemented in 2022 to facilitate dialog and expand communication, active listening and engagement with communities.



Through it, community members can make criticisms, suggestions, claims and acknowledgment on issues related to the company's operations.

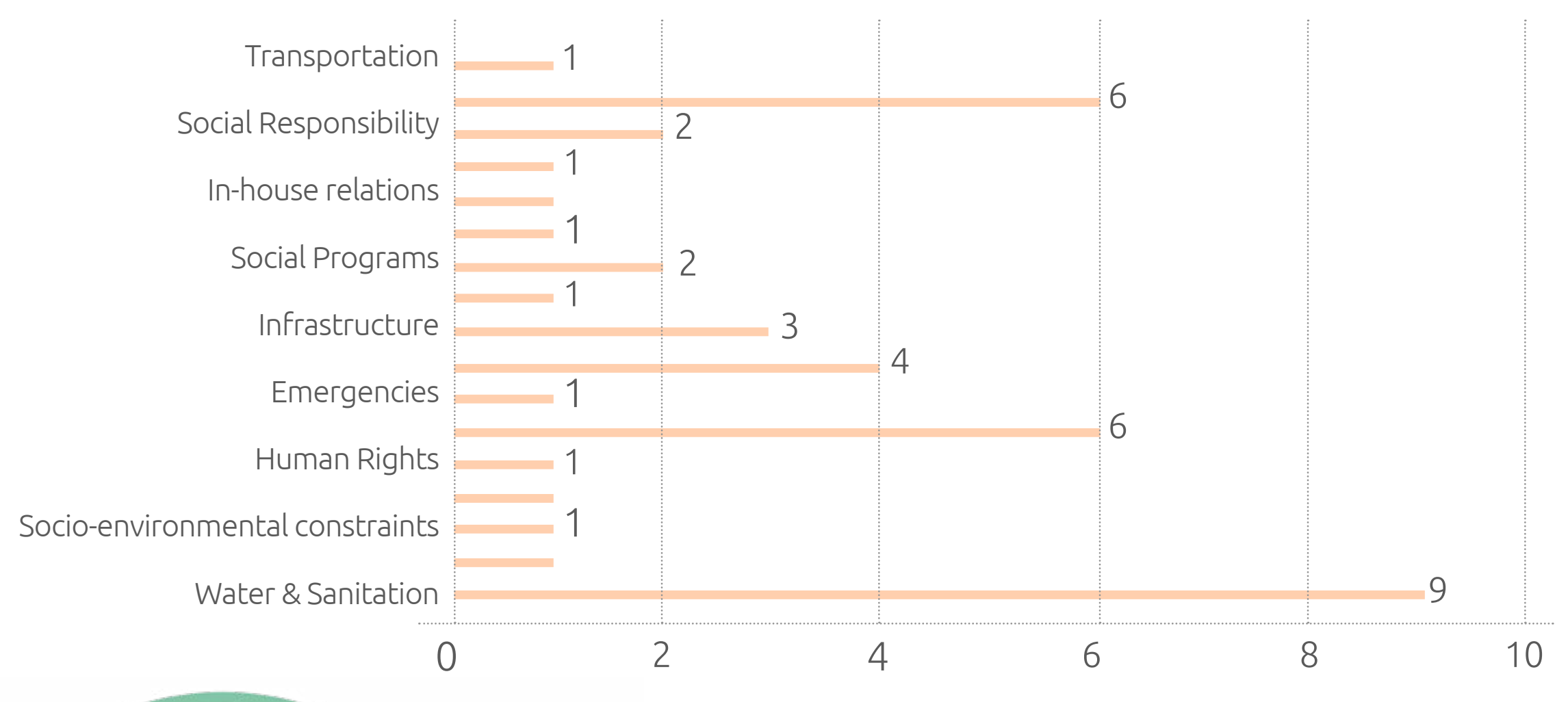
The tool is in line with the best international practices and increasingly underlines the company's alignment with the ESG agenda.



Complaint status



Complaints by subject category



Falai Comunidade

(93) 99189-6054

falai@mrn.com.br





SITE VISITS PROGRAM

The company has been promoting the Site Visits Program for more than two decades, an initiative that seeks to bolster its relationship with Quilombola and riverside communities, as well as enhancing its transparency and commitment to sustainable mining. The program also serves employees' families, educational institutions and local associations.

This is a fundamental channel for the community to understand the company's operation in a visual way and with detailed explanations, which allows distorted perceptions about the operation to be demystified and important information to be collected that should be worked on in the relationship throughout the year.

They visit the Nursery, where seedlings of the native forest species are produced to be used in environmental reclamation after ore extraction. Next, visitors visit an operating bauxite mine, where they are introduced to the process of ore extraction, crushing and washing. Afterwards, they visit a tailings pond, where they receive information, and experience walking on dry tailings.

The visit concludes in the Dam Monitoring Room, where they receive guidance on the Emergency Action Plan for Mining Dams (PAEBM) and learn about the protocols used to guarantee the highest safety standards.

EDUCATION TRANSFORMING LIVES

MRN recognizes education as a driving force behind structural change and a springboard that encourages people to broaden their horizons. That's why it maintains its ongoing commitment to providing learning and professional growth opportunities for its communities. MRN invests in educational initiatives that provide Quilombola and riverside communities with access to Basic Education, Higher Education and Professional Qualification.

Learn more about these initiatives:

BASIC EDUCATION SUPPORT PROGRAM

The Basic Education Support Program (PAEB) provides full funding for Quilombola children and teenagers to study at Colégio Equipe, an institution located in Porto Trombetas. MRN also pays for school and educational materials, transportation, meals and tutoring, providing a comprehensive education for students from elementary school to high school.



130 primary and secondary school children and teenagers by 2023



Boa Vista

(Elementary and High School)

Alto Trombetas II

(High School)

Batata and Boa Vista Communities



Investment in the Project in 2023

R\$5.8 million



Education doesn't just happen at school, it starts at home and the PAEB has been very relevant to me, as it has given me a deeper understanding of how the project will help me both personally and professionally in the future.

Neudimara Rocha da Conceição
3rd year of High School

HIGHER EDUCATION SUPPORT PROGRAM

The PAES acts as an extension to the support to Elementary School and supports young people from the Quilombola communities Alto Trombetas I and II and Boa Vista who are entering undergraduate in-person or distance learning courses.

The Program provides scholarships and monthly financial aid to support the students in their academic background. In addition, the students receive an annual ticket to return to their home towns during the vacation period, since the institutions are located in cities such as Manaus, Belém, Juruti and, for the most part, Santarém.



Scholarship with financial aid, vacation ticket

52 scholarships for students enrolled in courses such as: Pedagogy, Law and Mining Engineering

32 from Boa Vista

04 from Alto Trombetas I

16 from Alto Trombetas II



Investment in the Project
R\$314,543.17



As a black, Quilombola female student, I experienced the changes that higher education has brought to my life and I am experiencing the transformation that PAES is providing me in my Pedagogy degree course. The program's support was essential in encouraging me to stay at the university, helping to cover my expenses and consequently allowing me to change my life through education.

Kathe Santos, a student at Universidade Federal do Oeste do Pará (UFOPA) and PAES beneficiary.



EDUCATION IN THE AMAZON PROJECT

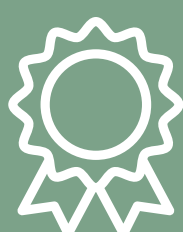
Carried out through a partnership between MRN and the Center for Interstate Social Studies (CESI), the Education for the Amazon Project brings basic education and professional training to local communities, including Quilombolas, riverside dwellers and indigenous people, in the municipalities of Oriximiná, Terra Santa and Faro.

Three lines of action:



Increased schooling:

Prepares students for the National Examination for the Certification of Competences of Young People and Adults (Encceja), and is geared at students and/or workers who have not completed elementary or high school.



Professional Training and Qualification:

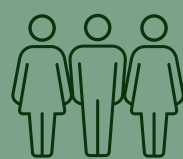
Qualifying local residents for job opportunities with MRN or local companies.



Free Courses:

Provides training for professionals interested in starting their own business. Goal: generate income on a self-employed basis.

HIGHLIGHTS:



326 participating students.



in courses such as Civil Firefighter, Vulcanizer, Mining Equipment Operator, Driving School, Increased Schooling (High School), Literacy for children and adults, Dressmaking, Bakery, and Cooperative Management Technical Training.



21 communities involved in the municipalities of Oriximiná, Terra Santa and Faro.



Learning materials, transportation and personal protective equipment (PPE) are all free of charge.



Investment in 2023 R\$1,140,826.78

KIP Komatsu Program

MRN and Komatsu and Kolping Brasil offered vocational courses to train the local workforce in order to expand educational opportunities by providing knowledge and developing new talents for the job market. To continue their course activities, the students are granted a scholarship and full logistical support. In 2023, 12 young people from the communities of Lago Batata and Lago do Ajudante were certified as Mining Equipment Maintenance Mechanics. And the good news: eight of them were hired by Komatsu.

CULTURE INCENTIVE

In MRN's view, culture plays a vital role in the daily lives of the communities adjacent to the mining company's areas of activity. With various actions aimed at promoting local cultural events, the company contributes to the preservation and celebration of the region's cultural traditions and history.

As well as bolstering the cultural identity of the communities, these initiatives also contribute to economic development, social well-being and the preservation of historical heritage, in addition to enhancing engagement actions with these communities.



Investment of R\$282,000.00 in 2023, related to culture in 2023.

TYPE OF ACTIVITY	TARGET COMMUNITIES
Cultural and religious events in communities	21 communities linked to the Trombetas and Sapucaá Glebas Communities Association – ACOMTAGS
	6 communities linked to the Oriximiná Mãe Domingas Association – AMD
	1 community linked to the Boa Vista Quilombo Descendants Community Association – ACROBV
	8 communities linked to the Alto Trombetas II Quilombo Descendants Communities Association – ACROAT
Event promoting Black People Awareness held by communities	8 communities linked to the Alto Trombetas II Quilombo Descendants Communities Association – ACROAT
	1 community linked to the Boa Vista Quilombo Descendants Community Association – ACROBV
Cultural events and religious festivities promoted by the public authorities	St. Anthony's Pilgrimage in Oriximiná
	Santa Isabel Pilgrimage in Terra Santa
	St. Anne's Pilgrimage in Óbidos

The festivities are organized by formal and non-formal leaders in the communities, involving artists, community leaders, educators and residents in the planning, implementation and evaluation of actions to be undertaken. This approach has ensured that the initiatives are culturally sensitive, socially relevant and truly beneficial to the communities.



SUSTAINABLE DEVELOPMENT IN LINE WITH LOCAL KNOWLEDGE

In partnership with the Associação das Comunidades das Glebas Trombetas e Sapucaá (ACOMTAGS) (Communities Association) and with a view at promoting sustainable development while in line with local knowledge, MRN has been developing a program geared at income generation associated with environmental preservation and involving dozens of families from the Espírito Santo, São Francisco, São Sebastião and São Tomé communities, located in the region of the Maria Pixi Lake. The aim is to stimulate income generation, reforestation and food security.

The program provides technical training and support proposals that were constructed together with the community members, taking into consideration the needs of the communities, their limitations (linked to infrastructure), and traditional knowledge.



The training courses are based on income generation, quality of life and the sustainable use of natural resources. **Nearly 80 families attended** activities such as technical visits, meetings and training courses in various areas such as: Cattle Ranching, Community-Based Tourism, Good Practices in Planting Management, Rural Entrepreneurship, Digital Content Creation and Audiovisual Dissemination Methods and much more.

PROMOTED PROJECTS*



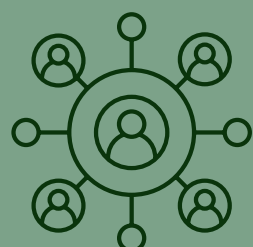
Vaga Lume

Encouraged by MRN, through the Rouanet Culture Incentive Act, Vaga Lume promotes education and community development in remote regions of the Brazilian Amazon. The main goal is to bring access to reading and education to children and teenagers who live in rural and riverside communities, often far from urban centers and with little access to educational resources.

It works by installing and maintaining community libraries in rural and community schools, as well as carrying out educational and cultural activities aimed at promoting a love of reading and learning. It also encourages the training of local reading mediators, training teachers and community members to act as multipliers of knowledge.



Approximately
1,000 people
assisted



Communities:
Lago do Ajudante, Moura,
Boa Vista, Serrinha,
Jarauacá, Flexal



Investment:
R\$500,000.00



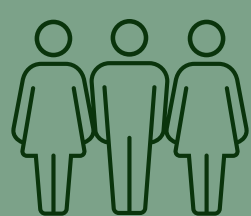
Sports in Town

Geared at promoting sports activities with the city's residents, with a special focus on young people. The project aims to improve people's quality of life and foster values such as discipline, teamwork and health. It provides a variety of sporting and recreational activities accessible to anyone who is interested.

Through partnerships with schools and government agencies, the project organizes classes, training sessions and sporting events in volleyball, basketball, futsal and handball. There are also talks and workshops on nutrition, injury prevention and personal development.

The project also aims to promote positive values and a greater sense of community among the participants. Participants have the opportunity to build friendships, overcome challenges and develop a healthy and active lifestyle.

The 'Esporte na Cidade' (Sports in Town) Project is run by the organization De Peito Aberto, sponsored by MRN through the Federal Sports Incentive Act.



300 beneficiary children and teenagers.
Around 100 scholarship students from Colégio Equipe



Porto Trombetas,
Communities: Ajudante, Boa Vista, Moura, Curuçá, Nova Esperança, Municipalities: Terra Santa and Faro.



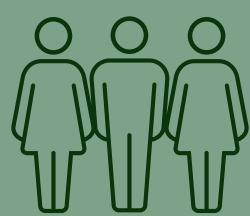
Investment:
R\$381,905.06



Maré do Amanhã Orchestra

It aims to promote social inclusion, personal development and musical training for children and young people in vulnerable positions. The project, sponsored by the Rouanet Culture Incentive Act, offers free access to classical music lessons and instrument practice, providing a unique opportunity for participants to explore their artistic potential and develop their musical skills.

Students develop essential skills such as teamwork, discipline, concentration and self-confidence, while exploring and celebrating their own artistic expression. In addition, the project offers a safe and welcoming environment where children and young people can connect with mentors and peers who share similar interests and passions.



