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# About this Report

(GRI 2-2, 2-3, 2-5)

This is Mineração Morro do Ipê (MMI)'s first Sustainability Report. More than just showcasing our practices, initiatives, results, and key indicators, this document marks an important milestone in the company's ESG (environmental, social, and governance) journey. It is structured around material topics—those that represent the organization's most significant impacts on the economy, environment, and people—identified through a

materiality process guided by leading sustainability reporting frameworks, particularly the **GRI Standards**, the most widely used worldwide. This inaugural edition covers MMI's performance from January 1 to December 31, 2023, and includes historical data for context, especially from the past three years, which coincide with the launch of the Tico-Tico Project. This innovative endeavor aims to sustainably triple

the company's iron ore production starting in 2024. While this document does not adhere to specific sustainability reporting guidelines, we plan to adopt recognized standards for future ESG reports. The information provided herein was collected from the managers responsible for each topic at MMI and has been reviewed and approved by the company's Board of Directors, without external verification. (GRI 2-14)

LEARN MORE:  
MATERIALITY



Standards set forth by the Global Reporting Initiative that represent global best practices for public reporting of different economic, environmental, and social impacts.



Iron ore, Mineração Morro do Ipê

# STMT Leadership

(GRI 2-22)

## Everything that isn't planted is mined

For Jayme Nicolato, CEO of MMI, the challenge is to pursue more sustainable and humane mining practices.

### 1) First of all, the million-dollar question: can we live without mining?

In today's world, mining is indispensable. As I often emphasize, "everything that isn't planted is mined". Mining is fundamental to our civilization, contributing not only to products like cell phones and computers but also to essential infrastructure such as water filters, pipes, and electrical systems. Therefore, the challenge lies in conducting mining in a more sustainable and humane manner.

### 2) And is that what MMI has been doing?

Yes, that's our driving force. Of course, we face many challenges typical of the sector and our specific context, but we are fully committed to creating a mining industry where the Environmental and Social aspects of ESG are central to our Governance.

### 3) How does this commitment translate into practice?

Through transparency, respect, and innovation. We open our doors to institutions and society,

particularly the local community, through our Visits Program. A good example of our transparent approach is the management of our dams, which are deactivated and in the process of being decommissioned. To tackle misinformation, we provide Igarapé Civil Defense with real-time footage from cameras that monitor the dams 24/7. This helps reduce the spread of fake news in the region. We also maintain direct radio contact with the Civil Defenses of Brumadinho and São Joaquim de Bicas. These tools are crucial for shared management and



are available in real time. Innovation, for us, is not about bringing in Elon Musk to make rockets land in mines. It is not magic; it is the result of intense daily work, incorporating best practices, engaging people in continuous improvement programs, and fostering partnerships and exchanges with other companies and institutions in the sector.

**4) When you mention other companies in the sector, are they competitors?**

Yes, they are competitors, but they are also colleagues who, like us, are seeking new ways to mine. While we share a common product, that does not mean we cannot establish partnerships. In fact, we can and should. I learned this from the Conscious Capitalism movement,

which my daughter, Bruna, introduced to me 10 years ago. Embracing a new way of thinking and addressing challenges is also a form of innovation.

**5) How do you foster a culture of transparency within your team, especially in a sector with a history of crises and insecurity?**

Our team operates based on what we call the 5HS: Honesty, Harmony, Humanity, Humility, and Humor, with the “S” standing for Physical and Mental Health. This means that instead of hiding mistakes and blaming others, we address difficulties openly, responsibly, and cooperatively, focusing on solutions. We also practice transparency internally: in a monthly live session,

we present our results to employees, celebrating achievements and committing to necessary improvements. Additionally, we acknowledge and respect our limits and those of our colleagues, understanding that physical and mental health and safety always come first. We strive for a harmonious, light-hearted, and even humorous organizational climate.

**6) Are these values shared with suppliers, service providers, and other partners?**

Yes, because we are all part of the same value chain. There is no point in the MMI team being safe if, for instance, our service providers work under unachievable targets and put themselves at risk. Our team is encouraged

to report errors, act without fear, and focus on harmonious and cooperative problem-solving. For this reason, all partners are invited to implement and actively participate in our programs, such as PAZ and SER (read more on page 36). It is a collective pact.

**7) And how is MMI's relationship with the communities?**

We are aware of the impacts of our activities and the history of the region. We maintain a continuous and open dialogue with the population, listening to their concerns, clarifying doubts about our operations, and developing projects that positively impact their lives. In 2016, we acquired a company that was in

receivership and had many liabilities. Since then, we have worked to build a bond of trust with the people of Brumadinho, Igarapé, and São Joaquim de Bicas, where we operate. We still have a long way to go, but we are always seeking partnerships that encourage us to improve our processes and operations.

**8) But how do you rebuild trust with the people impacted by mining activities?**

It is a daily task, done with a lot of responsibility through open and transparent dialogue with our employees, neighbors, local authorities, Civil Defense representatives, the Public Prosecutor's Office, the Military Police, the Fire Department,

and others. We also invest in education, culture, and professional training projects for the communities. Currently, about 49% of our employees live in the municipalities where we operate, demonstrating our commitment to hiring local labor and fostering the social and economic development of the region.

**9) Finally, what legacy does MMI intend to leave for the sector and the region where it operates?**

Our greatest legacy is one of trust and progress. It is about understanding that to achieve different results, we need new practices. We demonstrated this with the construction of the Tico-Tico project, an innovative and sustainable

venture that filters tailings, separating the liquid material (water) from the solid. This process allows the dry tailings to be sent to the tailings pile while the water is recirculated back into the industrial process, eliminating the need for tailings dams. Our next step is to remove ore trucks from the roads, which will require many studies, licenses, construction, partnerships, infrastructure, and significant investment. We have learned from past mistakes in the sector and remain steadfast in our aim to build an increasingly sustainable and humane mining industry. It is important to remember that the health of our company depends on the health of our community.

# About us

We are Mineração Morro do Ipê, established in 2016 to produce high-quality iron ore in Minas Gerais. Born from assets acquired from the former MMX Sudeste's Tico-Tico and Ipê mines, our mission is to become one of Brazil's most innovative and respected companies in the mining sector, committed to the planet and its inhabitants. Since 2017, we have been operating the Ipê mine, processing iron ore

stockpiles, and are on the brink of commencing operations at the Tico-Tico mine. We adhere strictly to legal, fiscal, environmental, social, and governance practices in a safe and responsible manner. Our approach includes developing social and environmental programs through open dialogues involving the company, institutions, local communities, and public authorities.



Morro do Ipê  
plant operator

## Where we are

Located in Brumadinho, bordering Igarapé and São Joaquim de Bicas, Mineração Morro do Ipê oversees the management of the Ipê and Tico-Tico mines, as well as iron ore processing facilities in the Serra Azul region of Minas Gerais within the **Iron Quadrangle**.

Our corporate headquarters is in Belo Horizonte.

Discovered in 1693, the Iron Quadrangle (QF) in Minas Gerais is a geological formation shaped like a square, known for holding the highest concentration of iron ore in Brazil (approximately 60% of the national production). It spans cities such as Brumadinho, Igarapé, São Joaquim de Bicas, Rio Piracicaba, Congonhas, Sabará, Itabira, Nova Lima, Mariana, and Ouro Preto, among others.



Tico-Tico Mine



Ipê Mine



Administrative Office- Ipê Mine

# Shareholding Composition and Corporate Governance

Mineração Morro do Ipê is governed by a board composed of two international companies: Trafigura and Mubadala. Trafigura stands as one of the world's foremost independent trading companies, specializing in the oil, metals, and minerals markets. It is dedicated to efficiently and

safely connecting producers and consumers of these essential commodities.

Mubadala, a global investment company active in over 50 countries, employs capital with integrity and innovation to foster economic growth, create

value, and generate positive social impact in the communities it serves. In Brazil, Mubadala manages the Mubadala Social Investment Fund through BrazilFoundation, which in 2023 supported projects in Igarapé, São Joaquim de Bicas, and Brumadinho, Minas Gerais.

## Corporate Governance

Our management ethos revolves around ethics, transparency, and accountability. At Morro do Ipê, Our organizational structure includes:

Trafigura



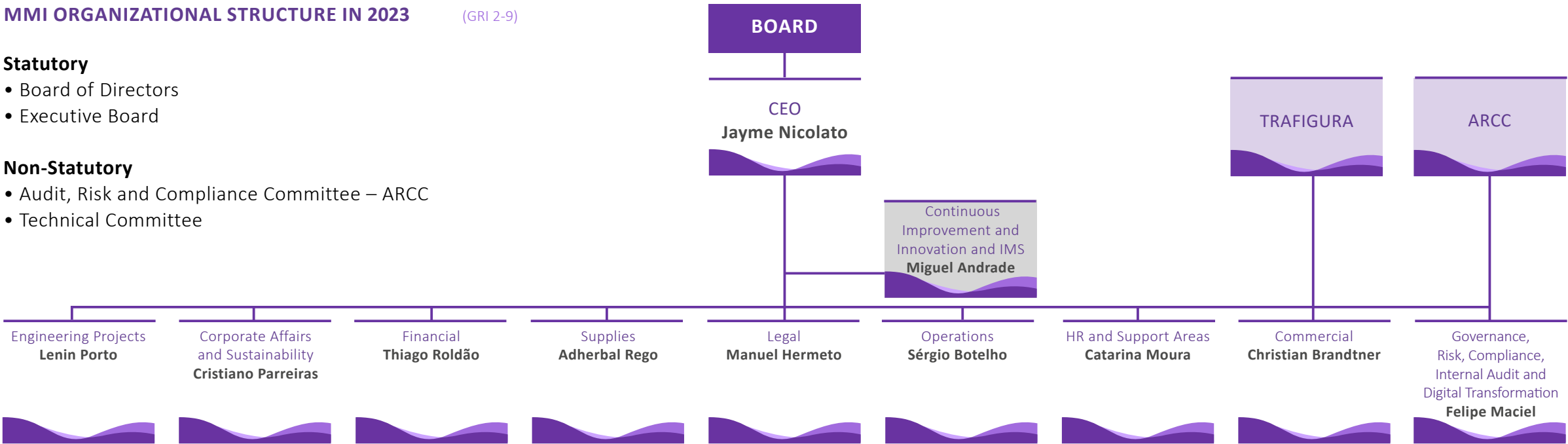
## MMI ORGANIZATIONAL STRUCTURE IN 2023 (GRI 2-9)

### Statutory

- Board of Directors
- Executive Board

### Non-Statutory

- Audit, Risk and Compliance Committee – ARCC
- Technical Committee





Stacking ore at the processing plant

# Our Products

## IPÊ PLANT



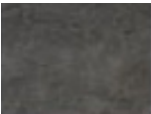
**LUMP ORE**  
– 25.0 +6.3mm  
61%, 5% Fe / 6.5% SiO<sub>2</sub>



**SINTER FEED NATURAL**  
– 16.0+2.0mm  
61% Fe / 7.0% SiO<sub>2</sub>



**MAGNETIC CONCENTRATE**  
– 2.0mm  
64.5% Fe / 6.0% SiO<sub>2</sub>



**SPIRAL CONCENTRATE**  
– 2.0mm  
62.0% Fe / 8.0% SiO<sub>2</sub>

## DRY PLANT



**LUMP ORE**  
– 25.0 +6.3mm  
61%,0% Fe / 7.5% SiO<sub>2</sub>



**SINTER FEED NATURAL**  
– 16.0mm  
60.5% Fe / 9.0% SiO<sub>2</sub>

## TICO-TICO PLANT



**PELLET FEED**  
– 0.15 mm  
65.0% Fe / 5.0% SiO<sub>2</sub>

*\*The Tico-Tico Mine will start operations in 2024.*

The iron ore travels by truck along a 20 km stretch of the BR-381 highway to two railway terminals: one in Sarzedo and another in Brumadinho (Serra Azul). From there, it journeys an additional 475 km on the rail network operated by logistics provider MRS to Porto Sudeste do Brasil in Itaguaí (RJ). This facility is part of the same group as Morro do Ipê and serves as the export hub for the ore.

(GRI 2-6)

## PORTO SUDESTE: A SUSTAINABLE PARTNER

### *We are Porto e Mina everywhere: competitive strategy based on integrated work*

Operating since 2015, Porto Sudeste is a multi-cargo port terminal capable of handling bulk solids (iron ore, coal, slag) and liquid bulk (petroleum and its derivatives). Located on Ilha da Madeira, in Itaguaí, Rio de Janeiro, facing Sepetiba Bay, Porto Sudeste offers the shortest distance between iron ore products from the Iron Quadrangle of Minas Gerais and their transoceanic customers.