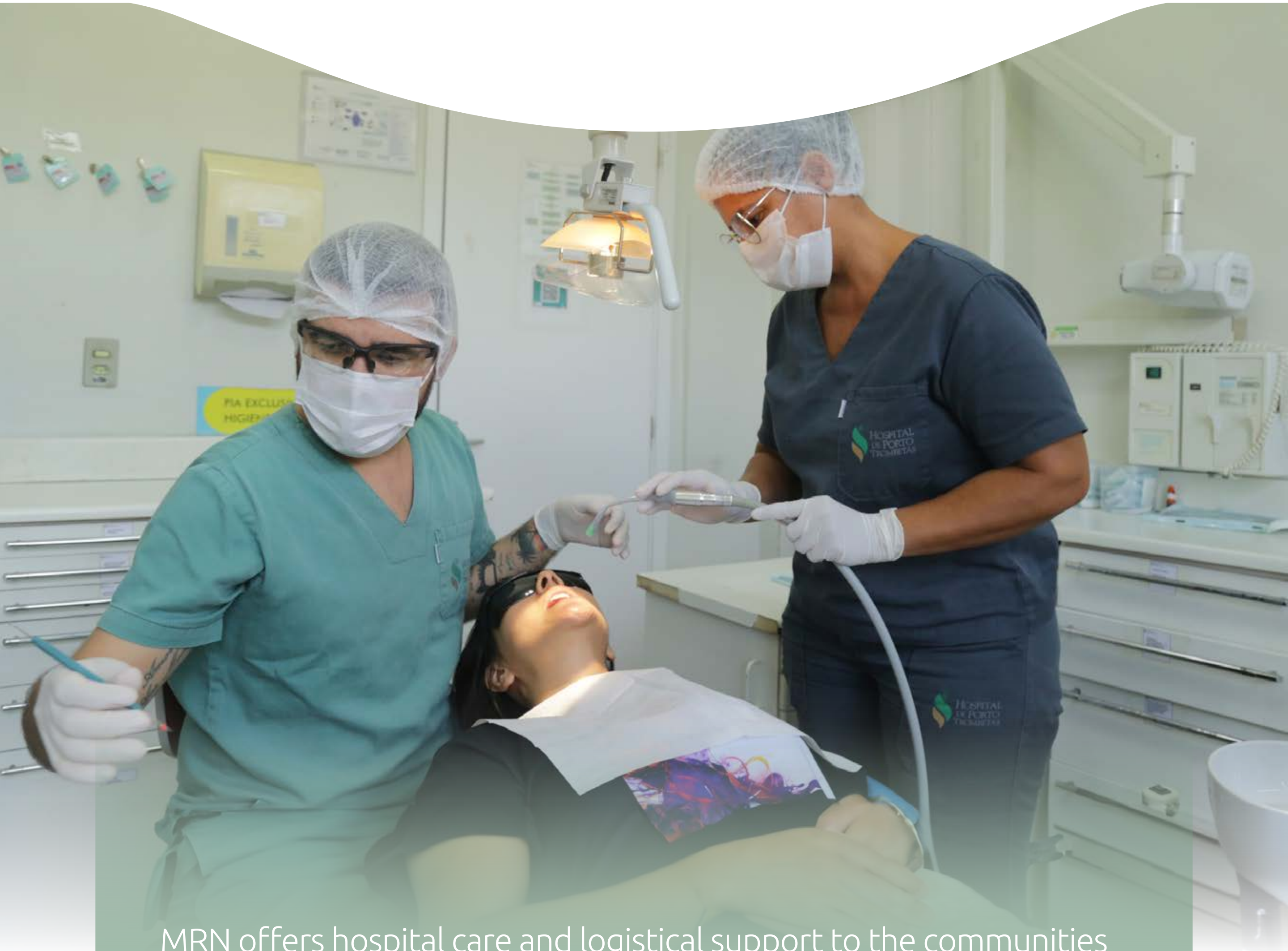
Approximately 150 students assisted.



Porto Trombetas, communities Moura, Boa Vista and Lago do Ajudante, enrolled at the Colégio Equipe Trombetas



Investment: R\$428,881.10



MRN offers hospital care and logistical support to the communities at the Porto Trombetas Hospital (HPTR). The company also provides dental care to three Quilombola territories, covering 16 communities and approximately 1,000 families.

In 2023, R\$146,151.15 was invested in logistical support to enable access for community members transferring to other centers.



TOTAL OF 30,977
 medical consultations
 for riverside dwellers and
 Quilombola people – 2023.

Vaccinations, medical and dental consultations	7,929
Outpatient / Consultations	782
Emergency care (urgency/emergency)	3,865
Surgery	231
Physiotherapy session	328
Ultrasound exams	201
Endoscopy	15
Hospitalization	335
X-rays	725
Clinical analysis laboratory	16,566



The Socio-Environmental Education Program (PES) is a constraint established by the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) in the process of environmental licensing of MRN to reduce, mitigate and offset for the social and environmental impacts of bauxite extraction.

Made up of 11 socio-environmental projects, the program relies on the active participation of the communities involved, who discuss and plan together with MRN the execution of each of the projects and their activities in the municipalities of Oriximiná and Terra Santa, in the state of Pará.

It aims to develop and train people who are able to comprehend the environment and its (social, economic, political, cultural, legal, ethical) interrelations, acting in a conscious and responsible manner on environmental preservation, on the rational use of the natural resources, on improving the living quality, on the respect to cultural diversity, and on the exercise of citizenship, while respecting and appreciating the tradition and local knowledge of each territory combined with income generation.



11
projects



578
activities



More than
16 thousand
people involved

[Learn more about the initiatives](#)



1

The mission of the program is to provide work and income generation alternatives for the Quilombola communities of Alto Trombetas II (ATII) and Boa Vista through the development of training processes around the production of ceramic handicrafts and bio-jewelry, thus contributing to the cultural and environmental recognition of these communities.

It also seeks to bolster community identity and organization through the recognition of local history, the learning of techniques and practices that reflect culture and the generation of an alternative source of income.



ENVIRONMENTAL AND HERITAGE EDUCATION PROJECT (PEAP)

03 modules of 264 hours of training in the production of bio-jewelry - 4 communities - 56 attendees;

03 modules of 264 hours of training in ceramics production - 4 communities - 37 attendees;

03 modules of 176 hours of training in the production of earthenware body adornments - 2 communities - 62 attendees;

149 Products on display at EXPOSIBRAM.

ENVIRONMENTAL EDUCATION PROJECT (PEA)



2

Promotes integrated educational actions to raise awareness about the rational use of the environment with a special focus on issues that influence the communities.

In 2023, the PEA operated through courses and workshops aimed at adults, young people and children. Among the various activities developed, the project worked on topics such as caring for wild animals, recycling and the use of natural resources. In addition, the Environmental Education Multiplier Training Course was held. The project seeks to spark innovative actions and products in the communities involved. In 2023, during courses and workshops, the communities were awakened to the reuse, creation and generation of income from objects that were previously seen as waste, such as the construction of brooms and dyes from PET bottles.



ENVIRONMENTAL EDUCATION PROJECT (PEA)

04 Modules of the Training Course for Multipliers in Environmental Education and the Environment - 5 riverside and Quilombola communities - average of 32 attendees per activity;

18 Environmental Education Workshops on the Use of Natural Resources - 18 riverside and Quilombola communities - 241 attendees;

17 Environmental Education Workshops on Caring for Wild Animals - 17 riverside and Quilombola communities - 349 attendees;

18 Environmental Education Workshops on Recycling - 18 riverside and Quilombola communities - 396 attendees.



3

Promotes the training of producing families from the rural communities of Jaguaruna, Alema, Urubutinga and Redobra, located in the municipality of Terra Santa (Pará State), to support and promote management of native bee species (*Scaptotrigona* sp.) with economic potential, without damaging the Amazon ecosystem.




**Income
Generation**

Contributes to the protection of biodiversity through the increase of ecosystem services provided by stingless bees, such as pollination.

BEEKEEPING SUPPORT PROJECT IN TERRA SANTA

- 28 Technical Visits to Review Colonies - 17 attendees;
- 02 stainless steel decanters delivered for common use by beekeepers - 2 communities;
- 230 Açaí seedlings - 17 attendees;
- More than 30 beekeepers mobilized to take part in the Technical and Management Assistance Program (ATeG) - Cassava-to-Honey, developed and run by the National Rural Apprenticeship Service (SENAR);
- 02 Propolis and pollen processing courses to diversify sources of income - 25 attendees.





4

The objective is to increase productivity, develop people and communities with a view to sustainable development, who are autonomous, venturesome and have a sense of constant pursuit of learning and personal, family and systems development, as well as improving the quality of life of the families served. The Project provides technical training to farmers by using collective and individual methodologies such as courses, workshops, and technical visits on agricultural and socio-environmental topics.



43
families

Communities:

Boa Nova, Casinha and Saracá, at Sapucaá Lake, Camixá, in the medium Trombetas River, and at Batata Lake

The project has been developing the participants in seeking business autonomy through environment-friendly practices, a strategic vision of the business, and promotion of the rural property and the brand. The producers are encouraged to participate in fairs, events, and in the productive organization through the creation of cooperative associations.



AGROFORESTRY SYSTEMS (SAFS) PROJECT

- 03 Courses on Worm Farming and Humus Production - 61 attendees from 03 communities;
- 04 Courses on Business Plans and the Organization of Rural Activities - 62 attendees from 03 communities;
- 03 Courses on Integrated Fire Management in Agricultural Areas - 26 attendees from 03 communities;
- 03 cassava residue utilization courses - participation of 03 communities;
- Delivery of materials and equipment for managing SAFs;
- 301 Technical Visits to 43 families participating in the Project throughout 2023.





5

It serves farmers from the Ascensão riverside community, located in the Sapucuá Trombetas Agroextractivist Settlement Project, in the municipality of Oriximiná, Pará State. The goal is to encourage agricultural practices aimed at community development, especially in the production chain of cassava. It provides training on agricultural topics through courses, workshops and technical visits.

The project also improves the management techniques adopted in the crops and stimulates the diversification of rural property, thus promoting a positive impact on income generation for the 18 participating families. The goal is to develop the productive autonomy of the families and the development of their business.



FAMILY FARMING SUPPORT PROJECT

Delivery of materials to renovate or build 13 houses - Ascensão Community - 18 beneficiary families;
01 Fruit Growing and Seedling Production Course - Ascensão Community - 17 attendees;
01 Course to Support Brand Creation and Improvements to the Project Logo - Ascensão Community;
01 Entrepreneurship and Brand Promotion Course - Ascensão Community - 17 attendees;
01 Best Flour Award at the 1st Oriximina Cassava Festival;
126 technical visits were made to 18 families over the year.



6

Aimed at promoting access to preventive and curative healthcare for the Alto Trombetas I and II Quilombola communities, it offers basic medical care, nursing consultations, the distribution of medicines and educational talks on topics related to health and the environment.

The communities are visited on a monthly basis by a healthcare team made up of doctors, nurses and nursing technicians who carry out consultations and awareness-raising and educational activities. Medical assistance services are provided to the families, including consultations and referrals for laboratory tests and emergency care.



QUILOMBO PROJECT

- 12 Campaigns in the year - monthly follow-up;
- 14 beneficiary communities - 06 service centers in the TA I and TA II territories;
- 2,066 Medical consultations;
- 2,179 Nursing consultations;
- 72 educational talks held in 14 communities - 778 attendees in the communities served.



PROJECT FOR THE
CONSTRUCTION
OF WATER
MICROSYSTEMS
AND ARTESIAN
WELLS



7

The project provides water catchment structures for families in the Boa Nova, Saracá and Batata Lake communities.

In 2023, elevated concrete structures were built to support water tanks that will serve as reservoirs to supply drinking water to the communities. Concrete structures are more durable and require less maintenance than old wooden structures. As a result, it was planned to build 8-meter-high reinforced concrete elevators with the capacity to support 10,000-liter water tanks. The system is made up of photovoltaic systems (solar panels) and is a sustainable system to replace the old fossil fuel engines.



WATER MICROSYSTEMS AND ARTESIAN WELLS PROJECT

02 Concrete elevated structures built - Batata Lake community;
05 Concrete Elevated Structures built - 02 beneficiary communities (Boa Nova and Sacará, on Lake Sapucuá);
08 artesian wells with drinking water for the community, according to laboratory analysis of water quality.

8

This project secures the conservation of the copaiba (*Copaifera* sp.) and the production of oil-resin by the communities, investing in training and technical advice for the sustainable management of copaiba, as well as inventorying and managing the natural populations on the Monte Branco plateau.

The project is being carried out with Quilombola communities in Alto Trombetas II, namely Curuçá-Mirim and Jamari.

- **The forest inventory includes only *Copaifera langsdorffii*, which has 28 cataloged species.**
- **Out of these, 16 are endemic to Brazil, mainly in the Amazon and Cerrado biomes.**
- **The species that occur in Brazil are considered to produce oil-resin,**
- **The oil-resin is widely used in the cosmetics and pharmaceutical industries and as an additive in the manufacture of varnish and paint. In popular medicine, it is used in the treatment of several diseases as anti-inflammatory.**



COPAÍBA GROVES MANAGEMENT PROJECT

100 days of Inventory and Monitoring of Copaiba trees;
123.8-hectare inventory;
8,484 seedlings produced in community-based nurseries;
4,835 copaiba individuals inventoried at all stages of development (including seedlings): 14.5 liters of oil-resin collected according to sustainable management;
04 technical visits to community nurseries - 44 attendees in 02 Quilombola communities;
08 Courses and Workshops - An average of 33 attendees at each course in 02 Quilombola communities.