In July 2022, Porto Sudeste initiated Double Banking operations, facilitating the safe and efficient transfer of oil between ships docked at the same pier. This method is crucial for transporting oil extracted from offshore sites. Porto Sudeste holds ISO 9001/Quality, 14001/Environmental Management, and NBR 16001/Social Responsibility certifications. It adheres to Conscious Capitalism principles in its management and is a signatory of the Global Compact – Brazil Network, contributing to the UN Sustainable Development Goals. For its sustainability reporting, Porto Sudeste follows GRI guidelines.

(GRI 2-1, 2-6)

LEARN MORE:  
PORTO SUDESTE

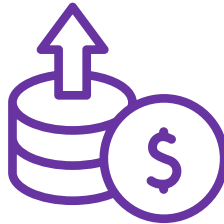


## Our Figures



**4.2 million**

**tons of ore: this was the annual production of the Ipê Mine in 2023**



**BRL 1.34 billion**

**was the amount invested in the Tico-Tico Project**



**9 million**

**tons per year will be the productive capacity of the Tico-Tico Mine operation**



**875**

**was the number of direct employees of our company in December 2023**

## Mission, vision and values

### OUR MISSION

- Promote logistics solutions for bulk and mineral production in a safe, sustainable, efficient, and innovative manner.

### OUR VISION

- Become one of the most innovative and respected companies, recognized for our commitment to the planet and people, and a source of pride for our employees.

### OUR VALUES

- Respect for life
- Social and environmental commitment
- Collaboration and empathy
- Sense of ownership
- Integrity

**2016**

Incorporation of Mineração Morro do Ipê

**2017**

Start of operations with the processing of existing iron ore stockpiles at the Ipê mine

First ship with material from Morro do Ipê is loaded at Porto Sudeste, with 168,086 tons of iron ore

Environmental license application filed for the Tico-Tico mine

Certification of the physical and chemical laboratories under the ISO 9001:2015 Quality Management System

**2018**

Construction began on the filter press, which replaced the use of tailings dams

**2019**

Start of operations with tailings filtration

**2020**

Environmental license to install the Tico-Tico Project obtained

Start of the new Environmental Control Plan with 35 programs for the physical, biotic and social and economic environments

Launch of Casa Ipê, the Community Service Center

Settlement of cavity liabilities through a Conduct Adjustment Agreement (TAC) between Morro do Ipê and the State of Minas Gerais

The Emergency Action Plan for Mining Dams (PAEBM) is implemented with announcements to the community, siren tests and practical drills

Launch of PAZ: Zero Accident Program

Launch of PN10: Professional Grade 10 Program

**2021**

Hydroseeding system is implemented to recover degraded areas

Start of constructions on the Tico-Tico Project and arrival of the first equipment

Launch of the SER Program: Sustainability, Balance and Respect

Joining the Conscious Capitalism Movement

**2022**

The Emergency Care Plan is restructured, including the implementation of a new mass alert system for Emergency Action Plan for Mining Dams (PAEBM), along with orientation seminars and simulation drills

Adjustment Agreements (TACs) are conducted for dam decommissioning and adjustments to the PAEBM are signed

A new drainage plan is implemented, involving restructuring the entire drainage system of Morro do Ipê

Structuring the Ethics and Compliance Committee

**2023**

Executive projects are issued for the decommissioning of dams B1 Auxiliär, B2 Tico-Tico, and B1 Ipê

The Tico-Tico Project construction is completed and the commissioning phase for the new plant is launched

The Environmental Education Program on the Culture of Prevention is launched and implemented in schools, social assistance centers, and health facilities.

Obtaining the operating license of the Tico-Tico Project

Completing the installation of the Mass Alert System to support the PAEBM Orientation seminars and drills performed and the Declaration of Conformity and Operability (DCO) is obtained for the structures

Start of the testing and equipment energization phase at the Tico-Tico Project

Adhesion to the United Nations (UN) Global Compact – Brazil Network

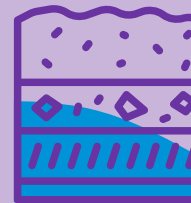
## The journey of ore in our lives

The mineral industry has played a pivotal role throughout history, intricately connected to the evolution of humanity. Minerals and their derived products are constantly present in society's daily life, serving as essential components for survival, improving quality of life, and fostering human development.

With a growing emphasis on ESG factors, the mining sector is increasingly prioritizing operational efficiency, innovation, and advanced technologies. The future of iron ore is inherently tied to sustainable extraction and production practices, influenced by the global shift towards cleaner energy sources for the benefit of the planet and future generations.



**18 tons of mineral goods is what a person uses, on average, throughout their life, in industrialized countries.\***



**The total of strategic minerals in Brazil—iron, aluminum, gold, copper, niobium, nickel and manganese—accounts for 98.6% of the marketed mineral production.\*\***



**Iron ore**  
- a mineral or a combination of economically valuable minerals, such as hematite, magnetite, and limonite—it is the **4th most abundant element on the planet and the most widely used in the world.\*\***



**An electric car requires up to 6 times more mineral inputs than a conventional model, underscoring the crucial role of mining in the energy transition. Electrification offers an alternative to replace fuel-powered transportation, highlighting the importance of minerals in this shift.\*\*\*\***

Sources:  
\* extinct estimate United States Bureau of Mines  
\*\*ibram.org.br and www.noticiasdemineracao.com  
\*\*\*panoramamineracao.com.br/a-mineracao-a-servico-da-transicao-energetica/  
\*\*\*\* assets.kpmg.com/content/dam/kpmg/br/pdf/2023/1/bc-bi34-articulo-por.pdf

# A Journey towards Sustainability

(GRI 2-22, 2-23,  
2-24, 2-28)

## Sustainable Development Policy

To achieve sustainable development, Morro do Ipê emphasizes generating results that benefit shareholders, suppliers, the environment, employees, the community, and all stakeholders. This commitment is articulated in **Morro do Ipê's Sustainable Development Policy**, a foundational document that sets out guidelines, values, and principles for defining the company's objectives and commitments regarding environmental

sustainability, health and safety, social responsibility, and customer satisfaction.

The policy guides management programs focused on operational excellence, responsibility, and safety, represented by the following mandala.

It is accessible to employees through the company's intranet and to all stakeholders via the corporate website. Internally, awareness of the policy is fostered



through training, from employee integration to daily management guided by key programs such as the Zero Accident Program (PAZ), Sustainability, Balance and Respect (SER), and Professional Grade 10 (PN-10).

Beyond its internal impact, the Sustainable Development Policy and the guidelines of the SER (Environmental and Social Responsibility) and PAZ (Occupational Health and Safety) programs must be understood and embraced by all suppliers approved by Morro do Ipê. Supplier adherence to these standards promotes the extension of sound management practices to strategic partners.

Morro do Ipê's policies, standards, and procedures provide clear guidance for employees and teams across their diverse work fronts, accessible through the company's intranet and Corporate Governance Portal:

- Sustainable Development Policy
- Code of Conduct and Ethics and Anti-Corruption Policy
- Management and Conflict of Interest Policy
- Diversity & Inclusion Guide

(GRI 2-22, 2-23, 2-24, 2-28)



Moro do Ipê  
employees

## Materiality

Prepared by an external consultancy, the materiality process for prioritizing the content of this report was guided by the GRI Standards, a framework that enables organizations to consistently and credibly report information on their impacts. This process aids stakeholders in making informed assessments and decisions regarding the company's activities and its contribution to sustainable development.

The study to define material topics encompassed four stages, outlined below.

(GRI 3-1)



For the next reporting cycle, the company plans to broaden its engagement process by involving external stakeholders in the materiality assessment. In this inaugural Sustainability Report from MMI, the approach involved consulting and engaging internal stakeholders. They provided insights into impacts and their respective management practices, complemented by data from sources such as the whistleblowing channel and inputs gathered from various interactions with external stakeholders throughout 2023.

\* Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), Sustainable Development Goals (SDGs), Task Force on Climate-related Financial Disclosures (TCFD) and Brazilian Business Council for Sustainable Development (CEBDS).

**MATERIAL TOPICS** (GRI 3-2)

ESG ASPECT	MATERIAL TOPIC	RELATED SDGS
E	Natural resource management and climate change	<div><div>6 ÁGUA POTÁVEL E SANEAMENTO</div><div>12 CONSUMO E PRODUÇÃO RESPONSÁVEIS</div><div>13 AÇÃO CONTRA A MUDANÇA GLOBAL DO CLIMA</div><div>15 VIDA TERRESTRE</div></div>
	Dam management	<div><div>9 INDÚSTRIA, INOVAÇÃO E INFRAESTRUTURA</div><div>12 CONSUMO E PRODUÇÃO RESPONSÁVEIS</div></div>
S	Employee development	<div><div>4 EDUCAÇÃO DE QUALIDADE</div><div>5 IGUALDADE DE GÊNERO</div><div>8 TRABALHO DECENTE E CRESCIMENTO ECONÔMICO</div></div>
	Local presence	<div><div>1 ERRADICAÇÃO DA POBREZA</div><div>3 SAÚDE E BEM-ESTAR</div><div>4 EDUCAÇÃO DE QUALIDADE</div><div>8 TRABALHO DECENTE E CRESCIMENTO ECONÔMICO</div><div>10 REDUÇÃO DAS DESIGUALDADES</div><div>11 CIDADES E COMUNIDADES SUSTENTÁVEIS</div><div>17 PARCERIAS E MEIOS DE IMPLEMENTAÇÃO</div></div>
	Occupational health and safety	<div><div>3 SAÚDE E BEM-ESTAR</div></div>
G	Ethics, Integrity and Compliance	<div><div>8 TRABALHO DECENTE E CRESCIMENTO ECONÔMICO</div><div>16 PAZ, JUSTIÇA E INSTITUIÇÕES EFICAZES</div><div>17 PARCERIAS E MEIOS DE IMPLEMENTAÇÃO</div></div>



For Morro do Ipê, the goal of advancing towards a more modern, safe, and sustainable mining operation involves innovation, which is a core topic that cuts across all aspects of the company.

INNOVATION

## External Commitments

A way of thinking about capitalism and business that better reflects where we are in the human journey, the state of our world today, and the innate potential of business to make a positive impact on the world (Conscious Capitalism Inc. definition).

We embrace the principles of **Conscious Capitalism**, encouraging our leadership to create value for all stakeholders, consistently rooted in ESG practices. Our actions are guided by a Higher Purpose, Conscious Culture and Leadership, and Stakeholder Orientation—the four pillars of Conscious Capitalism.

We are affiliated with the Instituto Capitalismo Consciente Brasil (ICCB), the official representative of Conscious Capitalism Inc., a global movement originating in the United

States that aims to elevate leadership awareness of business practices focused on generating value for all stakeholders.

In 2023, Morro do Ipê became a signatory of the **UN Global Compact - Brazil Network**. This movement unites companies and organizations to align their strategies and actions with ten principles covering human rights, labor, the environment, and anti-corruption efforts, all linked to the Sustainable Development Goals (SDGs).



"By joining movements such as Conscious Capitalism and the Global Compact, we reaffirm our commitment to addressing the significant challenges facing our planet today, which require agile and cooperative action from companies, governments, institutions, and citizens."

**Cristiano Parreiras**, Director of Corporate Affairs and Sustainability.



The 17 SDGs, established to be achieved by 2030 by 197 countries, including Brazil, aim to reduce social inequalities and minimize environmental impacts on our planet. At MMI, we strive to contribute to the social and economic development of the communities where we operate. Besides creating

jobs through our mining activities, we develop cultural and educational projects and offer courses to train the local workforce. Our approach is based on open and transparent dialogue to understand and meet the community's needs and expectations.

(GRI 3-3)

The programs and initiatives developed at Ipê contribute to the SDGs and demonstrate performance based on modern, innovative, and responsible mining practices.

(GRI 3-3)

## Social Pillar:

human needs, health, education, improving quality of life, justice, diversity and inclusion.

- Fair compensation
- Healthcare for hired and outsourced employees and family members
- Health promotion and disease prevention campaigns for the internal and external audiences
- Technical training for employees, support for continuing education, childcare and school supplies for family members
- Professional training and social and cultural and sporting activities for residents of the municipalities in which we operate
- Job opportunities for all genders, Somos Diversos [We are diverse] group



## Environmental Pillar:

preservation and conservation of the environment, protection of forests and biodiversity, tackling desertification and adoption of effective measures against climate change.

- Environmental Education Program
- Identification and protection of springs and reuse of water in the production process
- Optimizing the use of electricity, seeking to use renewable energy
- Waste management
- Atmospheric emissions management processes
- Recovery programs for degraded areas, planting seedlings from Ipê's own nursery



## Economic Pillar:

**promoting of inclusive and sustainable economic growth, fostering innovation, more sustainable cities.**

- Creation of decent jobs, fair wages and benefits for employees and their families
- Prioritizing local labor and suppliers
- Payment of taxes
- Efficient production processes, innovation projects and actions for more responsible and sustainable mining and logistics
- Contribution to the territorial development of the municipalities in which we operate, through income generation



## Institutional Pillar:

**fight against corruption and discrimination, strong institutions and the capacity to put the SDGs into practice.**

- Compliance system, code of ethics, risk mapping and prevention
- Ethical and transparent relationship with the government, institutions and local community
- Ombudsman channels for internal and external audiences
- Adoption of Conscious Capitalism as management foundation
- 5HS: Humbleness, Honesty, Harmony, Humanity, Humor and Integral Health
- Partnerships with public authorities, academic and sectoral institutions, and the organized civil society for collaborative action



# Financial Statements

## Our 2023 Results

Despite iron ore prices averaging over USD 120 per ton and a significant increase in sales volumes compared to the previous year, our operating results in 2023 were impacted by three main factors.

First, at the beginning of the second half of 2023, the company aimed for stability in cash generation by completing investments in the Tico-Tico plant. To achieve this, we set fixed prices for sales to our main customer through the end of 2023. However, these fixed prices were lower than the market rates due to high demand for iron ore in China.

Second, there were significant price updates on ore handling contracts, internal logistics, and port services. And with the expansion project at the new plant 98% complete, we faced increased production costs due to training expenses for the operational team and other costly expenses. These costs were incurred without a corresponding increase in sales volumes, which is expected to occur in 2024 after the ramp-up process at the Tico-Tico Mine is completed.

### INCOME STATEMENTS December 31, 2022 and 2023 (in thousands of Brazilian *reais*)

	2023	2022
Net revenues	1,311,580	1,271,034
Cost of products and services	(1,240,932)	(882,662)
Gross income	70,648	388,372
Operating Expenses <sup>1</sup>		
General and administrative	(66,401)	(45,652)
Total operating expenses	(87,564)	(62,301)
	(153,965)	(107,953)
Earnings before financial result and taxes	(83,317)	280,419
Financial result		
Financial revenue	2,796	15,856
Financial expenses	(43,666)	(15,533)
	(40,870)	323
Earnings before taxes on profit	(124,187)	280,742
Income tax and social contribution	30,966	(98,947)
Net profit (loss) for the year	(93,221)	191,795

<sup>1</sup>The increase in sales in 2023, compared to the previous year, led to higher maritime, rail, and road freight costs. Additionally, with higher ore production during this period, costs also rose, particularly for internal ore handling services, road transportation to the rail terminal, as well as fuel and maintenance.

**COMPREHENSIVE INCOME STATEMENTS**  
**December 31, 2022 and 2023 (in thousands of Brazilian *reais*)**

	2023	2022
Profit (loss) for the year	(93,221)	181,795
Accumulated translation adjustment	(69,327)	(15,578)
Derivative operations	(1,109)	(2,789)
Total comprehensive income for the year	(163,657)	(163,428)

**ECONOMIC VALUE GENERATED AND DISTRIBUTED**  
(GRI 201-1)

	2023	2022
GENERATED ECONOMIC VALUE		
Net Sales	1,311,580.00	1,271,034.00
Income from financial investments	2,796.00	15,856.00
Total economic value generated	1,314,376.00	1,286,890.00
ECONOMIC VALUE DISTRIBUTED		
Operational risks	(1,284,630.00)	(896,887.00)
Employee salaries and benefits	(96,069.00)	(72,137.00)
Government payments	(14,198.00)	(21,591.00)
Financial expenses	(43,666.00)	(15,533.00)
Total economic value distributed	(1,438,563.00)	(1,006,148.00)
Retained economic value	(124,187.00)	280,742.00



**4,224 thousand**  
wet tons of finished product were produced,  
representing a 26% increase compared to 2022.

**4,026 thousand**  
wet tons of finished product were marketed,  
exceeding the previous period by over 20%.

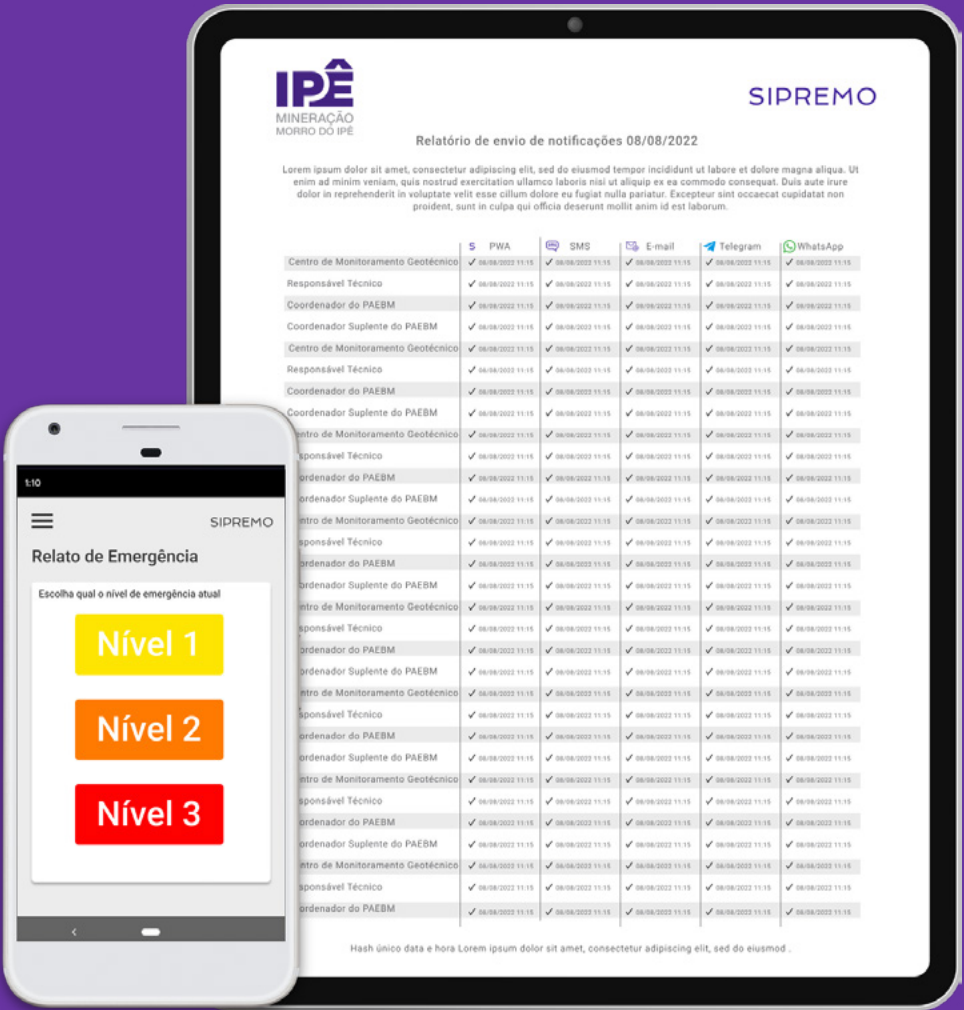
See full financial statements on **our website**.



**CHAPTER 1**

# Dam Management

Sustainable Mining.  
Is this allowed? Here it is!



# Smart PAEBM [PAEBM Inteligente]

In 2023, Morro do Ipê furthered its path of innovation by developing a smartphone app called **PAEBM Inteligente**

[Smart PAEBM], designed to enhance real-time communication with stakeholders involved in the company's Emergency Action Plan for Mining Dams. This app marks a significant milestone, particularly in actual emergencies or during simulation activities, as it can send instant and simultaneous notifications to all plan participants,

ensuring quick and efficient dissemination of crucial information.

Developed in partnership with the startup Sipremo, this app testifies to Morro do Ipê's commitment to continually seeking innovative practices that optimize and improve its processes. It exemplifies the company's dedication to constant improvement and modernization, reinforcing its focus on excellence in all aspects of its operations.

## IN PRACTICE



Professional from the Monitoring Center The Geotechnical Expert (CMG) detects an anomaly in the dam and reports it to the PAEBM Coordinator



The PAEBM Coordinator accesses the app and activates the necessary protocols



Notifications are sent to all relevant personnel according to their hierarchical level



Following the activation, the professionals receive a detailed report outlining the specifics of the anomaly

## Challenges for Mining regarding Dam Management

Mining dams in Brazil face challenges related to technical, safety, environmental, and social issues. Those were particularly highlighted by the collapses in Mariana in 2015 and Brumadinho in 2019. Following these incidents, Law 14066/2020, part of the National Dam Safety Policy, introduced stricter safety and risk management requirements. These include regular inspections of structures and enhanced geotechnical safety measures. Minas Gerais, with 357 mining dams, hosts the highest concentration nationwide. The state is

followed by Pará with 109, according to data from the National Mining Agency (ANM). While not all dams are active for tailings disposal, they must still comply with all regulatory precepts for operational dams. Various sectors play crucial roles in promoting safer mining practices. Innovative companies improve operational standards, authorities enforce regulations through inspections, specialists conduct rigorous inspections and audits, and the community advocates for and participates in safety initiatives.



B2 Tico-Tico and B1 Auxiliar dams

## Our Commitment

Morro do Ipê operates three tailings dams, all of which are stable, deactivated, and undergoing decommissioning processes. The B1 dam at the Ipê mine discharges into the municipality of Brumadinho, while the B1 Auxiliary and B2 dams at the Tico-Tico mine discharge into the municipalities of Igarapé and São Joaquim de Bicas.

In 2022, we entered into a commitment agreement with the Federal and State Public Prosecutor's Offices, the National Mining Agency, and the State of Minas Gerais. This agreement pledges to de-characterize the Morro do Ipê dams promptly and safely, utilizing the best available techniques. Detailed decommissioning projects have been developed and are currently undergoing rigorous analysis and

revision for approval by the competent authorities. Throughout the de-characterization process, the dams are subject to continuous, 24/7 monitoring with protocols that exceed current legislative requirements. This includes maintaining the structures and implementing all activities outlined in the Dam Emergency Action Plan. These efforts ensure the proper functioning of the warning system

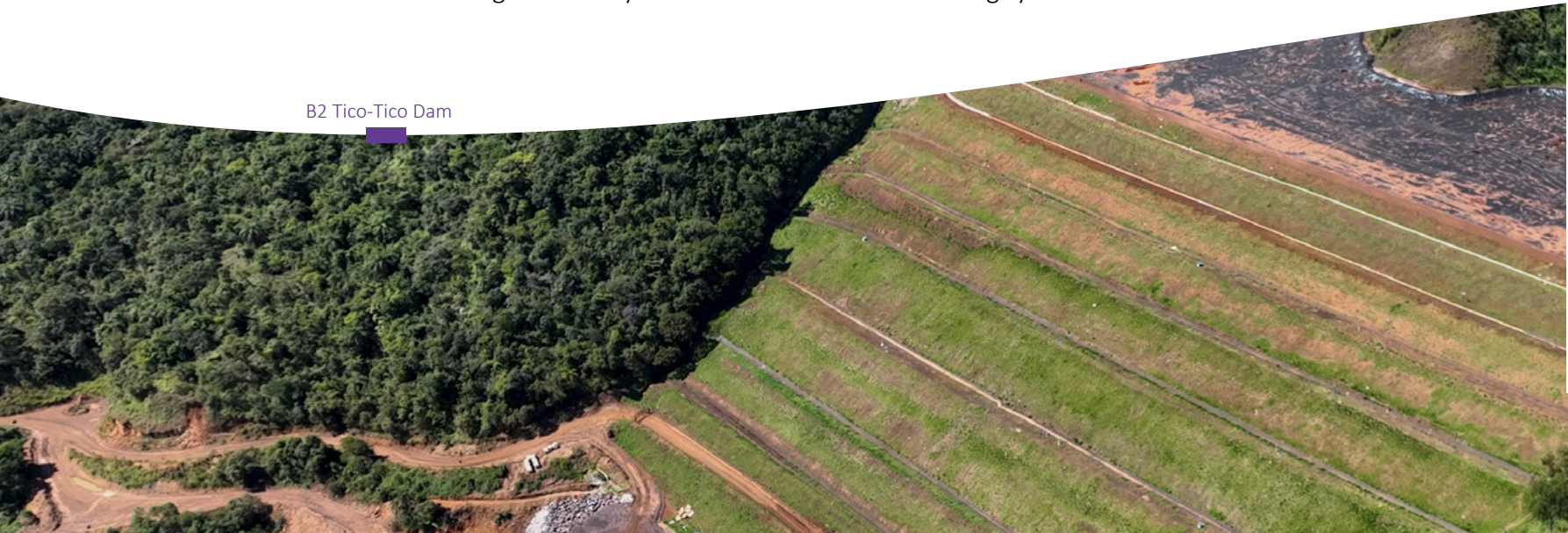
and maintain close relationships with residents and workers in the Self-Rescue Zone— areas identified as potentially affected in the event of a dam breach.