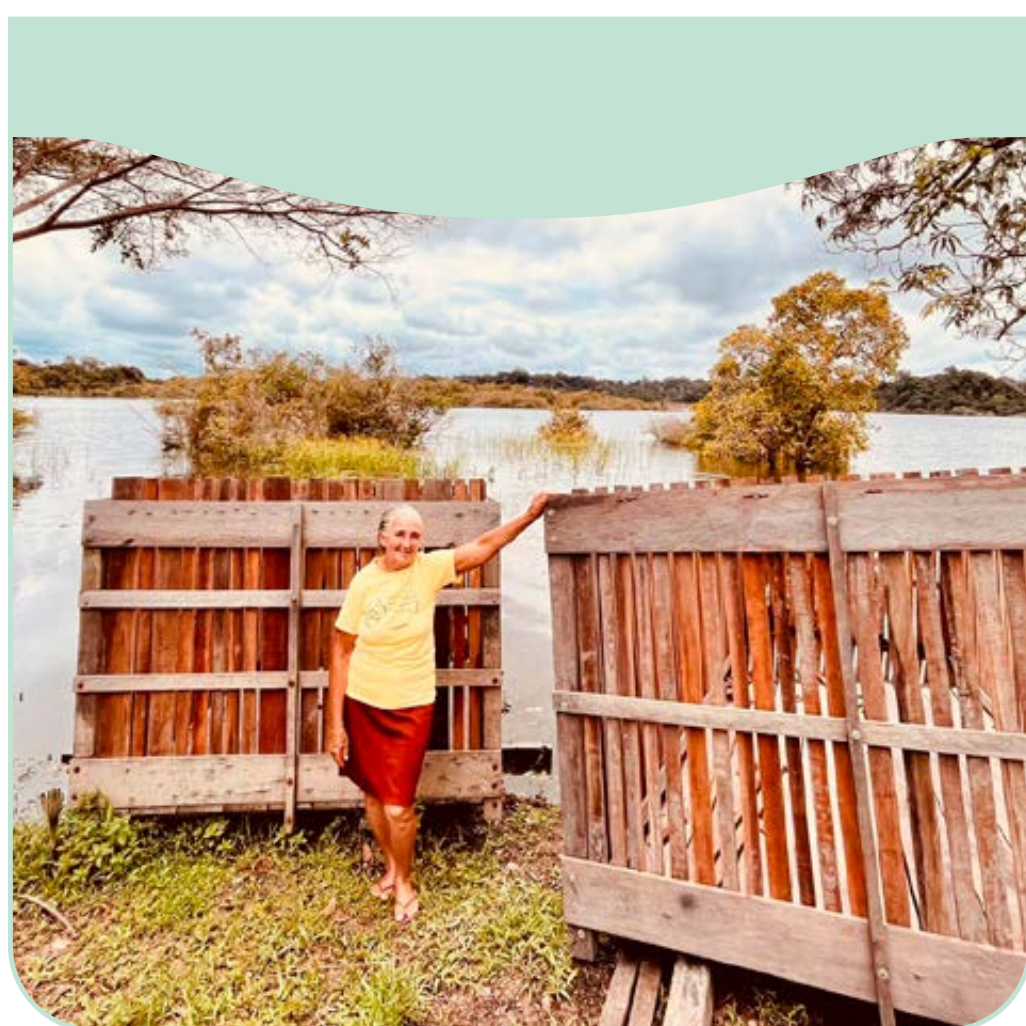


9

This project provides training for the residents of the communities Tarumã, Bacabal, and Acapuzinho, in the medium Trombetas River, in raising tambaqui fish using techniques developed locally based on experiments conducted jointly with the communities.

In partnership with the Federal University of Western Pará (UFOPA), it seeks to develop sustainable management methods that provide the highest yield in fish production, taking into account working time, resources employed and the time it takes for the fish to mature.

The technical and scientific knowledge produced at the university dialogues with the traditional knowledge of the riverside populations, with training to work independently and activities involving the construction of tanks for raising tambaqui, handling and enriching the feed with local fruit trees, among others.



FISH FARMING SUPPORT PROJECT

- 35 Technical visits made to beneficiary families - 07 beneficiary families;
- 04 fish farmers supported in their own initiative to buy fingerlings - Acapuzinho community;
- 3,000 kilos of feed delivered to 03 communities;
- 03 fish breeding tanks built in the Bacabal community;
- 20 Project participants at the Live Fish Fair in Oriximina/PA;
- 49 technical visits to the project's beneficiary families to monitor the development of the fingerlings and fish.





10

The project operates in 25 communities along the Trombetas River, carrying out disinsection (spraying and thermonebulization) to combat and repel mosquitoes that transmit malaria, dengue, yellow fever and leishmaniasis. The project also works with an educational approach, explaining to families the best way to take care of the environments that are favorable to the proliferation of insect vectors.



MALARIA CONTROL PROJECT

23 riverside and Quilombola communities and 2 indigenous villages visited in the first campaign;
17 riverside and Quilombola communities and 2 indigenous villages visited in the second campaign;
1,484 properties visited for spraying and thermonebulization;
06 cases of malaria identified and referred for treatment.



11

The Community Management of Chelonians in the Medium Amazon - Pé-de-Pincha Project has been developed since 1999 by the Federal University of Amazonas (UFAM) with the support of the Rio Solimões Institutional Support Foundation (UNISOL), MRN, local town halls and community volunteers, encouraging the conservation of chelonians through participatory management.

The goal is to conserve populations of chelonians, such as tracajá (*Podocnemis unifilis*), pitiú (*P. sextuberculata*), tartaruga-da-amazônia (*P. expansa*) and irapuca (*P. erythrocephala*) in a participatory manner, involving local communities and institutions, based on training and support from UFAM.

More
than 6
million

hatchlings released
into the wild:

Amazon river
turtles



Irapuca



Tracajá



Pitiús



Pé-de-Pincha is one of the projects that has made the most progress in research into the management of freshwater chelonians in the Amazon region and covers 2.7% of the entire Legal Amazon, in communities in the states of Amazonas and Pará.

In 2023, due to the historic drought on the rivers of the Amazon, there were major logistical difficulties. Nevertheless, thanks to the determination of everyone involved, the results achieved exceeded expectations.

PÉ-DE-PINCHA PROJECT

- 118 communities from 18 cities in Pará and Amazonas;
- 31 communities in Oriximiná and Terra Santa;
- 2,839 people from the communities involved in the project;
- 5,966 nests protected in the communities;
- 124,098 eggs which gave rise to 53,193 hatchlings, released into the wild;
- 71 meetings and training sessions held in Oriximiná and Terra Santa - 784 attendees throughout the territory covered;
- 86,481 chelonians released into the communities of Oriximiná and Terra Santa.





3. LICENSING AND SOCIO-ENVIRONMENTAL MANAGEMENT

FREE, PRELIMINARY, AND INFORMED CONSULTATION: THE QUILOMBOLA COMPONENT STUDY (QCS)

The Quilombola Component Study (ECQ) is built up in a participatory manner to identify socio-environmental impacts on Quilombola lands related to the location, installation, operation, and expansion of a work, activity, or venture. It is through this process that the Free, Preliminary and Informed Consultation of the Quilombola communities affected by the company's operation is materialized.

Quilombola consultation processes are currently underway: a) as part of the process of obtaining the preliminary license for the New Mines Project (PNM)* and b) in the process of renewing the operating license for the Monte Branco Plateau, both conducted by Ibama, with Incra as the intervening body.



ECQ New Mines Project

Boa Vista Quilombola Territory

A total of 53 Environmental Impacts were identified, divided into 11 Themes: Communication; Culture; Education; Income Generation / Economy; Territorial Management; Environment; Institutional Relations; Health; Safety; Transportation; Sport and Leisure.

Alto Trombetas II Quilombola Territory

The impact assessment activities were carried out in the first half of 2024. A total of 63 impacts were identified.

ECQ Monte Branco

Alto Trombetas II Quilombola Territory

A total of 62 impacts were assessed across 9 areas: Social Communication; Culture, Knowledge, Ways of Life and Education; Social Organization; Employment and Income; Mobility (Transport); Quality of Life; Health; Environmental Quality and Territory and Natural Resources.

* Detailed information on the project and its main actions in 2023 can be found in the New Mines Project chapter.

HUMAN RIGHTS

Securing the protection of human rights throughout its chain of suppliers, employees and partners is a key issue for MRN. In order to disseminate its Human Rights Policy, the company carries out various actions such as training and conversation circles, as well as regularly promoting Human Rights Due Diligence (HRDD), an independent technical audit that checks its performance in relation to human rights principles and standards.



Throughout 2023, MRN implemented the actions recommended in the last DDDH, with special attention to improving communication and consultation with Quilombola communities.

Chapter 4



Governance

Operations and
Innovation Compliance

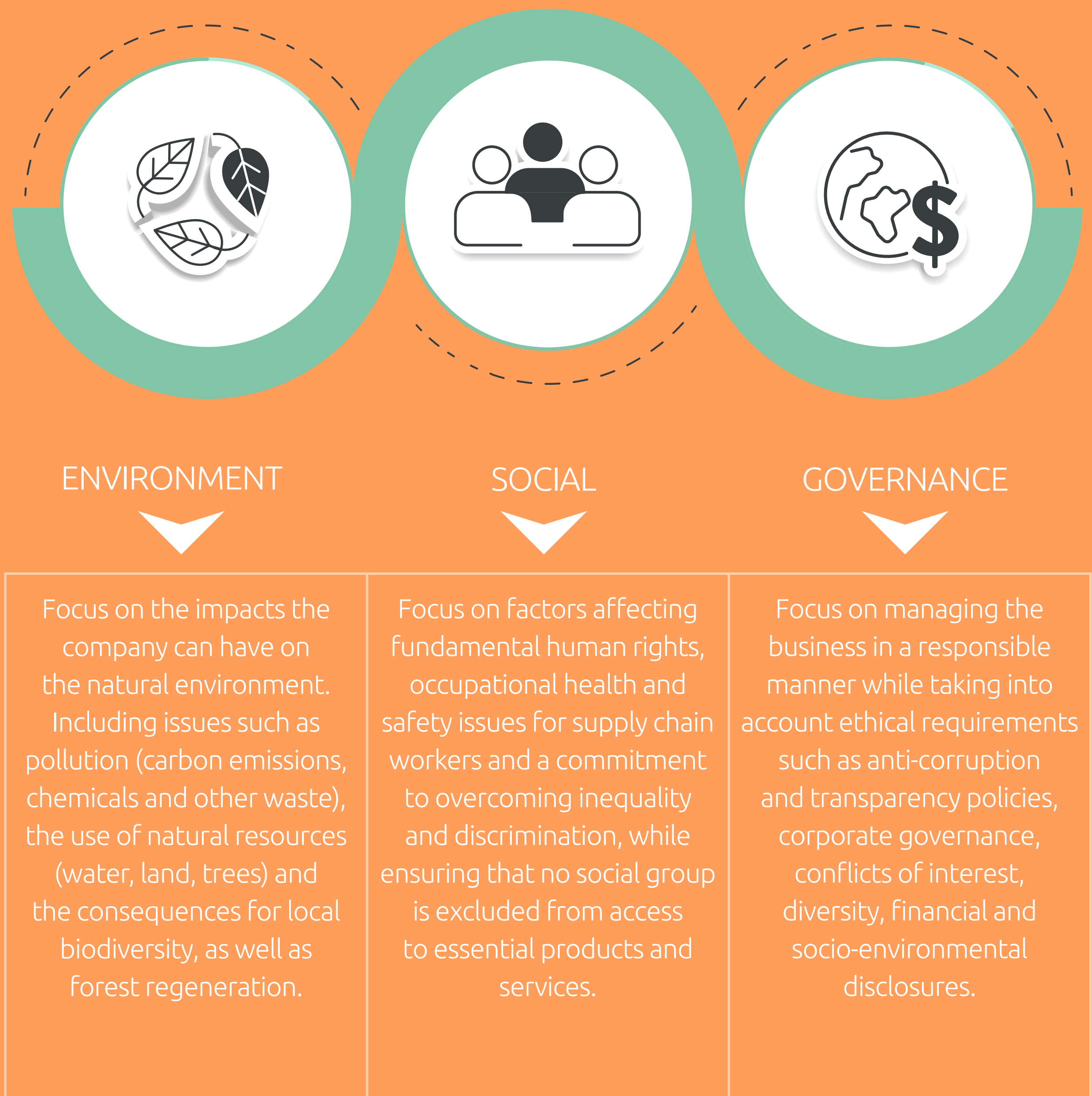
Compliance



Management committed to transparency and integrity.

MRN follows corporate governance standards based on international criteria by incorporating sustainability concepts such as integrity, anti-corruption, human rights and biodiversity management into its management model. Seeking strategies that promote operational excellence in line with a high degree of transparency and compliance with ESG principles is what guides the company's governance policies.

ESG PILLARS



CERTIFICATIONS ATTEST TO A COMMITMENT TO SUSTAINABLE MINING

ASI Performance Standard

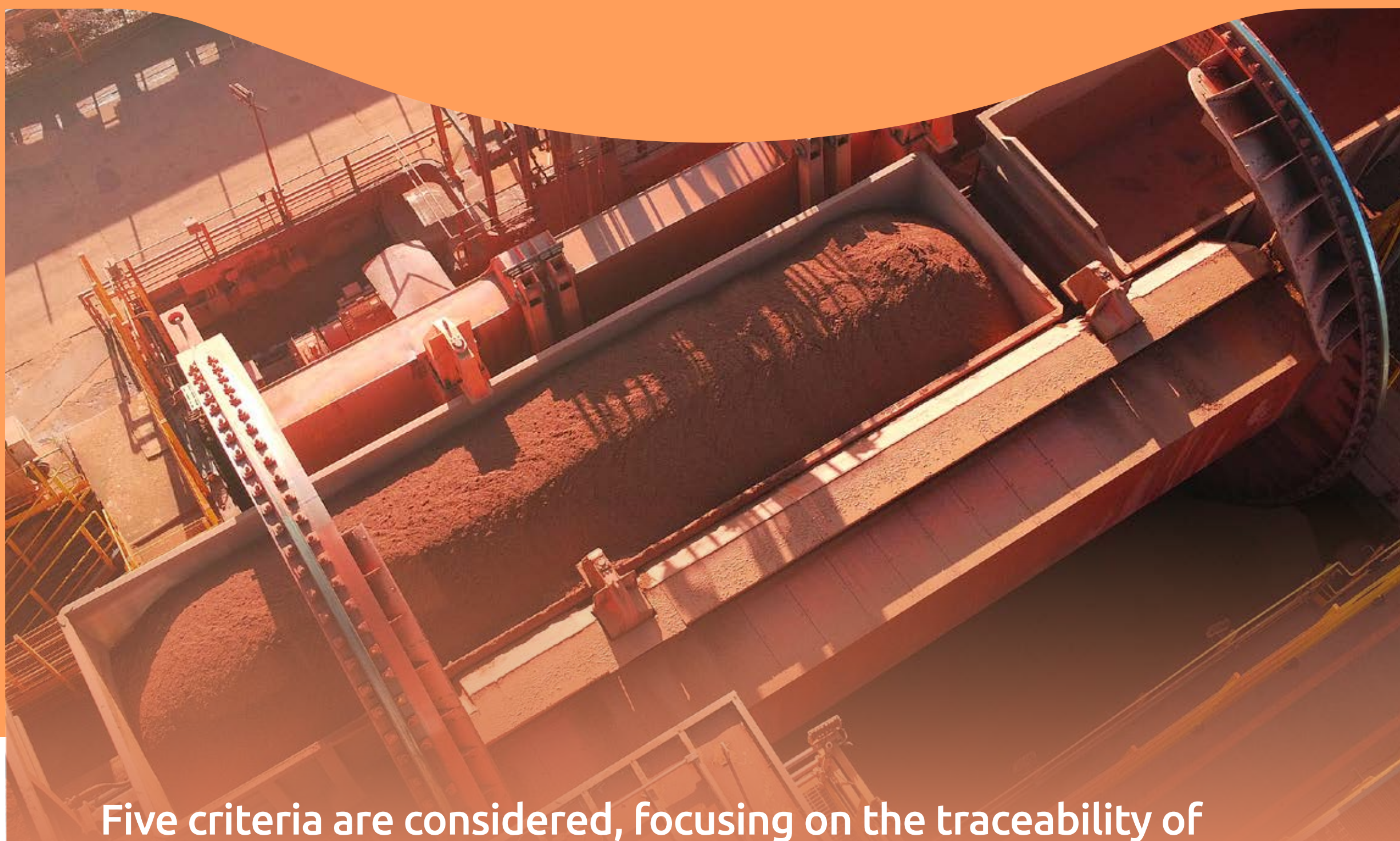
In 2023, MRN maintained the ASI (Aluminum Stewardship Initiative) seal in the Performance Standard through an independent audit carried out by Bureau Veritas Certification. ASI is a non-profit organization that sets certification standards for the aluminum production cycle. It is the world's only voluntary sustainability initiative that covers the entire aluminum value chain, and is based on ESG principles and sets 11 **requirements**:



Chain of Custody (CoC) Standard

In 2023, MRN maintained the certification of the Chain of Custody (CoC) Standard. The independent auditing process was also conducted by the international certification agency Bureau Veritas Certification (BVC).

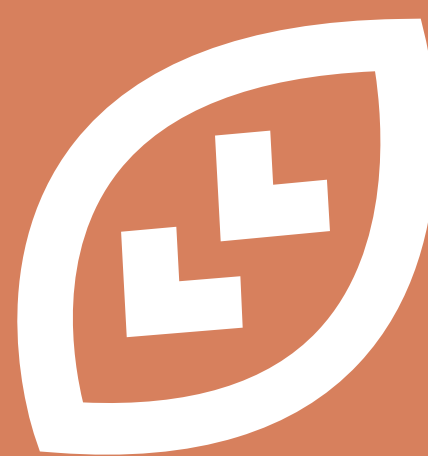
The ASI-CoC seal complements the Performance Standard and establishes requirements for maintaining a Chain of Custody, from the extraction of bauxite to its transformation into aluminum from the value chain.



Five criteria are considered, focusing on the traceability of processes, from bauxite extraction to shipment.

5 PRINCIPLES APPLICABLE

- Management System and Responsibilities
- Primary Aluminum
- Mass Balance System
- Issuance of CoC Documents
- Allegations and Communications



MRN's commitment to sustainability is evidenced by its active pursuit and achievement of ASI Performance Standards. Our certification reflects the solid environmental, social and governance principles that permeate the entire aluminum value chain, meeting the demands of customers who value responsibility and sustainable excellence.

Wvagno Ferreira, General Manager for Performance and Risk.

FEATURED PROGRAMS IN 2023

Internal and external ombudsman channel
Community Complaint Mechanism
Maintenance of ISO 14001 and 45001 certifications
Consolidation of the Compliance structure
Improving the application of the General Personal Data Protection Law (LGPD) and the right to privacy
Maintaining ASI CoC and Performance Certifications
Implementation of IFC Standards requirements - World Bank



Compliance Training

- | | |
|--|---|
| <ul style="list-style-type: none"> • Code of Conduct • Preventing and Combating Discrimination and Harassment • Compliance Management System • Anti-Corruption • Interaction with Public Agents | <ul style="list-style-type: none"> • Gifts and Amenities • Conflict of interests • Donation, Sponsorship and Socio-environmental Investment • Integrity Due Diligence • Interaction with Public Agents |
|--|---|

Integrated Management System (IMS)

MRN maintained its Integrated Management System (IMS) certifications in accordance with ISO 14001 and ISO 45001 Standards.



The recertification audit featured the following:

- ◆ High level of management involvement;
- ◆ Workshop Housekeeping;
- ◆ Commitment to workers' health and safety;
- ◆ Proper management of industrial waste;
- ◆ Strong commitment to environmental preservation.

INTEGRATED MANAGEMENT POLICY

Through its senior management, the company has defined and documented its Integrated Management Policy, which takes into account environmental, social, health, safety, governance and quality criteria, as well as their relationship with sustainability issues in the business value chain.

The policy is made up of established guidelines that are broken down into measurable objectives that are consistent with continuous improvement, with results that are critically analyzed, with a view to adopting actions that increase the performance of the Integrated Management System.

Some of the commitments of the MRN Integrated Management Policy



Complying with legal, institutional and contractual requirements, as well as any other agreements entered into with stakeholders.

Through a system, it monitors compliance with stakeholders and verifies compliance with agreements with suppliers, shareholders and neighboring communities, and performs periodic audits.



Provide safe and healthy conditions to prevent work-related accidents and illnesses, by ensuring that all risks are continuously identified, assessed, treated and monitored.

In addition to standards and indicators, attention to detail, compliance with procedures and genuine care also guarantee a safe environment in the company, which has a Risk Management Manual that defines guidelines for identifying, assessing and controlling risks.



Protecting the environment by preventing pollution, managing its environmental aspects and impacts arising from its operational activities and sustainable attitudes, with a commitment to continuous improvement in environmental performance.

MRN complies with the socio-environmental conditions and has created a protocol for identifying and evaluating environmental aspects and impacts, as well as implementing the Socio-Environmental Education Program.

To access the document in full,

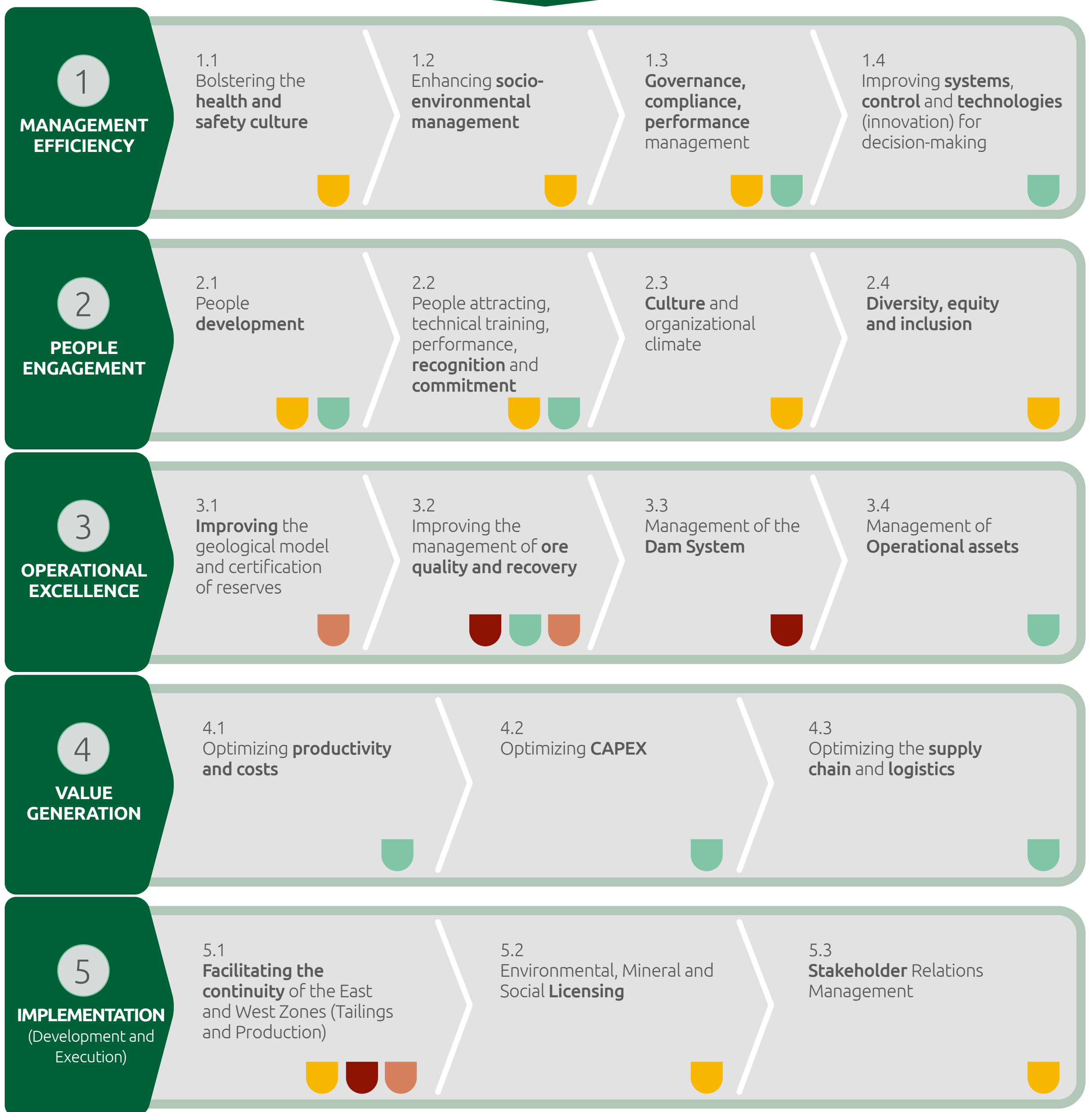
[click here](#)



STRATEGIC GUIDELINES

MRN’s strategic planning establishes global challenges and targets directly related to the company’s purpose, mission, values and vision.

Strategies that support the Global Goals



C H A L L E N G E S

Social License

Tailings Restriction

Economic Viability

Mineral Inventory

Communication with Stakeholders

The company communicates clearly and transparently with its stakeholders, working in an integrated manner and adhering to strategic themes, aligned with its global challenges and goals, and connected to the principles of international certifications such as ASI, IFC, GISTM and others. Its Communication team works along four lines: Internal Communication & Engagement, External Communication, Digital Communication and Press Relations, seeking to promote transparency of information through official internal and external channels.



MRN CERTIFICATION AND ACCREDITATION TIMELINE



ISO 14001 and 45001 in order to bring MRN's activities into line with international environmental management and occupational safety standards.

2015 – 2018



GISTM defines criteria for the management and operation of dams to mitigate socio-environmental risks and impacts.

2021 – 2025

2022 – 2023



ASI Performance defines ESG (environmental, social and governance) principles and criteria, which address sustainability issues in the aluminum chain, integrated into the IMS [Integrated Management System].

ASI Chain of Custody creates a sustainable link between MRN and its certified customers in the aluminum chain.



2022 – 2025



IFC is a World Bank association that promotes the application of social and environmental sustainability performance standards.

RISK MANAGEMENT

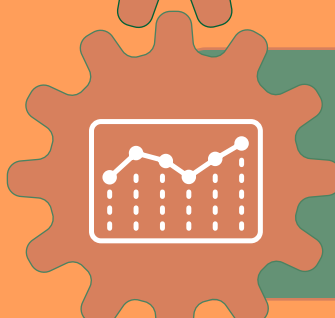
In the process of adopting sustainable practices, MRN aims not only to manage socio-environmental and governance risks, but also to mitigate their negative impacts and seize opportunities to generate positive impacts and create long-term value for its stakeholders.

There is an alignment between the company's actions aimed at the ESG agenda, with transparency and evidence, based on its performance indicators, which are fundamental to guaranteeing consistency and avoiding misleading disclosure, known as greenwashing.