Additionally, we are committed to an environmental education program aimed at identifying and mitigating risks in each area.

(GRI 3-3)

- **Our three dams—B1 Ipê, B1 Auxiliar, and B2 Tico-Tico—are currently deactivated, monitored, and scheduled for decommissioning.**
- **In our processing units, tailings undergo filtration, with water being recycled back into the process. The dried tailings are then disposed of using a method known as dry stacking, eliminating the need for active dams.**
- **All our dams hold Declarations of Condition of Stability (DCE) and Declarations of Conformity and Operability (DCO) from the Emergency Action Plan for Mining Dams (PAEBM).**
- **We strictly adhere to the regulations of the National Mining Agency (ANM), including undergoing audits conducted by third-party teams and environmental and regulatory bodies. These audits provide regular reports on the stability of the dams, even though none of them are currently operational.**

B2 Tico-Tico Dam



## Our Initiatives

By integrating monitoring and communication technologies with an engagement plan involving key stakeholders, we aim to develop dam management initiatives that prioritize safety for society and environmental stewardship.

### TECHNOLOGIES FOR DAM SAFETY

Since the beginning of 2018, we have invested in new technologies to replace traditional dams with a tailings filtration system (refer to Natural Resource Management and Climate Change, page 33). Our three deactivated and stable dams are continuously monitored

by the Geotechnical Monitoring Center (CMG).

Instruments measure real-time data such as structure conditions, pore pressure, water levels, surface movements, and vibrations. Anomaly detection procedures include visual and drone inspections, video monitoring, and manual and automated instrumentation controlled via direct integration with CMG computers.

High-tech cameras monitor every element of the structures, including the body, reservoir, and embankments. Each dam is equipped with advanced

**Doppler radar** systems capable of detecting mass movements and automatically triggering sirens in case of breach. A network of **piezometers** and automated water level gauges records hydraulic variations inside the dams in real time. Additionally, each structure features over a hundred prisms (topographic landmarks) and robotic stations to detect millimetric deformations over time. At CMG, we monitor weather forecasts and the operational status of 11 PAEBM sirens in Igarapé and São Joaquim de Bicas, as well as 8 sirens in Brumadinho. In 2023, we pioneered the installation of radio

An instrument installed outside structures to detect rapid mass movements by emitting and receiving radio waves.

An instrument installed at a specific depth in the ground to measure groundwater pressure.

**OUR HIGHLY QUALIFIED STAFF AND ADVANCED MONITORING SYSTEMS ENSURE THAT ALL STRUCTURES OPERATE AT THE HIGHEST SAFETY STANDARDS.**

MMI's Geotechnical Monitoring Center ensures round-the-clock monitoring.

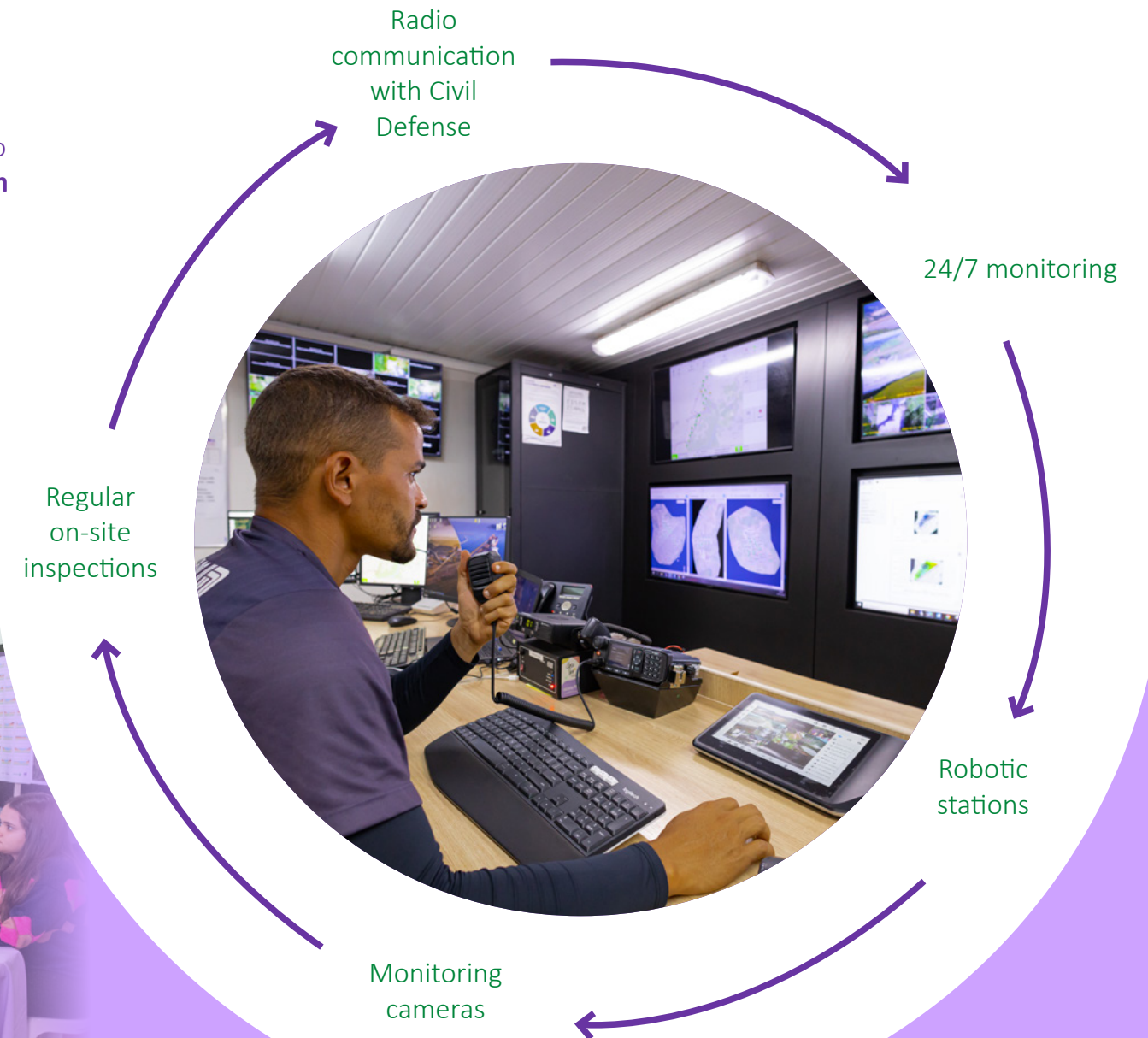


systems enabling direct communication with Civil Defense during emergencies. This initiative not only enhances emergency response but also plays a crucial role in dispelling misinformation frequently circulating on social media regarding mining operations.

- **Equipment monitors** the structures of the decommissioned Morro do Ipê dams continuously, 24/7.
- **The PAEBM** in Brumadinho, Igarapé, and São Joaquim de Bicas **features a warning system comprising 19 sirens.**
- **1,600 signs**, informing on escape routes, meeting points, and risk areas, **indicate the Self-Rescue Zone**
- **On-site inspections** are carried out in the dams and in the signaling areas and alert system of the PAEBM



Emergency Drill Command Station, in Igarapé



**EMERGENCY ACTION  
PLAN FOR MINING  
DAMS (PAEBM)**

The PAEBM is a technical document crafted by Morro do Ipê, designed to be accessible and crucial in identifying potential emergency situations in dams. It outlines precise actions to be taken during such circumstances and specifies the responsible parties to notify, all with the primary goal of minimizing damage and safeguarding lives.

Morro do Ipê ensures full transparency and public access to the PAEBMs for its three dams on its official website, ensuring transparency and public access to relevant information. Additionally, updated physical copies of these plans are submitted to municipal authorities

in neighboring areas, reinforcing our commitment to transparency and local safety.

**PAEBM evolution**

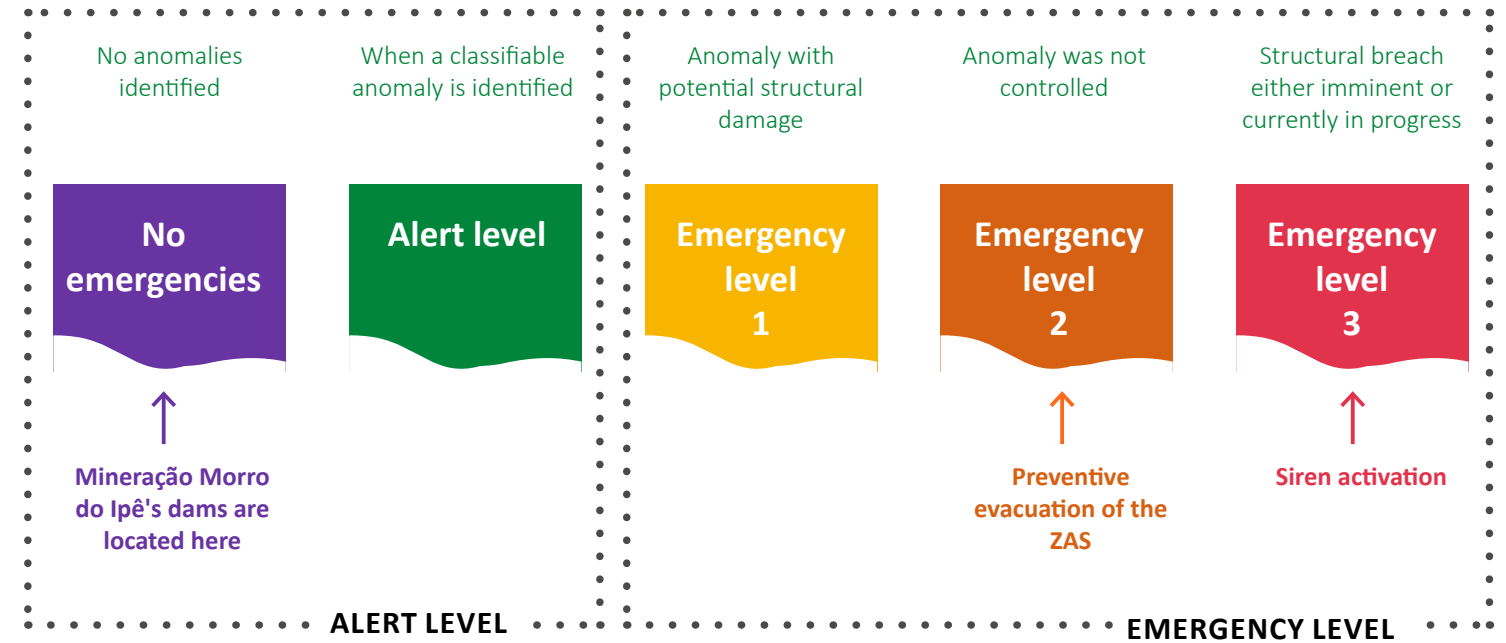
The PAEBM begins with a comprehensive technical study, known as a "dam break" analysis, which simulates potential scenarios of dam failure. This study provides an accurate map of areas that could be affected during an emergency. Based on this mapping, a social registry of these areas is compiled, and emergency signage is strategically installed, always in collaboration with and approval from municipal civil defense and protection agencies. To ensure rapid response in critical situations, effective sound warning systems, such as sirens, are deployed. These measures aim to keep



Assistance to the community at the meeting points—Emergency Drills, Igarapé/São Joaquim de Bicas

the population informed and aware at each stage of emergency preparedness. In partnership with Civil Defense agencies, we actively promote seminars and conduct simulation exercises, engaging the community and training them in proper evacuation procedures for emergencies.

Currently, the dams are in a secure condition, with no level of alert or emergency. The safety and well-being of people and the environment are our top priorities, and we remain committed to ongoing investment in preventive maintenance measures to uphold these standards.



## COMMUNICATING AND ENGAGING WTH THE COMMUNITY

Transparency in mining operations and the disclosure of information about dam conditions are essential for building trust with key stakeholder groups: the community, municipal and state civil defense, the Fire Department, the Public Prosecutor's Office, city halls, and other government agencies.