STRATEGIC RESULTS

Secure adherence to strategic planning



REPORTS & KRIs

Bring transparency to actions



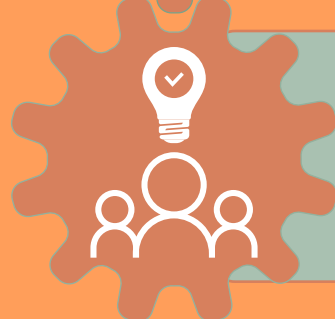
ESG INTEGRATION

Mapping of risks related to priority themes



STAKEHOLDERS

Relevance, scope and engagement plans

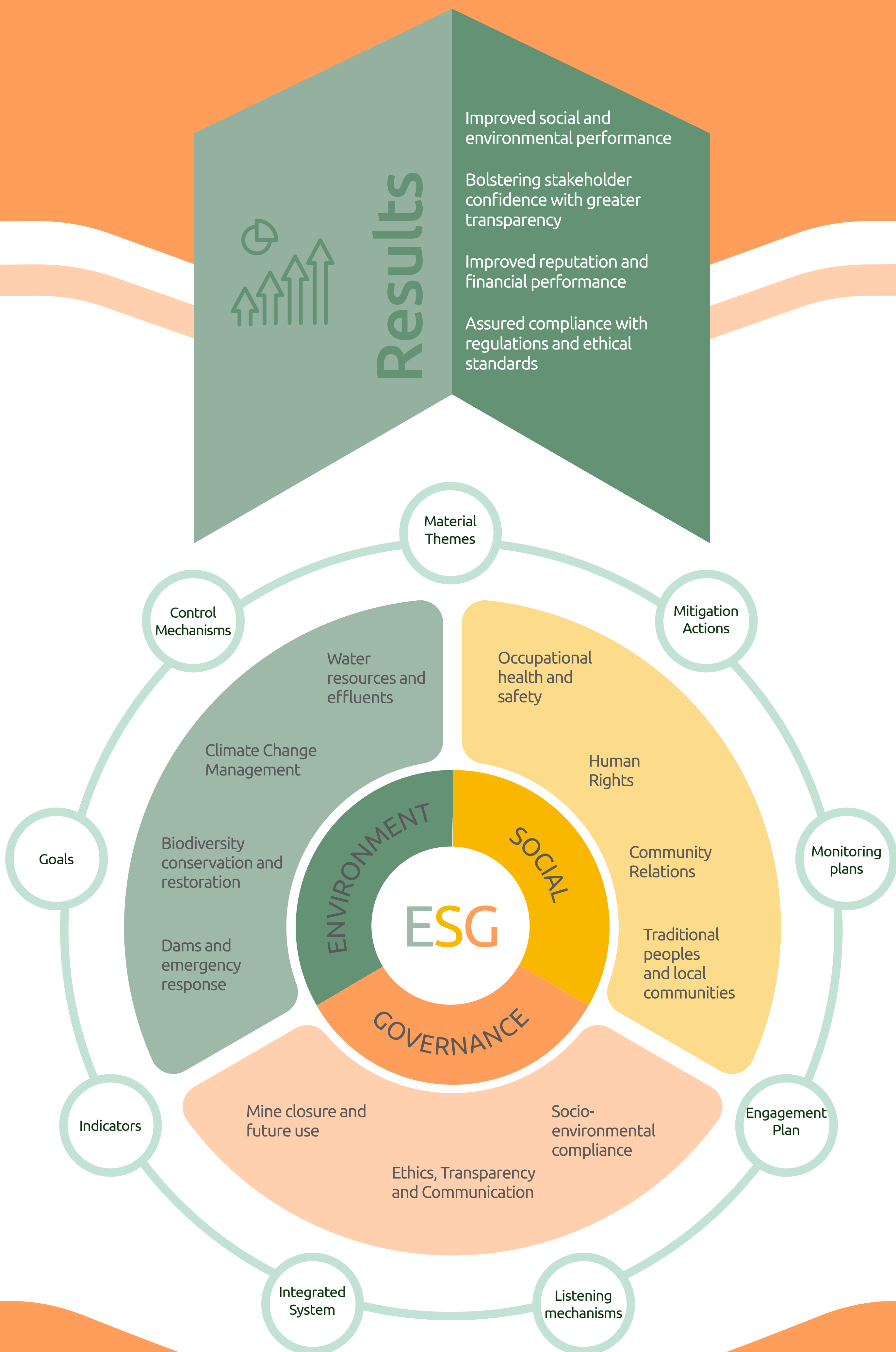


PROJECTS

Integration of project portfolio with ESG strategic goals

Risk Management x ESG

Risk Management is the integrating element between MRN's strategy and ESG practices, from the identification to the mitigation of risks related to environmental, social and governance issues. Its results are achieved through defined methods and criteria, adopting preventive and corrective control actions for risk management in operations.





Examples of Risks related to priority ESG Themes

ENVIRONMENTAL THEME	RISK
1. Climate Change Management	Failure to draft the Climate Change Management inventory
2. Dam risk management and emergency response	Water and tailings dam breaks

SOCIAL THEME	RISK
1. Promoting human rights	Moral or sexual harassment, prejudice and discrimination in the workplace
2. Community relations	Inadequate Stakeholder Management

SOCIAL THEME	RISK
1. Socio-environmental compliance	Loss of Social License
	Failure to obtain or delay in obtaining Environmental Licenses/Authorizations

Mine closure and future use

Every year, MRN reviews the Mine Closure Plan in relation to financial, environmental, social and governance issues for the closure, decommissioning and divestment of operations, based on an ongoing assessment, identification and mitigation of risks, in accordance with the assessment of identified impacts.

The company's mines have been located within the same area belonging to the company since the start of operations. MRN has a long-term plan that guides the next areas to be depleted, closed and the next mines to be opened.

Environmental and social issues related to the closure, decommissioning and divestment processes are dealt with as presented in the Mine Closure Plan and their impacts are considered, with all the company's structures scheduled to be decommissioned and de-characterized over time.

All the stages for decommissioning mines up to closure are foreseen even before applying for a license. Part of this process is the recovery of mined-out areas and the reforestation of decommissioned tailings ponds.



Efficiency for the business, for the planet and for the people.

Throughout its 45-year history, MRN has modernized its operational flow. Strategic investments in technological innovation to find smarter and more productive ways for increasingly profitable, safe and sustainable operations.

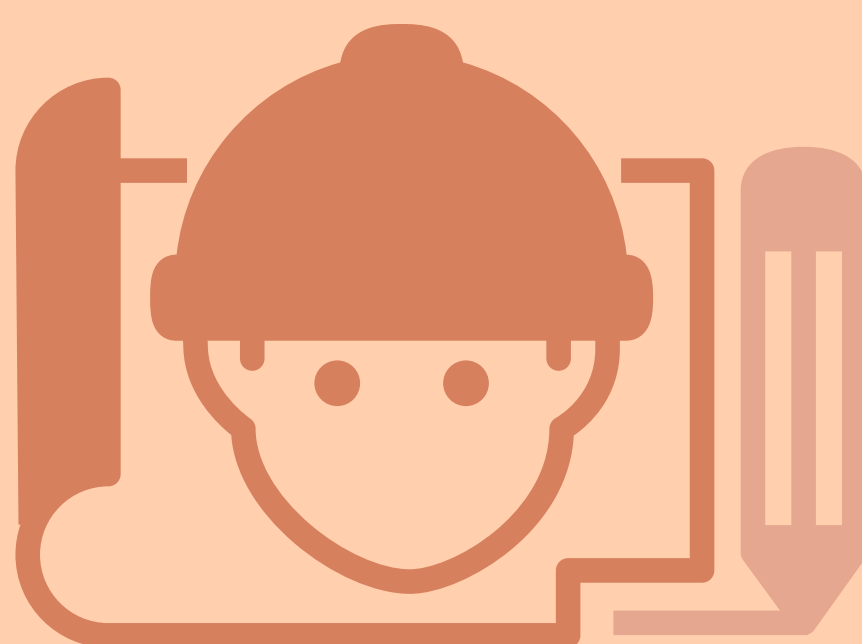
The initiatives and figures for 2023 reflect the company's commitment to excellence so as to renew all possibilities on a daily basis.

Acquisition of instruments and equipment:



R\$ 1.1M

Investments in projects and works associated with dam safety:

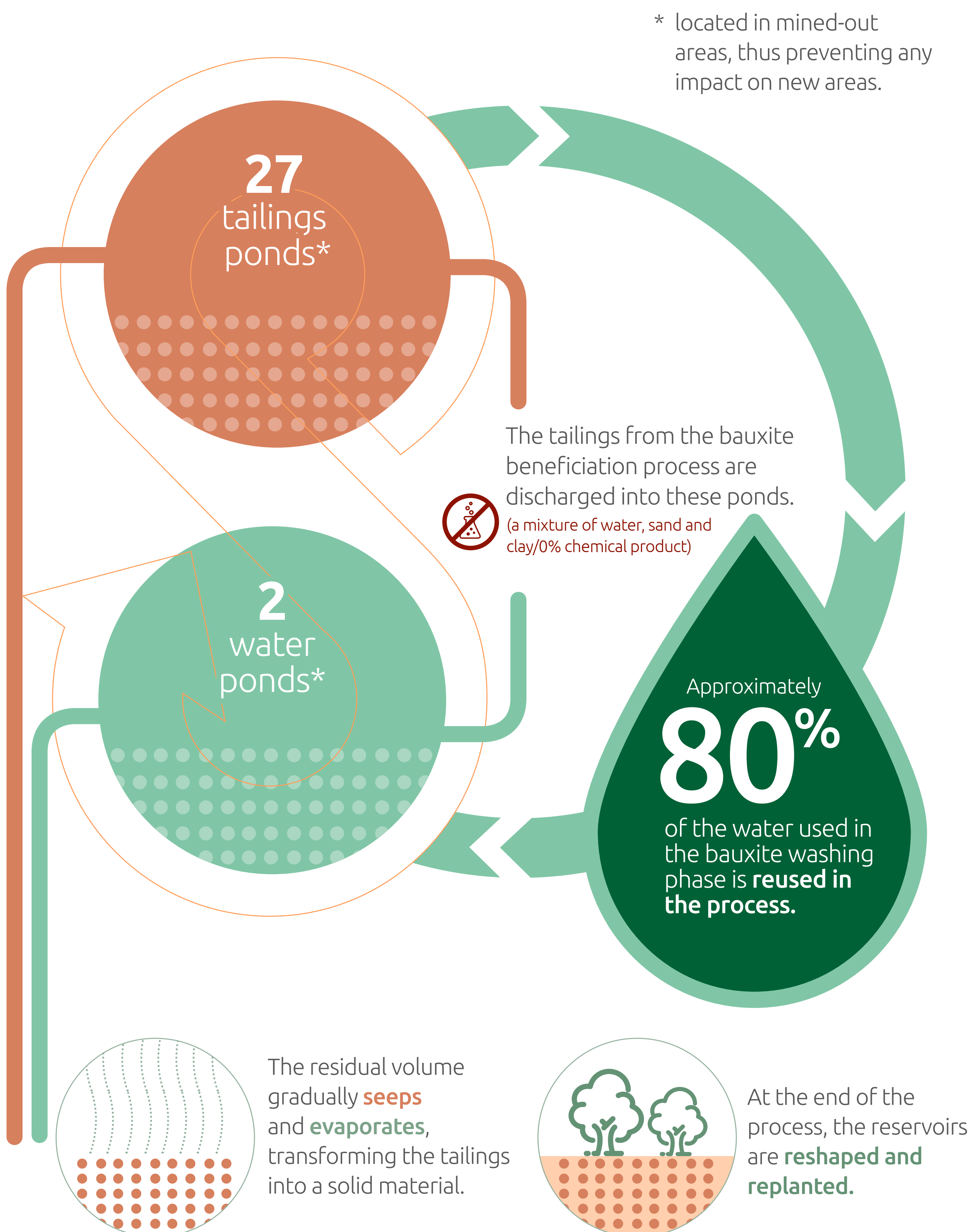


R\$ 144.2M



Management of Dams

MRN is constantly investing in new technologies to operate the Tailings Management System - reservoirs and sediment dams - in an increasingly responsible manner. The technical team working on our dams is made up of professionals trained in geotechnics with guidance from national and international geotechnical companies, and in compliance with strict dam safety codes based on the best international practices. Our dams have instruments that send data to our monitoring center, which operates 24 hours a day, thus securing the stability of our dams.

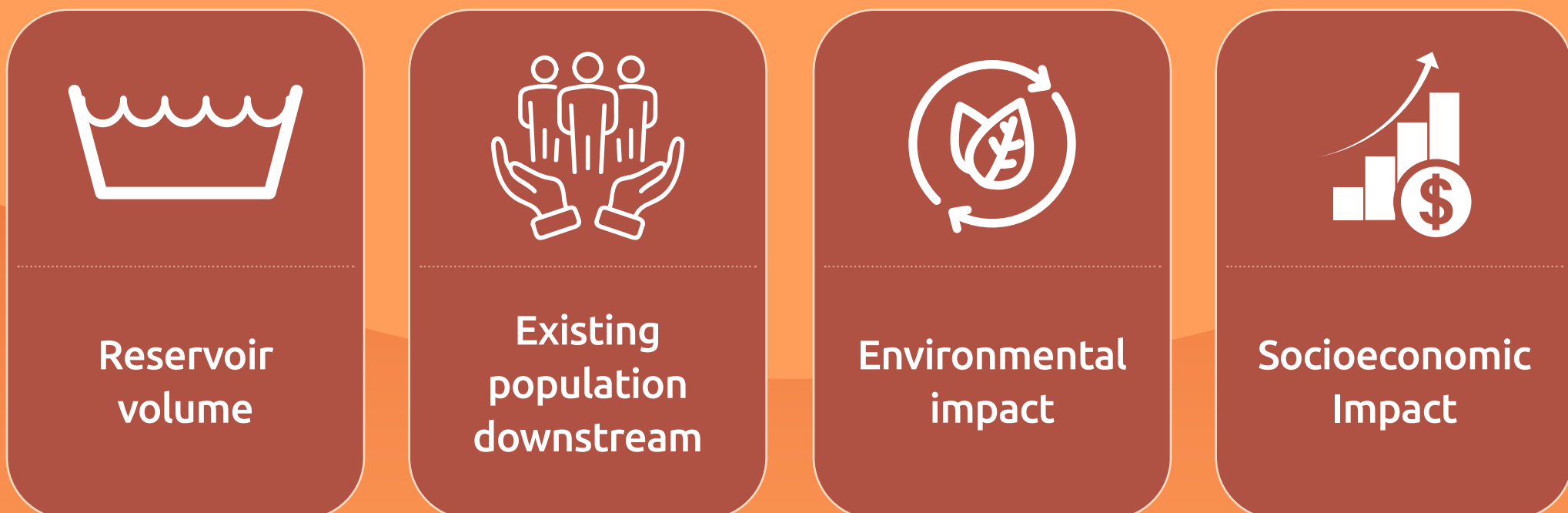




Associated Potential Damage (DPA) is damage that might occur due to the break or malfunction of a dam, irrespective of its probability of occurrence, to be measured according to the loss of human lives, and social, economic and environmental impacts;

According to the criteria, DPA can be classified as low, medium or high. MRN has 2 reservoirs with high DPA and 27 with medium DPA.

CRITERIA:



Technical characteristics of reservoirs (height, geotechnical monitoring, construction method and technical characteristics of spillway designs)

State of conservation of the structures (spillway reliability, adequate drainage system, no settlements or cracks, and good conservation of the embankments)

Dam Safety Plan, containing project information, organizational structure and technical capacity of the team responsible for the operation and safety of the reservoirs. It has operating, inspection and monitoring manuals, an Emergency Action Plan for Mining Dams (PAEBM) and inspection and monitoring analysis reports are regularly issued.

MRN HAS

- ◆ 846 automatic electric piezometers
- ◆ 113 manual open-tube piezometers
- ◆ 100 water level gauges
- ◆ 8 automatic rain gauges
- ◆ 40 automatic inclinometers installed

Tailings disposal plans with different durations:



Short term

monthly,
covering about
1 year



Medium term

6- to 8-year
coverage



Long term

encompasses the
current year up to the
year of ending the
operations



For the design and management of these plans, the following aspects are considered:

1.	Storage capacity of existing reservoirs;
2.	Spigot layout* and sequence of implementation of new reservoirs;
3.	Water balance, hydrological safety against overtopping** of structures;
4.	Site clearance for environmental reclamation;
5.	Guidelines for discharging/drying cycles and for forecasting the main operating requirements.