Our community relations plan includes a variety of initiatives, such as orientation seminars and drills for the Emergency Action Plan for Mining Dams (PAEBM), integrated into environmental licensing programs. We maintain ongoing dialogue through permanent forums, both online and in-person, and provide specialized environmental education programs focused on fostering a "culture of prevention". Further details about these actions can be found in the Local Presence chapter.



Guidance Workshop in the Cidade Nova district, Igarapé.

CHAPTER 2

# Natural Resource Management and Climate Change

We seek, at all times, to be:  
Sustainable, Balanced and Respectful



Protected natural cavity

## Cavity Preservation and Compensation

We have acquired the assets of the Tico-Tico and Ipê mines from MMX Sudeste. Since then, we have been dedicated to addressing environmental liabilities inherited from the former mining company's iron ore extraction activities near caves and protected natural cavities, in accordance with legal requirements. [\(GRI 3-3\)](#)

To address these goals, we have implemented a comprehensive program encompassing monitoring, preservation, recovery, and compensation for natural cavities. Key environmental initiatives include focused efforts on speleological protection,

encompassing cave fauna monitoring, particulate and vibration monitoring, and photographic documentation. These efforts are crucial for preserving caves surrounding MMI's operations.

Currently, we are executing an environmental recovery plan covering a 72,000 m<sup>2</sup> area that influences cave ecosystems. MMI manages a repository of 1,266 natural caves located in two critically important areas for Brazil's speleological heritage: Cerca Grande State Park and Peruaçu Caves National Park.

MMI completed the donation process of Fazenda Cerca Grande,

situated within Cerca Grande State Park, to the State of Minas Gerais on June 1, 2023. This action was part of our commitment under the Conduct Adjustment Agreement (TAC) signed with the Priority Projects Superintendence of the Minas Gerais State Secretariat for the Environment and Sustainable Development. Moreover, we have undertaken the payment of over BRL 23 million to the State of Minas Gerais as compensation for damages caused by previous owners of the Ipê and Tico-Tico mines.

[\(GRI 304-2\)](#)

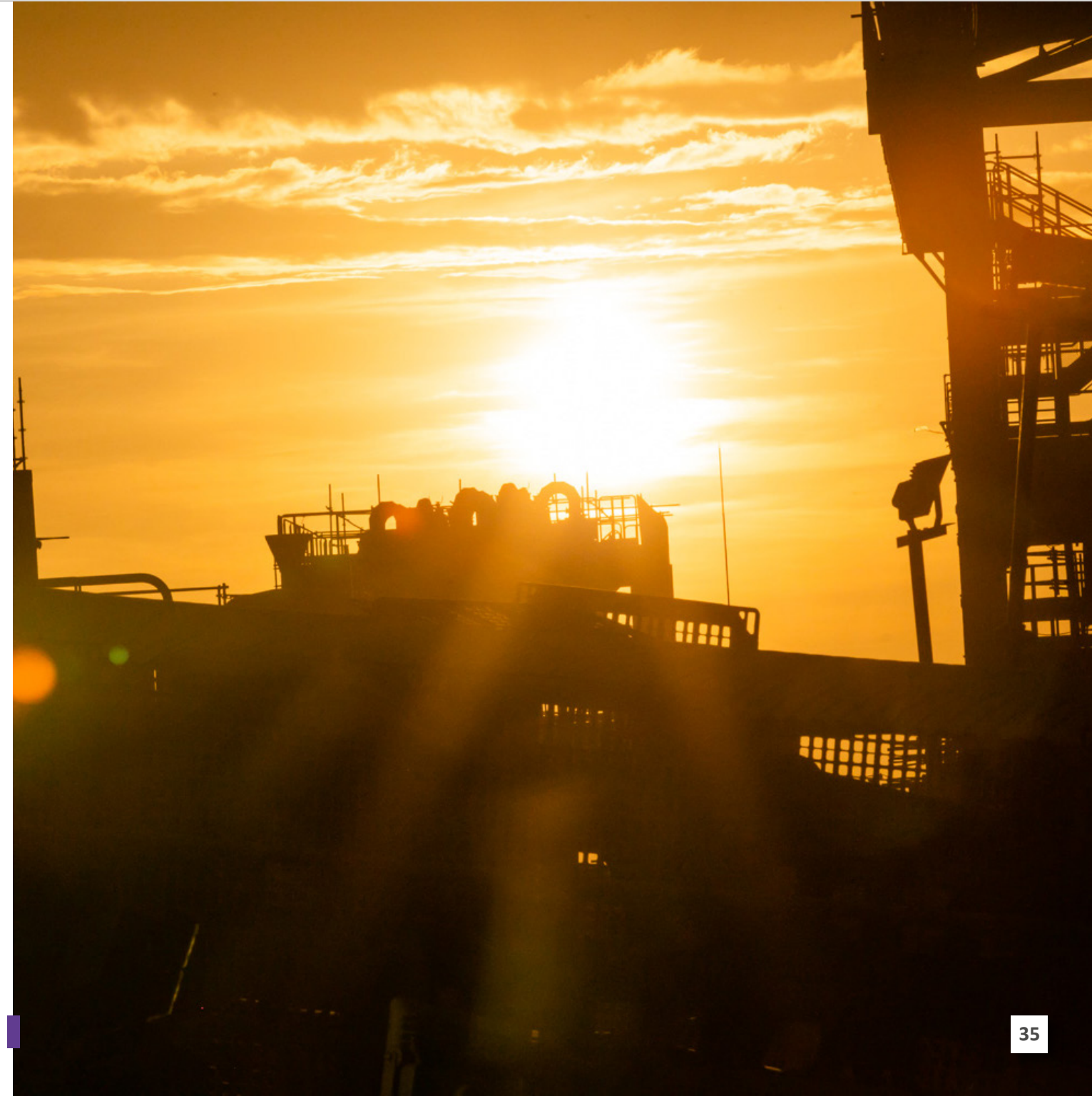
## Natural Resource Management and Climate Change Challenges

Scarcity of natural resources, growing demand for drinking water, use of non-renewable energy, deforestation and loss of biodiversity. These are some of the challenges we face to preserve the planet we live on, our well-being and that of future generations.

The increase in greenhouse gas (GHG) emissions from the burning of fossil fuels, deforestation, and industrial processes contributes to global warming and increasingly frequent extreme weather events, such as changes in precipitation patterns and rising sea levels. Inadequate management of natural resources has impacted vulnerable communities,

especially those who rely directly on these resources for their survival.

Specifically in mining, one of the biggest challenges is the management of tailings and waste rock, with proper disposal in safe places. The path to more sustainable mining requires local, national, and global cooperation between companies, communities, and governments, investments in clean technologies, the promotion of environmental education, conservation of biodiversity, and the adoption of policies that encourage and enforce best practices.



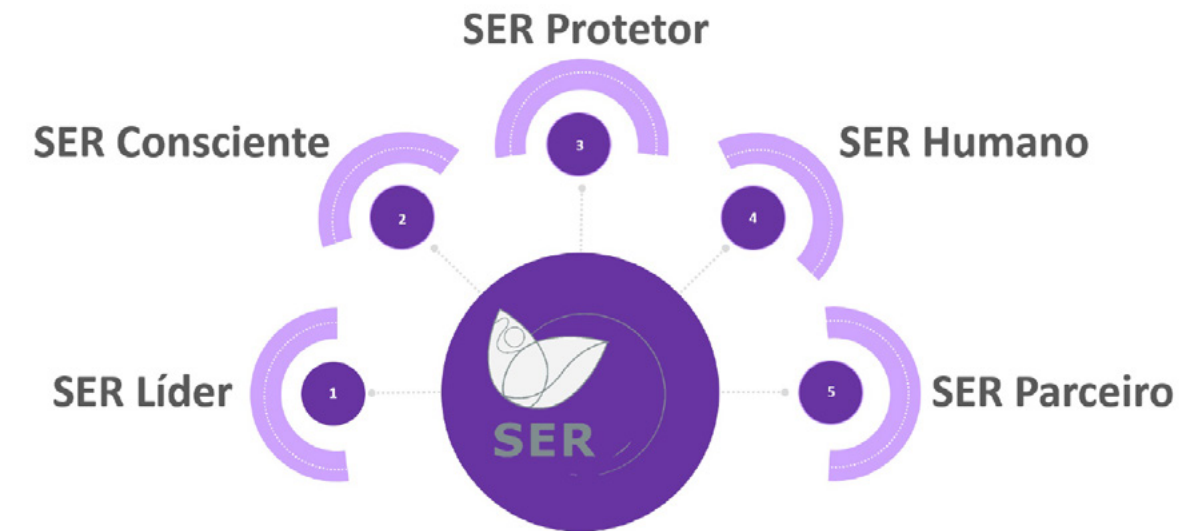
## Our Commitment

Growing environmental awareness and the state of climate change are leading to stricter regulations and pressures for sustainable practices in the mining industry. At Morro do Ipê this is no different. Our social and environmental management serves as our compass in striving to be among the most environmentally and socially responsible companies.

The Environmental Control Plan oversees more than 35 programs covering aspects such as dust dispersion, cleanliness, safety protocols, visual impact mitigation, noise reduction, landscape

preservation, and monitoring of water, flora, and fauna. As we earn certifications, we uphold our commitments through regular audits, both mandatory and voluntary, conducted under our Environmental Management System, ensuring compliance with National Environment Council (CONAMA) resolutions and legal requirements.

In 2021, we launched the program **SER: Sustainability, Balance, and Respect**, a systematic management initiative designed to highlight daily actions while promoting



environmental and social advancements aligned with the principles of Conscious Capitalism and the Sustainable Development Goals.

Comprising five pillars (SER Leader, SER Conscious, SER Protector, SER Humane, and SER Partner), the program embodies the ethos guiding all our employees

and service providers. These pillars define performance indicators and bonus initiatives for evaluating leadership roles (managers, coordinators,

supervisors, or equivalent positions within our career framework).

We also foster communication through "Minuto SER" [SER in a Minute], dedicated occasions when leaders engage with their teams—both internal and from partner companies—prior to commencing activities. These sessions focus on environmental and social issues, promoting awareness of project-related impacts and guiding community relations to prevent incidents and foster attentive practices throughout our operations. (GRI 3-3)

## OUR INITIATIVES

Since 2021, Mineração Morro do Ipê has been measuring its emissions and compiling a Greenhouse Gas (GHG) inventory related to its activities. In 2023, we collaborated with Senai's Technological Innovation Center to benchmark market sectors, developing a corporate policy and strategy on climate change as part of our GHG Emissions Management Plan. This initiative will guide the adoption of management practices and initiatives aimed at reducing emissions.

Our Climate Change Policy directs efforts to manage risks and impacts associated with climate change, focusing on transitioning to a low-carbon economy. We are committed to reducing GHG emissions.

(GRI 305-5)

Currently, 99% of Scope 1 emissions are attributed to mining activities involving heavy equipment and diesel usage. Scope 2 includes electricity purchases to maintain our operations, while Scope 3 encompasses activities by outsourced companies, such as transporting ore to railway terminals, employee commuting on

buses and microbuses, emissions resulting from landfilling solid waste, and treating industrial effluents.

Challenges ahead include managing increased electricity consumption at Tico-Tico Mine, expected due to a 6 million-ton increase in iron ore production starting in 2024. Additionally, we are addressing the replacement of HCFC22 gas used in air-conditioning systems.

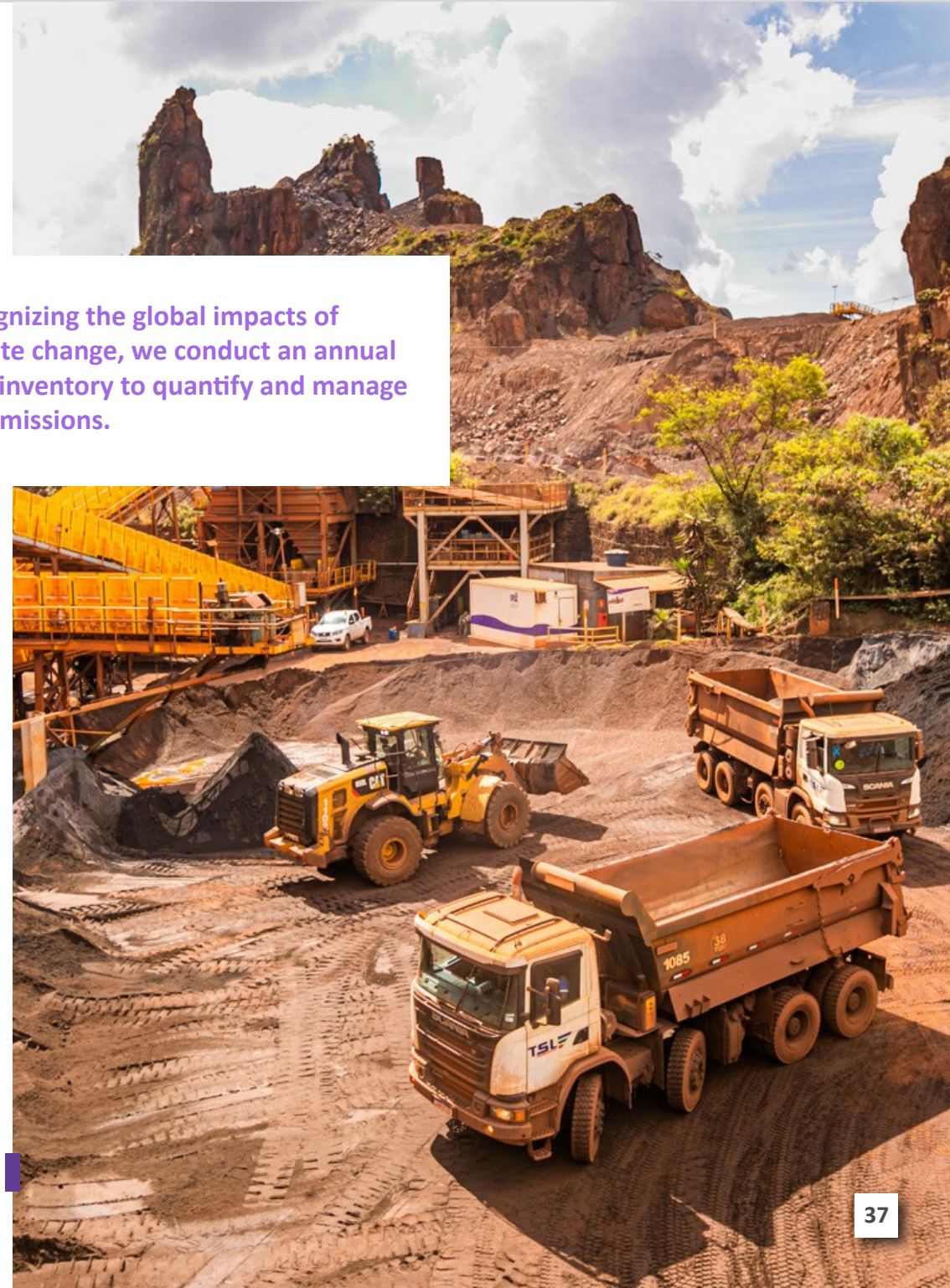
(GRI 305-4)

Detailed CO<sub>2</sub> emission results can be found in Indicator Hub (page 85).

(GRI 3-3)

**Recognizing the global impacts of climate change, we conduct an annual GHG inventory to quantify and manage our emissions.**

Efforts are ongoing to reduce greenhouse gas emissions.



WASTE MANAGEMENT

Currently, the waste generated by Mineração Morro do Ipê (mine operation, plant operation, maintenance, outpatient clinic, cafeteria, laboratory and administrative areas and by the contracted companies) is managed according to the current Waste Management Plan. This plan outlines

procedures for waste segregation, storage, and disposal based on waste classification. In 2023, we initiated efforts to integrate MMI's Solid Waste Management Plan with plans operated by contractors, prioritizing waste prevention, reduction, reuse, and recycling.

All waste undergoes weighing and is accompanied by a waste transportation manifest, with management indicators carefully monitored. Last year, we managed 1,400 tons of waste, including wood, paper/cardboard, refining oil, and organic waste. Of this total, 814.33 tons

(60%) were recycled, reused, or directed to other sustainable disposal methods, with the remainder responsibly managed at a controlled sanitary landfill in Betim (MG).

(GRI 3-3, 306-1)

WASTE	DESTINATION	AMOUNT (in tons)
Wood	Recycling	301.28
Used oil	Re-refining	14.26
Organic waste	Composting	119.87
Paper/paperboard	Recycling	15.14
Tires	Recycling	0.25
Plastic	Recycling	5.74
Metal	Recycling	357.79
<b>TOTAL</b>		<b>814.33</b>



BLOCK BRICKS PRODUCED FROM TAILINGS

Mineração Morro do Ipê has innovatively produced block bricks using tailings discarded from ore processing plants, which were utilized to pave our new parking lot, covering a total area of 1,300m².

This initiative not only provided a cost-effective solution but also aimed to stimulate local commerce and create jobs in our region, as the bricks were manufactured by a partner company based in Igarapé.

## REUSE AND REDUCTION OF WATER CONSUMPTION

Since 2019, Mineração Morro do Ipê has implemented a new system for treating iron ore tailings through a filtration process, eliminating the necessity for traditional tailings dams. This system utilizes

two **filter presses** to separate liquid material (water) from solids. The filtered water is recycled back into the industrial process through recirculation, while the dry tailings are safely stored in designated piles. (GRI 3-3)

**The water recirculation facilitated by our waste filtration system significantly reduces the need to extract water from natural sources, whether underground or surface water. Additionally, the production of hematite at the Tico-Tico Mine is entirely dry, with no water used in the crushing and sieving processes.**

(GRI 306-5)



Filtration at the Tico-Tico Mine

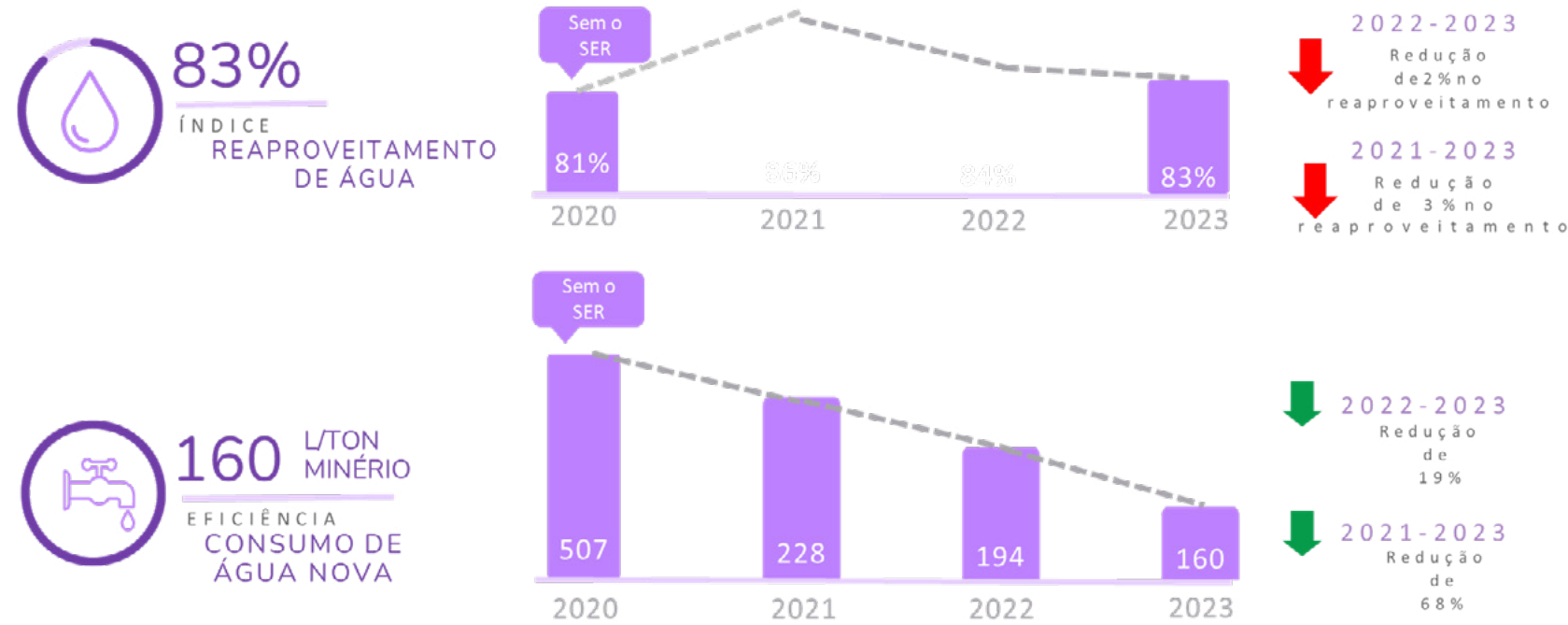
Decantation Conquistinha entrance



"Water is crucial not only for our operational needs but also for society well-being and environmental conservation. By reusing water and minimizing consumption, we demonstrate our steadfast commitment to sustainability."

**Guilherme Raposo,**  
Environment Manager.





Most of the water utilized in the iron ore concentration process is sourced from the **Paraopeba River**. For purposes such as human consumption, road wetting, and washing machines and equipment, among others, water is sourced from two authorized artesian wells. All these water sources are duly authorized by the State Department for the Environment and Sustainable Development (Semad).

(GRI 303-1)

The Paraopeba River Basin forms part of the São Francisco River Basin, in a region known as Serra Azul or Serra das Farofas, within the Iron Quadrangle of Minas Gerais.

In 2023:

**83%**  
of the water utilized in ore processing was recycled through filtration for the production process (GRI 303-1)

The average volume of new water consumed by MMI was

**680**  
thousand m<sup>3</sup>/year

(GRI 303-5)

"Social and environmental responsibility is inseparable from our operations; it is ingrained in our DNA and guides our daily activities. Every action taken by our company is imbued with this commitment to nurturing positive relationships with our community and protecting the environment. This ethos is paramount to us and underscores that the well-being of our company hinges on the health of our community."

**Sérgio Botelho,**  
Director of Mine Operations.



# Our Initiatives

HERE'S A SUMMARY OF WHAT WE HAVE BEEN DEVELOPING AS FAR AS:

## Water

(GRI 303-1, 303-5)

- **Identification and protection of springs and watercourses**

within the premises of Morro do Ipê

- Periodic monitoring of water quality indicators of springs and watercourses
- Proper rainwater management and drainage according to the Drainage Plan implemented in 2023

## Effluents and Waste

(GRI 306-2)

- Effluent monitoring and control
- Proper disposal of sanitary sewage
- Approach in Safety Dialogues on the generation and correct segregation of waste, in addition to internal campaigns on the subject
- Encouraging the reduction of plastic use and food waste



Environmental Education Action with the Community:  
Conservation of Springs

## Emissions Inventory

(GRI 305)

Mineração Morro do Ipê joins the *#GreenZone* program, carried out by the investing company Trafigura, which consists of identifying and reducing the use of energy and the emission of greenhouse gases

## GHG emissions intensity\*

(GRI 305-4)

# 4.42 KgCO<sub>2</sub>e/ton

of material transported to railway terminals

The emission of

# 276.479 tCO<sub>2</sub>e

**associated with the consumption of HCFC-22 (R22) refrigerant gas, used in air conditioning equipment, is accounted for separately, in order to contribute as a form of management, so that we can find a more sustainable solution with the replacement of these gases**

\*GHG emissions intensity expresses the amount of GHG emissions per unit of activity, production, or any other organization-specific metrics.

## Biodiversity

(GRI 304-2)

- Protection of local flora and fauna: programs for the recovery of degraded areas, Fauna Care and Rehabilitation Center (CARF) and a [seedling nursery](#)
- Preservation and conservation of environmental compensation areas
- Management of air quality, noise and vibration levels
- Environmental education for internal and external audiences covering topics such as of water, conscious consumption, proper disposal of waste, 5Rs and others



CONSERVATION AREAS

The Iron Quadrangle, located south of the Espinhaço Chain, in the central-eastern region of Minas Gerais, stands out nationally for its natural wealth and is home to areas of great environmental conservation relevance.

Four sustainable use conservation units are located close to the MMI areas, three of which are Environmental Protection Areas (APAs) and one is a Private Natural Heritage Reserve (RPPN). They

include: Igarapé APA, Serra das Farofas APA, Paz de Inhotim APA and Inhotim RPPN. Also within MMI's area of influence, two Special Protection Areas (APEs) are found, the Ribeirão Serra Azul Basin State APE and the Manso River Basin State APE.

Considering MMI's environmental importance and location, the company develops several programs for the preservation and conservation of biotic and physical ecosystems.

[\(GRI 304-1, 304-2\)](#)

WHAT DO APA, APE  
AND RPPN MEAN?

**APA:** Environmental Protection Area, an extensive natural area, with a certain level of human occupation, which guarantees the protection and conservation of biotic, abiotic, aesthetic or cultural attributes important for the quality of life of the population.

**APE:** Special Protection, created as a way to regulate the subdivision of urban land, requiring special attention to territorial spaces of environmental, scientific, cultural, landscape relevance, among others.

**RPPN:** Natural Private Heritage Reserve, a type of Conservation Unit of private domain (individual or legal entity), with the objective of conserving biological diversity.