* Spigotting: Method of disposing of thickened tailings in the reservoirs in the form of a slurry through pipes and spigots.
 ** Overtopping: The overflow of water over the reservoir wall, posing a risk to the stability of the structure.



RESERVOIR & DAM SAFETY MANAGEMENT

MRN undertakes a number of actions that increasingly enhance the operations and safety of its reservoir system.

Inspections and monitoring conducted by our in-house team and the Registration Engineer's team:

The automatic instruments provide daily readings, which are analyzed by geotechnical engineers on a daily basis. In addition, manual instrument readings are taken every two weeks and structures are inspected in detail for operational safety, thus allowing preventive and corrective action plans to be drawn up to mitigate risks.



Assessment by Risk Committees:

Based on the criteria established in the ISO 31.001 Standard, the main risks regarding the tailings disposal system are assessed.



Independent assessments:

Independent consultants assess the risk profile of structures using the FMEA (Failure Mode and Effects Analysis) methodology.



Safety Audits:

In keeping with the legislation, independent auditors conduct technical visits, general field observations, stability analysis, corrective and preventive action plans and Stability Condition Statements are issued twice a year.

The PAEBM is a technical document, required by law, which identifies the dam's potential emergency situations and outlines the measures and actions to be taken in these situations.

The objective is to keep communities close to the project and service providers informed and prepared for any type of incident by acting preventively as the awareness on the subject is bolstered. In other words, minimizing damage or loss of life.

MRN has adopted a schedule of actions in partnership with the communities and the municipality, through the Civil Defense, which involves activities to facilitate access to this information, such as:

- ✓ Community visits to the tailings system
- ✓ Dissemination of the PAEBM through primers and folders
- ✓ Guidance seminars
- ✓ Half-yearly simulation drills



The following were presented:

- ✓ Concepts on dams and reservoirs
- ✓ Monitoring system
- ✓ Bauxite production process
- ✓ Tailings characteristics
- ✓ Studies conducted to define risk-prone areas
- ✓ Areas where people should leave immediately in the event of an emergency
- ✓ Current legislation

In 2023, MRN obtained the PAEBM Compliance and Operability Reports (DCOs), attesting that the plan is adequate and effective for mining dam emergency situations.



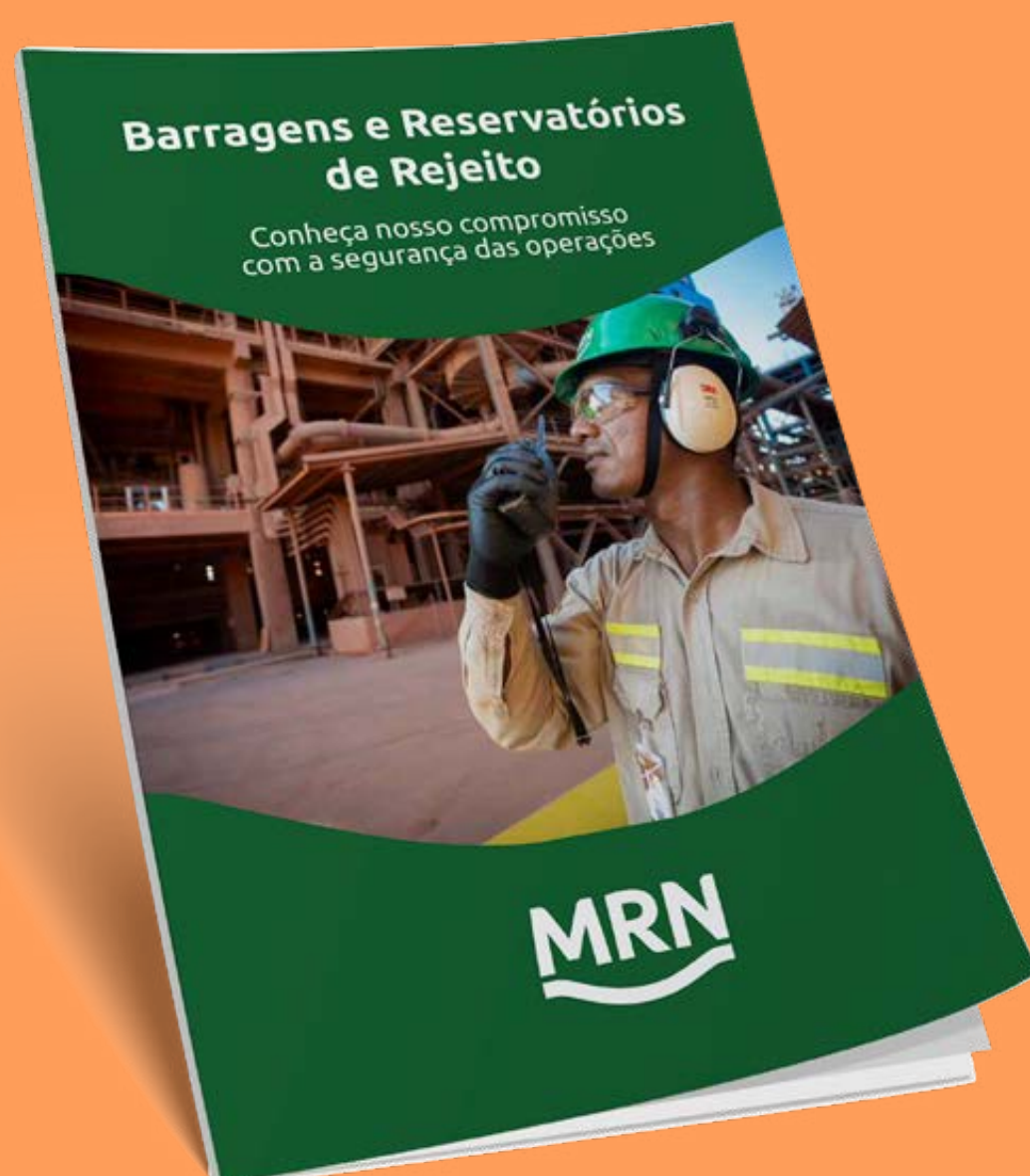
We understood what it really was (the simulation) and that took away our fear of dams. There are people here who are laypeople and these lectures are important. It's more than fair to clarify the mining company's role for the people,

Rosilda dos Santos Clemente, 50,
a resident of the Boa Vista community.

In order to provide the community with clear and objective information, MRN has produced a primer on **Dams and Tailings Ponds** detailing its operations.



Click here or access the QR Code to download the booklet



DAM MONITORING ROOM

24/7 monitoring

The Monitoring Room is the first line of defense for the safety of the company's reservoirs and dams. Sensor data is compiled in real-time and if any abnormality is detected in the tailings disposal structures and sediment dams, the emergency action protocols are triggered immediately.

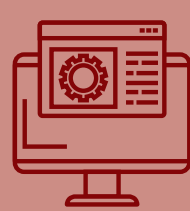


100% safety-oriented:

- 24/7 Monitoring.
- 1,000 sensors installed
- Piezometers: Equipment for monitoring the stability of reservoir walls
- 27 tailings reservoirs
- 2 sediment dams: A1 and Água Fria, which serve to collect and clarify rainwater that falls on the shipping yard.



Daily inspections by specialized technicians and engineers



Cloud processing and storage software



Satellites to monitor any deformations in the reservoir walls



Remotely operated sirens

Main actions



Now we have a geotechnical monitoring system that is even more reliable than before. That is because we have increased the number of instruments and incorporated new technologies into our system. With more advanced equipment and methods, we can collect more data and get a more complete picture of what is happening on site. This means that we can detect changes and problems more accurately and quickly, which is essential for maintaining safety and preventing risks.



We have also added a technology called InSAR to our monitoring systems, which is an advanced form of radar that can detect very small changes in displacements on reservoir surfaces. We are using equipment that operates in the X-band, which is a radar frequency range, and we are doing this from two different orbits to get a broader and more detailed view. This allows us to measure displacement changes with an accuracy of up to 3 millimeters, give or take.



We have implemented improvements to our internal processes for inspection, monitoring and decision-making. This means that we now have more efficient procedures to guarantee that all activities are performed in an organized and effective manner. With these adjustments, we can identify and resolve problems more quickly, thus improving the quality of our work and the safety of our operations.



Issuance of the Statement of Stability Status (DCE) for 100% of the reservoirs, without any emergency events.



Main safety-related initiatives in 2023

<p>Emergency Action Plan for Mining Dams (PAEBM)</p>	<p>Issuance for the Saracá West tailings pond (SP-25), as well as the necessary revisions and updates to the PAEBMs for the Port and Saracá East dams.</p>
<p>Emergency Evacuation Drills</p>	<p>Conducted at Saracá East, Saracá West and Port Reservoirs, it involved employees, service providers, municipal, state and federal authorities, as well as independent auditors and communities.</p>
<p>Issuance of reports</p>	<p>The company Engineering of Records (EoR) continued to play a fundamental role in the management of MRN's tailings system, being responsible for issuing the Regular Safety Inspection Reports (RISR) and the respective Statement of Stability Status (DCEs) for the port's tailings and sediment disposal reservoirs.</p>
<p>Constant studies and improvements for tailings disposal</p>	<p>Ongoing work to better define groundwater flows in tailings disposal systems. It includes hydrogeological studies at Saracá West and its results, added to the work already undertaken at Saracá East in 2022, should reflect new assumptions adopted in the analysis of the safety factors of the structures, as well as new considerations for project development.</p>

GLOBAL INDUSTRY STANDARD FOR TAILINGS MANAGEMENT (GISTM)

The GISTM, implemented by MRN in 2021, establishes procedures for the safe management of tailings disposal facilities in order to avoid any harm to people and the environment. A fundamental initiative to achieve safety levels compatible with the best global operating practices.

As part of the GISTM implementation project, adherence to the program's requirements rose to 73%, surpassing the 70% planned for the end of 2023.

OPERATIONS AND TAILINGS REMOVAL

The year 2023 was characterized by extreme drought in the Amazon, which ultimately resulted in an increase in new water abstraction in relation to 2022. The rainfall distribution recorded during the 2022/2023 hydrological year revealed high rainfall in the first few months of the year, followed by extreme drought in the subsequent summer months.

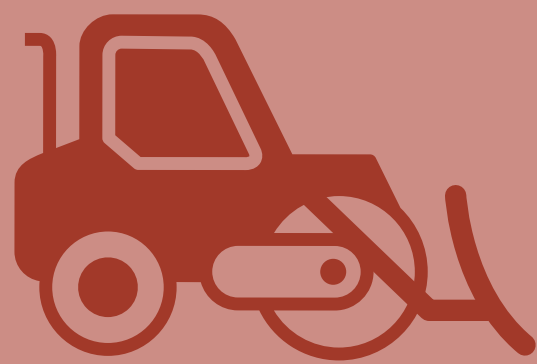


14%

Share of
new water
in 2023

Even with more new water being abstracted than in 2022 (5% of the industrial consumption), the share of new water was still below the operation's historical levels (20%).

To guarantee the safety of the tailings system, MRN had to treat the effluents and make controlled discharges into the streams. The environmental monitoring performed before, during and after the discharges showed the quality of the treated effluents to be significantly higher than the legal requirements.



**Record
tailings
removal**

consolidates a
more sustainable
model

2+ million cubic meters of dry tailings from the Saracá East reservoirs, destined for mined-out areas and the closure of reshaped reservoirs.

Throughout the year, the company continued its activities to advance the learning curve in the AMC (Accelerated Mechanical Consolidation) process, using equipment for Mud Farming. This type of equipment accelerates the consolidation of the tailings, thus allowing the final solids content to be reached more quickly and maximizing the use of MRN's tailings ponds. Currently, MRN has five pieces of equipment, the first of which went on operation in November 2020.

POWER MANAGEMENT

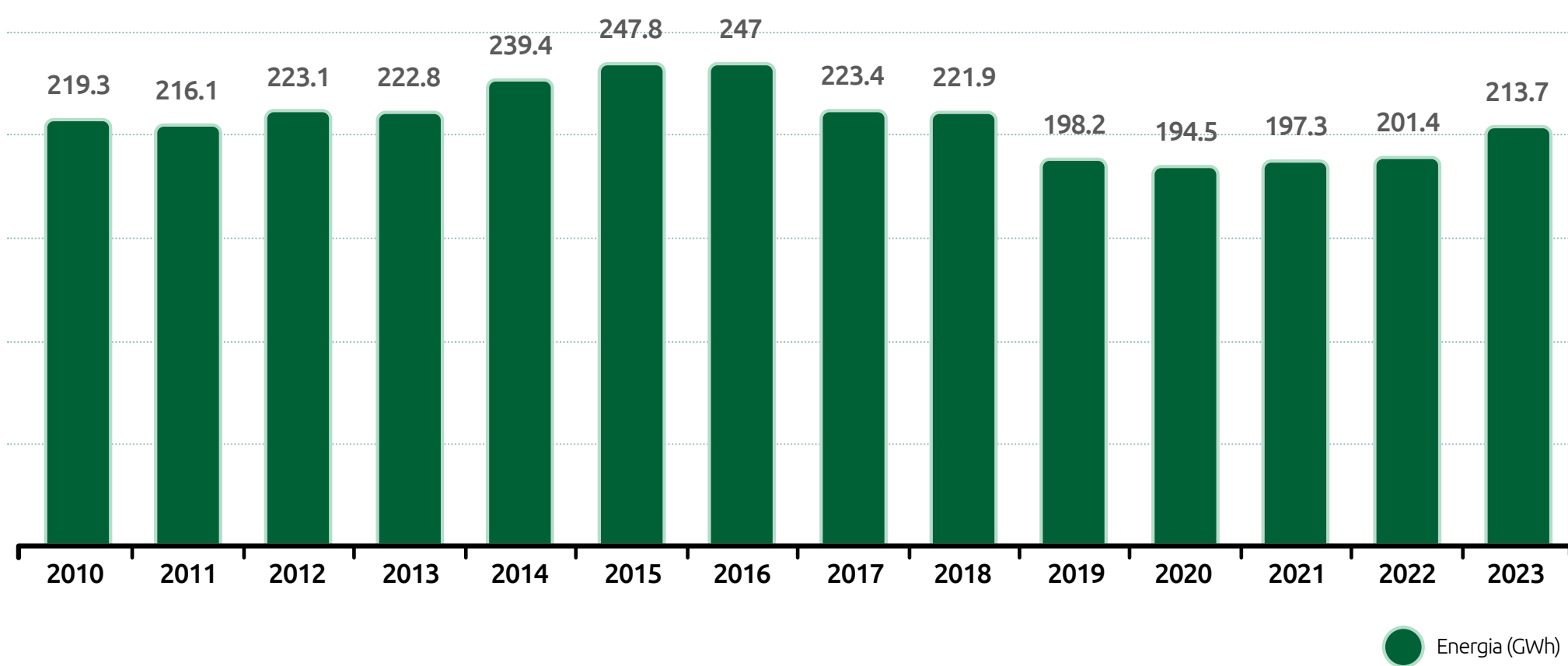
100% own power without connection to the national grid. MRN's Power Generation Plant meets the demand of the entire industrial complex, mine, port, support infrastructure and residential area of Porto Trombetas.

The company is a member of the IBRAM (Brazilian Mining Institute) Energy Committee, created in 2019 within the framework of the Letter of Commitment, now Brazil's Mining ESG. The objective is to make the sector reduce its energy consumption by 5% and increase the renewable source in the energy matrix. MRN has some studies to contribute to these objectives, in addition to concentrating on studies to evaluate the incorporation of new renewable energy sources, such as natural gas.

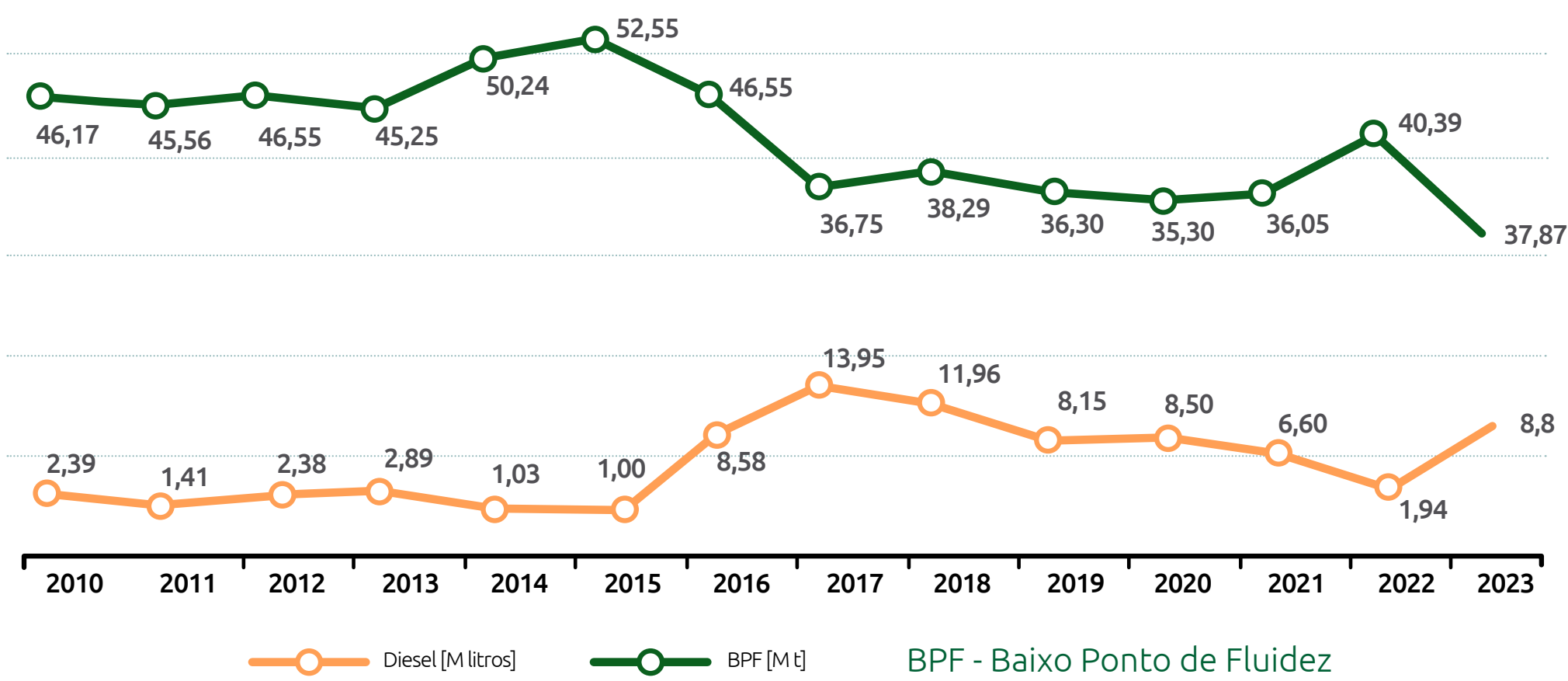


HISTORICAL PROGRESS

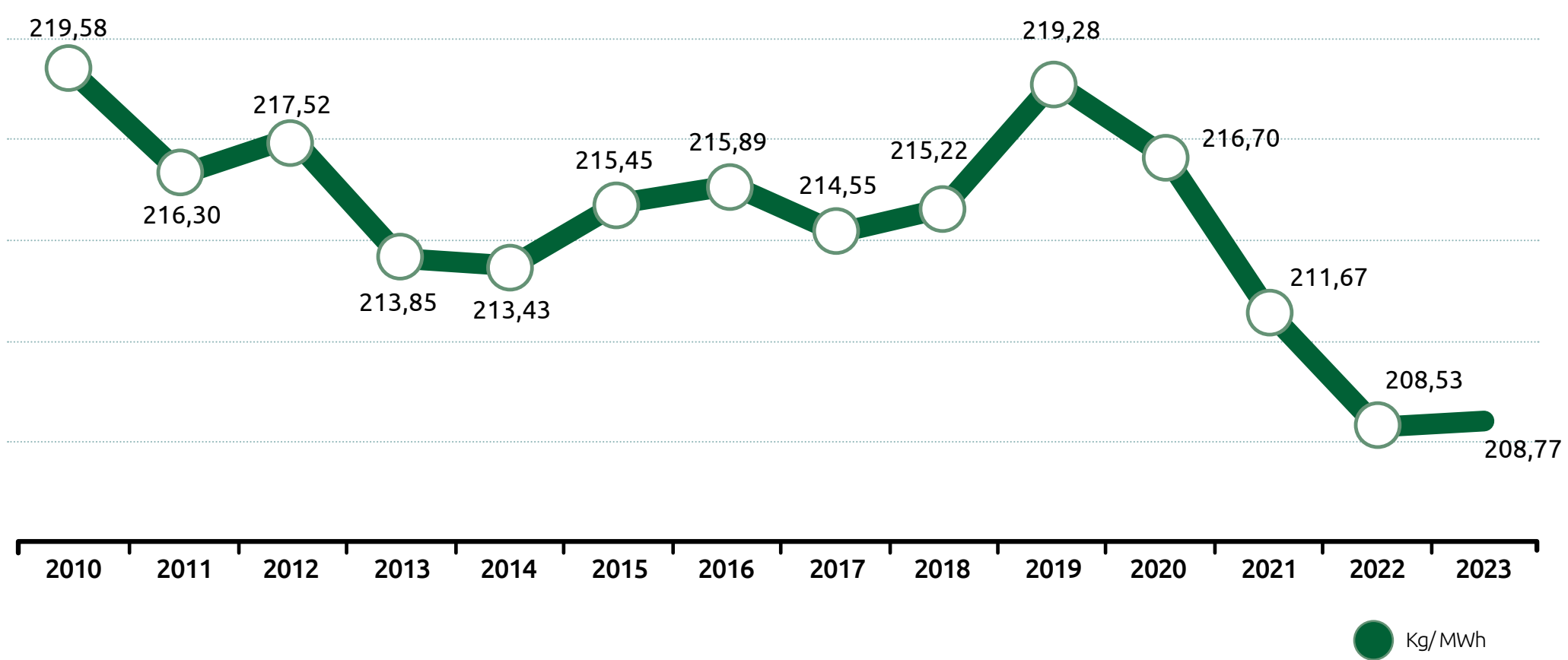
Energy generated:



Fuel consumption:



Specific consumption (Kg/MWh):





MANAGEMENT OF TECHNICAL SERVICES

The area plans, executes, manages, evaluates and supervises projects, services and researches geared at the know-how and increase in understanding MRN's geological resources and mineral reserves. It is also responsible for the extraction rate, optimization, development, sequencing and service life of the mine and for the economic analyses, according to the company's strategy and vision in the long-term process.

The sector is also responsible for the following initiatives:

- Collection and processing of geospatial and topographical information and environmental monitoring of the closure of forestry operations;
- Real-time monitoring and analysis of the main variables throughout the day to synchronize processes and meet the day's program to guarantee that shipments are met within quality specifications and TML limits.
- Coordination and implementation of ANM requirements in aspects relating to mineral rights and geotechnics, such as operational compliance and related matters;
- Interface with regulatory agencies;
- Routine inspections and monitoring of various dams and geotechnical instrumentation, execution of field tests, support for installation and/or replacement of instrumentation;
- Management of laboratories and WTP.



Hydrogeological study

Conducted in collaboration with Frasa Ingenieros Consultores, it analyzes the hydrological behavior during the working phases of each plateau, taking into account its specific characteristics and the variations in the operating system.



Gain by 13.17Mt of ROM

(gross ore production) in the 2024 plan
[comparison - 1Mt in 2023]

Maximizing the use of non-renewable resources

Ore deposit rationalization in the mining planning



INDUSTRIAL MANAGEMENT

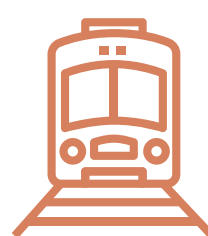
Crushing



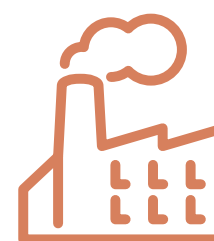
Beneficiation



Railroad transport



Drying



Ship loading



Beneficiation

The beneficiation of bauxite ore consists of two main phases: crushing and wet classification. The crushing stage consists of reducing the bauxite ore into smaller fractions of up to three inches, barely bigger than a tennis ball.

In the wet classification step, the bauxite undergoes unit operations to remove the fine fraction contained in the bauxite ore using water. Nearly 80% of the water used in wet classification is recirculated.

75% of the mass fed into the beneficiation plant is transformed into a marketable bauxite ore product and 25% of the beneficiated bauxite ore mass is removed from the process and called tailings and goes to the tailings disposal ponds.



Railroad transport:

The bauxite product from the beneficiation stage is transported from the Beneficiation Plant area to the Port's product yard area, over a 28-km long railroad, where each train has 46 rail cars.



Drying:

When the ore gets to the port's yard area, it is stacked in longitudinal piles. Approximately 30% of production is called lump product and is transferred to the drying plant, where the product's moisture content is reduced from 10% to 5%. In the drying process, high temperatures (up to 1200 °C) are used in horizontal drying furnaces.



Ship loading:

After stacking, the dry lump ore, wet lump ore, and wet fine ore products are recovered by bucket wheel reclaimers and sent to the ship loading system called Shiploader. All shipments are sampled for quality certification.

2023 Highlights | Railroad transport:

Digital monitoring of the EFT Railroad [Trombetas railroad]
Greater reliability and safety in the rail transportation process by providing monitoring of critical assets to avoid unplanned stoppages and proposing preventive actions for the railway line.



Shipment:

Amigo da Marinha [Friend of the Brazilian Navy]

The company was awarded the Friend of the Navy medal by the 4th Naval District in recognition of its work and collaboration with the maritime sector, especially in the west of Pará.

**Trombetas Terminal:
Production 7,000 ton/h
SHIPLOADER**

**Year
2023**



Zero environmental accidents and incidents



Lower specific fuel consumption in the ore drying plant



**12.6 Mt shipped
244 ships loaded**



**Ships
96 ships for foreign markets
147 ships for domestic markets**





Inspired by best practices and compliance with national and international regulatory requirements, MRN continually upholds integrity and transparency in the running of its business. It is through the Compliance and Governance Department that the company ensures that actions and conduct comply with the principles of good governance, proportionality, integrity, responsibility and sustainability.

COMPLIANCE MANAGEMENT IN NUMBERS



1,471
own
employees
trained in the
following:

- 
Code of Conduct
[CLICK HERE](#)
- 
Anti-Corruption
- 
Gifts and Amenities
- 
Conflict of Interests.
- 
Donation, Sponsorship and Socioenvironmental Investments
- 
Compliance Management System
- 
Fight Against Discrimination and Harassment
- 
General Data Protection Act
- 
Ombudsman Channel

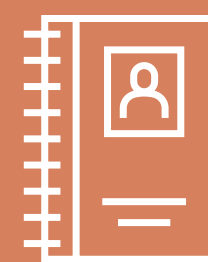
58 Communication and Compliance Awareness actions, including:



Messages from
Top Management
- tips on various
compliance
topics



Ambassador
Program



Primer on the
General Data
Protection Act

The 5 pillars of the Compliance and Anti-Bribery Management System

Through its Compliance and Anti-Bribery Management System, MRN provides mechanisms to prevent misconduct, promote compliant organizational development, comply with legal requirements and foster a culture of ethics and integrity.



01.

Governance and Organization

Relies on a Board of Directors, Audit Committee and Executive Board, which undertake actions to drive the company's culture of integrity and transparency.



02.

Risk Management

Structured, systemic and supported by methodology and practices.



03.

Policy, procedures and controls

Guidelines set out in MRN's Code of Conduct, on rules and procedures.



04.

Training and Communication

Promotes a culture of ethics and integrity through actions that guide employees and third parties to act in the best way and make the best decisions.



05.

Monitoring and Reporting

Monitors the company's adherence to the guidelines of the Compliance and Anti-Bribery Management System by monitoring processes and managing compliance risks.



LGPD – Continuous Improvement

In 2023, MRN continues to improve the prevention and detection measures of the obligations provided for in the General Data Protection Act - LGPD (Act No. 13.709/2018), with various activities being carried out to ensure compliance, such as:



Drafting and reviewing privacy regulations;



Updating the LGPD primers;



Review of the ROPA (Record of Processing Activities)/Data Inventory to update the processes in the privacy management tool to fully meet the requirements of the legislation, and to review the risks and layers of privacy control.