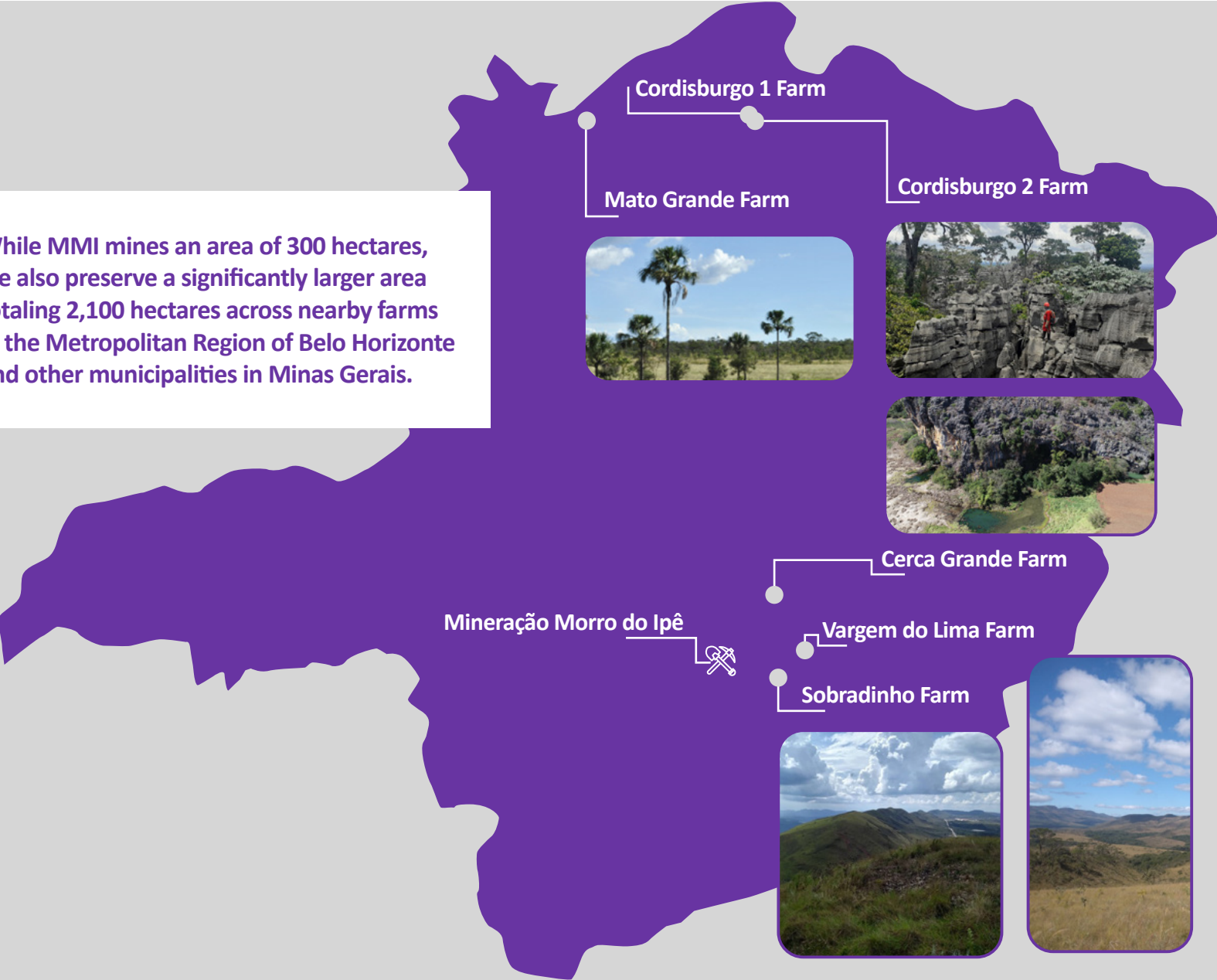
Serra das Farofas APA

**Environmental  
Preservation and  
Compensation**

We develop actions aimed at environmental preservation and recovery of forest and grassland ecosystems as part of the compensation for our impact on such environments. An example of our commitment is the project to plant over 80,000 native seedlings across three locations: Vargem do Lima Farm (Rio Acima) within the Serra do Gandarela National Park, Laranjeiras Farm (São Joaquim de Bicas), and Sobradinho Farm (Moeda) part of the Serra da Moeda Natural Monument. These lands were acquired by MMI for Atlantic Forest Biome compensation. As of 2022/2023, 71,000 seedlings have already been planted.

(GRI 304-3)

**While MMI mines an area of 300 hectares, we also preserve a significantly larger area totaling 2,100 hectares across nearby farms in the Metropolitan Region of Belo Horizonte and other municipalities in Minas Gerais.**



**Fauna and Flora Recovery**

Animals potentially impacted directly or indirectly by mining activities or facing environmental risks are relocated to areas that provide adequate shelter and food, ensuring conditions similar to or better than their original habitats. To this end, MMI implemented, in 2023, a new Wildlife Rescue Service Center. In the case of flora, the program recovers plants and collects seeds for reforestation and the preservation of native species, especially those threatened with extinction. Morro do Ipê has a nursery with a production capacity of more than 13,000 seedlings per year.

(GRI 304-2, 304-4)

Through such initiatives, we uphold our commitment to preserving natural areas, forests, rivers, *habitats* and ecosystem, as well as contributing to the conservation of biodiversity and the protection of valuable natural resources.

(GRI 303-1)

## Impact on Roadways

The heavy flow of iron ore vehicles on highways presents a significant concern for mining companies due to accident risks and the potential buildup of ore dust on roads. Mineração Morro do Ipê is vigilant about this issue, particularly as part of our logistical process involves transporting ore by truck over a 20 km stretch on BR-381 to

railway terminals. To mitigate these risks and impacts, Ipê collaborates closely with road transport companies that uphold high safety, quality, and control standards, strictly supervising their operations. Throughout the process, trucks are weighed to ensure that no vehicle transporting MMI ore accesses the route with excess load.

Another fundamental step covering the load on these trucks, which minimizes the impacts of dust and the dispersion of ore on the roadways. Drivers undergo continuous training and personal condition assessments to ensure safe transport practices. Additionally, we prioritize cleanliness by implementing wheel washing procedures before

trucks depart, utilizing recycled water from our ore treatment systems to reduce dirt impact on road surfaces. In line with our commitment to regulatory compliance and minimizing environmental impact, Mineração Morro do Ipê has engaged a specialized road cleaning company to maintain safe conditions near our mining activities along BR-381.

In 2023, we initiated a partnership with Brumadinho City Hall to pave the Conquistinha road, an 8 km stretch linking Highway BR-381 at km 520 to Brumadinho municipality. Furthermore, advanced discussions are underway with Arteris, the BR-381 concessionaire, to construct a new interchange facilitating safer access to our

operations. We are also exploring options to reduce or eliminate trailer traffic on BR-381 in the future through road improvements and paving initiatives.

Conquistinha Road, Brumadinho



CHAPTER 3

# Employee Development

People are our DNA. Developing, guiding  
and supporting: this is our commitment



We total

**875**  
employees

(GRI 2-7, 2-8)

We also employ

**1,690**

outsourced professionals

**179**  
women



Leadership positions in 2023:

**14.77%**  
female

**696**  
men



**85.23%**  
male

**HIRINGS**

CONTRACT TYPE	F	M	TOTAL
Apprentice	6	9	15
Fixed-term contracts	4	7	11
Intern	18	11	29
Statutory	0	2	2
Indefinite-term contracts	151	667	818
Overall total			875

Morro do Ipê employees



## Industry Challenges

To promote a productive, diverse and welcoming environment so that people are able to improve their individual and collective performance, adapting to market changes and innovation. This has been one of the challenges for organizations when it comes to employee development.

It is essential to cultivate a learning culture that promotes and values professional development. This can be achieved through training, capacity building, and recognition, which encourage employees to experiment and share knowledge. Providing the necessary resources and time for their development is also crucial.

In this sense, leadership support is essential, through guidance, constructive feedback, and active listening to understand the physical and emotional state of their employees.

49% of our employees live in the municipalities where we operate: Brumadinho, Igarapé and São Joaquim de Bicas, which proves our commitment to hiring local labor and fostering the social and economic development of the region.



## Our Commitment

Our Global Human Resources Policy and Sustainable Development Policy are aligned with the principles of the International Labor Organization, prioritizing the hiring and training of professionals from the locations where Ipê operates, as well as structuring

development programs that encourage the growth of employees and the construction of the training and development matrix appropriate to the positions and roles. We exceed the employability quota for people with disabilities and young

apprentices as required by Brazilian legislation. We offer fair remuneration, consistent with the market's standards and in accordance with the company's Positions and Wages Policy.



OUR 5HS FOR A SUSTAINABLE AND  
HUMANE ENVIRONMENT



We maintain a harmonious environment that respects diversity, acts ethically, and fosters partnership, humor, and the encouragement of physical and mental health. This is the work climate we value, encouraging our employees to practice the 5HS:

**HARMONY**

Team results is more important than individual results. Harmony brings balance and makes everyday life more pleasant.

**HUMBLENESS**

Being able to listen and being aware of our limitations. By being humble, we allow the best ideas to win.

**HUMANITY**

Everyone goes through problems. Leaders must perceive how their team members feel. Humanity involves having sensitivity and empathy when dealing with people.

**HUMOR**

Fear hinders truth and creativity. Good humor fosters the willingness and encouragement needed to face challenges.

**HONESTY**

It is essential to act ethically by following the company's rules and guidelines. Honesty is an attitude. There are no shortcuts.

**PHYSICAL AND  
MENTAL HEALTH**



## Our Initiatives

### INSPIRATION | CORPORATE UNIVERSITY

Our Corporate University offers programs that support our operations by focusing on initiatives to develop our employees, train new hires, and maintain a talent pool, ensuring the succession of strategic positions.

- **Individual Development Plan:** we provide and monitor the development actions of our employees through actions led by internal and external instructors. We also offer individualized development solutions, such as specializations, MBAs, technical and language courses, through the Educational Aid program. We also maintain a large Health and Safety training program, which is strictly followed up on, confirming the partnership and alignment between our corporate education and OH&S areas.

- **Learning Program [Programa Aprender]:** concentrates entry-level programs for Young Apprentices and Interns. Through a selection process carried out exclusively with residents of the surrounding community, we opened opportunities for 23 apprentices between 18 and 24 years of age in 2023. They took an Electromechanics course, in partnership with Brazil's National Service for Industrial Training (Senai). As for internships, we engaged 29 students across various areas of the company.

- **Online Talk [Conversa Online]:** through training, lectures and online and live workshops, we connect and engage employees on relevant issues for the development of interpersonal skills, alignments and processes on a weekly

basis. In 2023, 43 sessions were held, which were attended by more than 2,000 employees.

- **Our Journey [Nossa Jornada]:** our onboarding program for new hires, which introduces the company and begins the process of disseminating our culture and values, is carried out for 100% of those hired.

- **Leadership Academy [Academia de Liderança]:** created as a solution for the internal training of talents promoted to company leadership positions, the program disseminates essential content for the performance of people and process leadership roles. Additionally, certain modules held monthly involve participation from all levels of leadership, addressing issues relevant to all managers.

"In addition to providing opportunities for young professionals entering the labor market through theoretical and practical professional qualification, the Young Apprentice Program contributes to social inclusion and the development of the local workforce."

Paula Santoro, Education and Diversity Coordinator



### EMPLOYEE SUPPORT CENTER

With professionals trained in Social Work, we support our employees in addressing personal and social issues that affect their professional and personal performance:

- **Nurture Program [Programa Cuidar]:** Providing legal, psychological, social support, and financial consultancy, the Programa Cuidar offers confidential, online, and free assistance to employees and their dependents. It addresses issues impacting their lives, providing mental health support, guidance, and assistance for families.

(GRI 403-6)

- **Knowledge Week [Semana do Conhecimento]:** debates and lectures, personal and professional improvement. In 2023, the Knowledge Week addressed topics such as Time Management, Innovation, Artificial Intelligence, Assertive Communication, among others.

- **Our Children Program [Programa Nossos Filhos]:** Through monitoring pregnant women, including employees and their dependents, we provide attentive care to ensure a smooth and well-structured pregnancy, integrating our medical plan and healthcare services.

- **Benefits Fair [Feira de Benefícios]:** every six months, we present all the benefits to employees, bringing our suppliers to answer questions and better explain the products, improving access by employees of the benefits offered.