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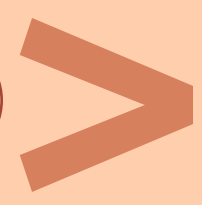
It is an exclusive and confidential tool for reporting claims. Available to in-house and external groups, it plays a fundamental role in transparency and accountability.

The reports are received by an independent and specialized company, ensuring that they are handled with respect for segregation of duties and confidentiality.

In 2023

● **614 denouncements, queries and complaints received**

35% higher than in 2022 (455 reports).



Out of the denouncements received and evaluated throughout the year:

- 15% were classified as justified, addressed for appropriate measures
- 13% partially justified
- 18% unjustified
- 24% inconclusive
- 15% construed as matters not related to MRN's activities
- 15% received in the last quarter of 2023 and will therefore be completed throughout 2024

Ombudsman Channel Contacts

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Certifications recognize commitment in stakeholder relations.

In December 2023, MRN's Compliance and Anti-Bribery Management System achieved certification under the **ABNT NBR ISO 37001:2017** standards and **ABNT NBR ISO 37301:2021** guidelines, recognizing integrity, transparency and compliance in shareholder and stakeholder relations.



PREVENTING AND COMBATING DISCRIMINATION AND HARASSMENT

MRN has established regulations and a booklet to prevent and combat discrimination and harassment in its facilities, promoting a healthy environment and organizational culture based on mutual respect and equality.

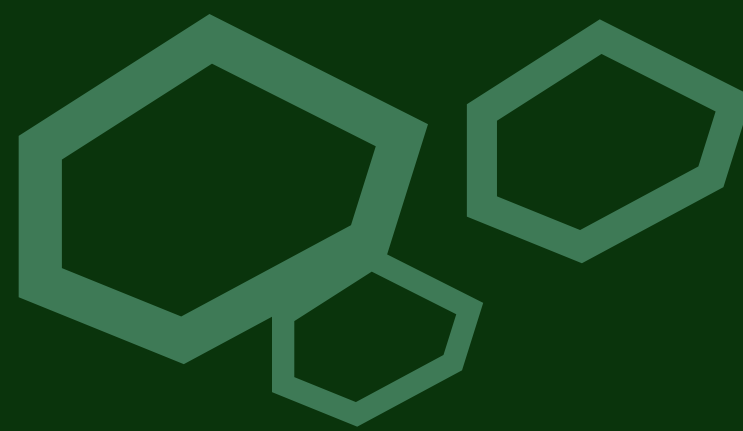
The company does not tolerate any kind of moral or sexual harassment, discrimination or bullying, regardless of job title, function or hierarchical position.

Any employee or service provider who feels victimized or witnesses such behavior in the workplace should report it to the Ombudsman Channel.



Chapter 5

New Mines Project



Continuity of the sustainable operational flow, a construction by all of us.

MRN has made every effort to focus on its biggest challenge: the environmental licensing of the New Mines Project - PNM. The project will secure the company's operational continuity over the next 15 years, while keeping production at 12.5 million tons of bauxite per year, as well as the more than 6,000 direct jobs generated in the region. The licensing process began in October 2022, when the Environmental Impact Study and Report (EIA/RIMA) was filed with the licensing agency seeking approval to operate the Rebolado, Escalante, Jamari, Barone and Cruz Alta East plateaus. In 2023, the project's journey was marked by dialog, transparency and extensive listening to stakeholders.



Main PNM actions in 2023.

Preliminary and sectoral meetings

During the months of January to April, preliminary meetings were held with the communities involved in the New Mines Project. Stakeholders were identified in order to conduct a broad process of dialog and active listening, seeking to identify the main requirements and suggestions regarding the operational continuity project in the region.

Five Quilombola territories and 50 riverside communities at MRN's interface were mapped out, both in the area of direct and indirect influence. Sectoral and institutional meetings were also held with around 60 players potentially interested in the project, including: partners, suppliers, business associations, trade associations, public authorities, community associations, the press in western Pará, MRN's in-house staff and residents of the Porto Trombetas district.

Dialog to and active listening from:



5 Quilombola Territories.

50 riverside communities.

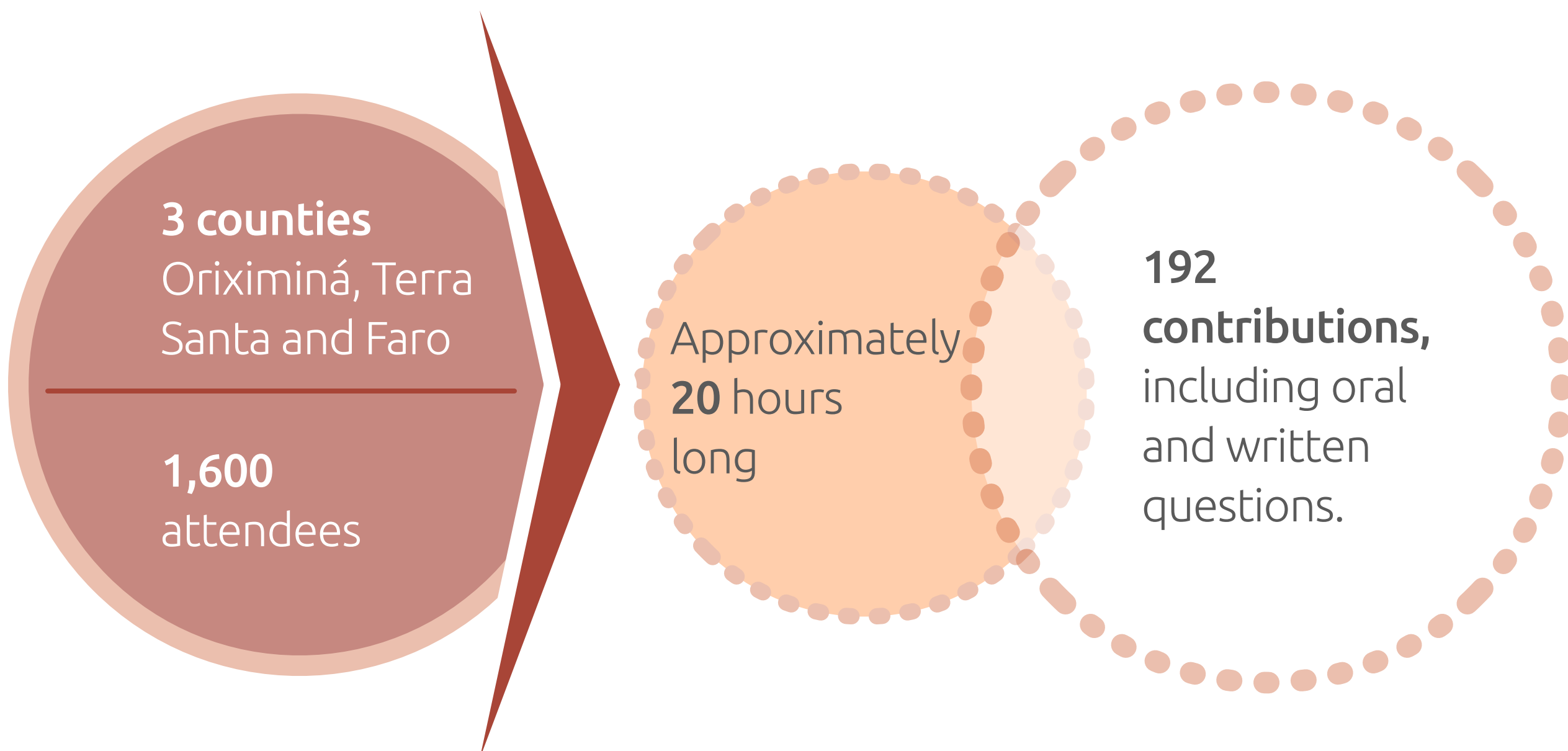
60 different audiences with a potential interest in the project.

Public Hearings

Led by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), Public Hearings (PAs) were held in May in the municipalities of Faro, Terra Santa and Oriximiná. The meetings amounted to about 20 hours, with the participation of 1,600 people and 192 contributions, including oral and written questions.

Public hearings are one of the stages in the environmental licensing process and are essential for the public to find out more details about the project, to ask questions and to be queried about the project, so that their contributions can be considered in the process. All the questions raised during the hearings, with MRN's respective responses, were forwarded to Ibama, which is conducting the licensing process for the PNM, for analysis.

Transparency and broad communication in the PAs:





The hearings provided a space for extensive debate and quality discussions. I have no doubt that this is the result of the company's intense preparation to disclose the project to society in full transparency. More than 40 preliminary and sectoral meetings were held that involved communities, town councils, trade associations and representative entities until we actually reached the public hearings, which are a people's right.

Vladimir Moreira, Sustainability and Legal Director - MRN.

Free, Preliminary and Informed Consultation on Quilombola territories

The PNM has a direct interface with two Quilombola territories in the western region of Pará: Boa Vista and Alto Trombetas II. During the licensing process, these territories have been consulted by means of the Quilombola Component Study (ECQ), an instrument that gives concrete form to Free, Preliminary and Informed Consultation in keeping with Convention 169 of the International Labor Organization (ILO) within the scope of the licensing process in Brazil. The ECQ made it possible to actively listen to these territories, ensuring the broad participation of communities in the PNM and its socio-environmental impacts.

The ECQ is an important way for the company and the federal agencies responsible for licensing to get to know the reality of the communities in greater depth and identify the potential impacts that could affect their territory and way of life. Once Incra is aware of the impacts and the measures to prevent, mitigate and compensate for them, it issues an evaluation report indicating whether the project is feasible from a social, economic and environmental perspective. Next, it issues a statement to Ibama, so that it can assess whether to grant MRN a preliminary environmental license.



Key Milestones

In September 2023, the Final Consultation Meeting with the Boa Vista Territory took place, at which time Incra listened to the community about the ECQ and their perceptions of the project. In May 2024, it was the turn of the Alto Trombetas territory to be consulted by INCRA. In both cases, the ECQ was approved, with the addition of reservations, which are incorporated into the process and must be taken into account in the next stage, the construction of the Quilombola Basic Environmental Plan (PBAQ).

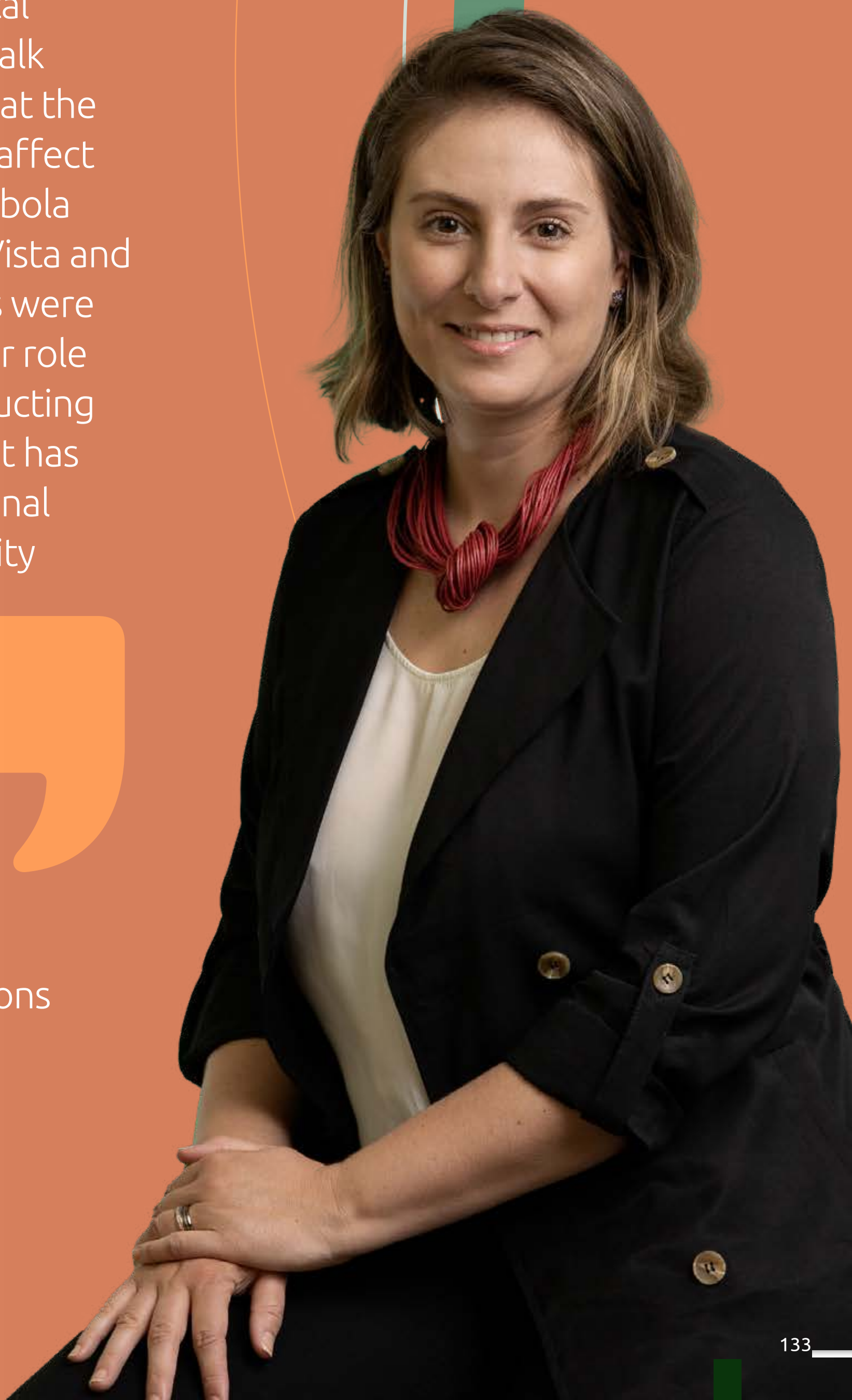




In this process, we all matured over the drafting of a technical piece, the ECQ, which has great social and political significance for the communities. During this process, Quilombola consultants were trained, the communities learned about environmental licensing and were able to talk about how they perceive that the impacts of the project may affect their daily lives. The Quilombola associations from the Boa Vista and Alto Trombetas II territories were also able to strengthen their role in the communities in conducting this process. A parallel result has certainly been the institutional empowerment of community associations.



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