## WE ARE DIVERSE [SOMOS DIVERSOS]

Morro do Ipê has assembled the "Somos Diversos" group, with representatives from different areas of the company, to foster an increasingly welcoming environment for its employees. In 2023, the **Diversity and Inclusion Guide** was launched and affinity groups for race, gender, people with disabilities, and LGBTQIA+ were created. Through dialogue and active listening, we seek to strengthen the culture of inclusion and gender equality at Ipê.

"These are some of the ways through which we reinforce our commitment to a fairer and more inclusive society. We will continue to inspire positive change."

**Catarina Moura**, director of Human Resources, Internal Communication and Support Areas



## BENEFITS

Our benefits package includes health and dental insurance, financial aid for the purchase of school supplies and gym vouchers, extended to dependents. We also provide our employees food vouchers, daily meals, assistance for minor children, assistance for glasses, physical activity incentives, life insurance and transportation. Our employees in the administrative area work on a hybrid on-site and remote regime.

(GRI 401-2)

**We take care of our employees and their families. We offer 180 days of maternity leave for mothers and 20 days for fathers.**

(GRI 401-3)

# 50.22

was the average number of training hours per employee at MMI in 2023.

Leaders:

# 3,169 hours

Employees:

# 40,771 hours

NUMBER OF HOURS  
TRAINED BY GENDER:

Male:

# 22,855

Female:

# 21,085

(GRI 404-1)

HOURS OF  
TRAINING IN 2023



Morro do Ipê Employee

Morro do Ipê Employee



## TOP PROGRAMS IN PEOPLE MANAGEMENT

### Careers

In a comprehensive cycle comprising self-assessment/evaluation, committee review, feedback, and individual development planning, we have established the Annual Assessment and Performance Cycle through our Careers Program. This cycle assesses 100% of our employees on both behavioral and technical skills, encompassing teamwork, focus on results, business acumen, impact and influence, knowledge management, and for leaders, people management.

Based on these evaluations, decisions are made regarding promotions, salary adjustments, and departmental transfers,

emphasizing a meritocratic approach that values equality regardless of gender, race, or other factors. Our goal is to foster greater engagement and create growth opportunities. The Careers Program also devises strategies to address potential development needs and identifies successors for

key positions, both in leadership and technical roles.

### Straight-A Professional [Profissional Nota 10]

This program empowers each employee to take ownership of their responsibilities, serving as a compass for their personal development

and contributing to our company's performance. It involves understanding both global and individual goals, managing processes with quality and transparency, prioritizing safety, strengthening community ties where we operate, and promoting environmental preservation.



Morro do Ipê employees

CHAPTER 4

# Occupational Health and Safety

A safe environment to work  
is everyone's responsibility!



Ipê Outpatient Clinic

## Zero Accident Program | Programa Acidente Zero: PAZ

Our primary Occupational Health and Safety (OH&S) management program is PAZ: the Zero Accident Program. It operates through routine management, periodic inspections, and a commitment from every worker to their own safety and that of their colleagues, from senior management to operations.

Key tools such as the Risk Management Program (PGR), components of the PAZ Program, and our Portal manage OH&S risks, proposing action plans to minimize factors that could negatively impact people and facilities.

Managers, coordinators, and supervisors adhere to OH&S requirements to oversee and monitor employee activities, focusing on both physical

and mental health and ensuring adequate working conditions.

We conduct regular training and weekly campaigns to maintain employees' awareness of safety protocols. These initiatives include informative cards, live events, and the "Safety Call", where incidents and accidents from the period are reviewed, along with the corresponding actions taken.

**"IF IT'S NOT SAFE, OR WHEN IN DOUBT, DON'T DO IT AND DON'T LET ANYONE ELSE DO IT!"** THIS IS THE MOTTO OF PAZ, UNDERSCORING OUR COMMITMENT TO SAFETY, EMPHASIZED DAILY IN MMI'S HEALTH AND SAFETY DIALOGUES BETWEEN LEADERS AND TEAM MEMBERS.

Employees are encouraged to use tools like the Deviation and Near Accident Record (RDQA), Right of Refusal, and **Golden Rules** to report and halt unsafe activities without fear of retaliation. Incidents, near misses, damage, and time-loss incidents are documented in the RDQA and discussed in operational, management, and senior management meetings, ensuring issues are monitored through resolution.

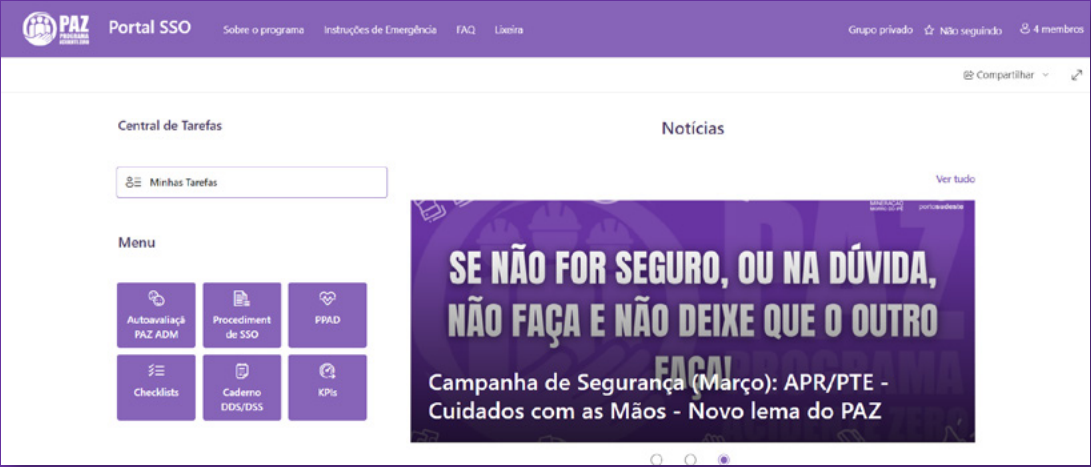
(GRI 403-1, 403-2, 403-3)

- Preliminary Risk Analysis:** Prepare the Preliminary Risk Analysis and follow operational procedures.
- Training and Authorization:** When performing tasks, present yourself as fit and only perform activities you are trained in and allowed to.
- Vehicle Driving and Equipment Operation:** Operate or drive vehicles and equipment prudently, respecting operating limits.
- Cargo Handling and Hoisting:** Move and remain at a safe distance, never walking under suspended cargo and/or within the range of action.
- Hazardous Energy Block:** Complete the hazardous energy procedure.
- Work at Height:** Comply with safety rules for working at height and fall prevention.
- Movement of People:** Never jump and/or stand between wagons and railroad tracks. Use electronic equipment in secure areas.
- Tools and Equipment:** Tools must be adequate for the accomplishment of the task, without improvisations and defects.
- Confined spaces:** Comply with the confined space procedure.
- Special Activities:** Perform activities considered special according to operational procedure, following the guidelines and using PPE appropriately.

(GRI 3-3, GRI 403-2)

PAZ  
|  
PORTAL

Through process automation, deviations are now managed more effectively, enhancing transparency and visibility in our management processes. This contributes significantly to error reduction and improves overall program governance.



## Industry Challenges

One of the challenges of the mining industry is maintaining an organizational culture where everyone prioritizes safety. Being mindful of every detail makes the difference in accident prevention.

Safer practices require training of workers, such as the proper use of personal protective equipment (PPE), compliance with Occupational Health and Safety policies, standards and procedures, treatment of deviations related to

unsafe behaviors and inappropriate work environment conditions.

Technology has proven to be a valuable ally in accident prevention, enabling real-time drills, monitoring, and proactive response to potential risks.

## Our Commitment

We are first and foremost committed to protecting lives. All employees of MMI and contracted companies receive guidance on the Golden Rules, Right of Refusal and compliance with the PAZ Program, opening RDQAs upon identification of unsafe conditions, incidents and other information that

they find pertinent to maintain a safe place for the execution of their activities in accordance with our policies, OH&S operational rules and procedures. Inspections and audits are continuously carried out to identify and mitigate the existing risk. Since 2017, we have utilized software for

managing data related to occupational medical examinations, certified by the NBR ISO/IEC 27001:2013 standard for Information Security Management System. This ensures data security and compliance with the General Data Protection Regulation (GDPR).

(GRI 403-1, 403-8)



"We must prioritize the well-being of those who operate machinery; prevention knows no hierarchy. We are all responsible for a safe and healthy environment."

**Paulo Milieu,**  
Occupational Health and Safety Manager.



# Our Initiatives

## TRAINING

Every worker, regardless of their role, undergoes Integration training, ensuring they understand rules, policies, standards, and Occupational Health and Safety procedures. Our inspection processes and audits verify readiness for job tasks.

Integration covers legal requirements specific to mining activities, the Golden Rules, the Alcohol and Drug Use Prevention Program, Traffic Plan, Personal Protective Equipment use, and Safety Rules. Additional specialized training, such as for electricity, work at heights, hot work, confined spaces, and fire brigade duties, is conducted periodically based on job functions.

(GRI 403-5)

## HOW AM I [COMO ESTOU]

An integral part of our Daily Safety Dialogues (DDS), "How Am I" [Como Estou] aims to foster communication between leaders and employees regarding their physical and psychological well-being before starting daily activities. Using a form or online system, employees indicate their emotional state through an "emotiongram" with options like "I'm fine" or "I'm not feeling well". This allows managers to assess whether employees can safely perform their work routine. If necessary, employees are directed to the Medical Center or advised to return home. If not, they are referred to the Medical Center or home.

## PRIMARY HEALTH AND SAFETY PROGRAMS

**Hearing Conservation:** Prevent or reduce hearing loss among workers exposed to occupational noise, through collective, individual and administrative control measures, as well as audiometric monitoring and health education.

**Respiratory Protection:** Protect the health of workers exposed to chemical, biological or particulate agents, which may cause respiratory damage, through the appropriate selection, use, maintenance and hygiene of respiratory protection equipment.

## Occupational Health

**Medical Control:** Protect and preserve the health of workers in relation to occupational risks through admission, dismissal, periodic, return-to-work and change of function medical examinations, in addition to other preventive and corrective actions.

**Risk Management:** Eliminate, minimize or control such risks, as well as avoid the occurrence of occupational accidents or diseases, through administrative and technical requirements and processes.

**Prevention of Alcohol and Drug Use:** Perform breathalyzer tests to assess whether alcohol has been

consumed and saliva and urine tests to assess the use of illicit drugs by workers, with a lottery and in cases of accidents. The program identifies and supports employees with positive results, providing them with medical guidance and support.

**Ergonomics:** Improvement actions are identified

and planned to address ergonomic issues effectively.

**Humanity:** The program is designed to proactively mitigate risks of accidents and illnesses, serving as a tool for employee healthcare, emphasizing comprehensive health: physical, mental/emotional, and social well-being.



**Operational Readiness:**

Assessment of the physical conditions to perform the daily work among the Industrial Maintenance teams.

**CIPAMIN:** The Internal Commission for Accident Prevention at Mineração Morro do Ipê proposes actions to promote health and prevent occupational accidents through risk inspections, campaigns, and orientation events.

**Trap Hunting [Caça às Armadilhas]:**

A program where managers conduct inspections of their own or other areas, aimed at ensuring compliance with Occupational Health and Safety (OH&S) standards and procedures within the company. In 2023, 313 items for improvement were identified.

(GRI 403-6, 403-7)

**SIPATMIN**

Annually, CIPAMIN holds the Internal Week for the Prevention of Accidents in Mining (SIPATMIN). In 2023, our focus was on "Bet on Life: Don't Compromise Safety," emphasizing the importance of careful equipment and tool handling. It was a week of an intense schedule with employees, including lectures, simulations, artistic activities for integration, reflections and intensification of health and safety care.

(GRI 403-4)



**For direct and outsourced employees:**

- Healthcare for direct and outsourced employees at the outpatient clinic with 24-hour assistance
- Two ambulances available
- Development and implementation of disease prevention and health promotion campaigns: DDS, live streamings, face-to-face initiatives, and an Internal Week for the Prevention of Occupational Accidents.
- Vaccination
- Health and dental plans for direct employees of Morro do Ipê and their dependents
- We offer gym vouchers and access to an application to promote sports participation among employees. This initiative includes healthy competitions and rewards for teams that engage in regular physical activities.

(GRI 403-3)

**HEALTH INITIATIVES**

**REPORTING OF  
HEALTH AND SAFETY  
STATISTICAL DATA**

(GRI 403-9, 403-10)

Through routine management in weekly, biweekly, and monthly meetings, as well as a monthly report sent to the shareholder group, we present statistical data on near misses, personal incidents, and material events. For each specific case, an action plan is implemented to mitigate and eliminate unsafe conditions. This includes conducting a learning exercise and ensuring comprehensive coverage to prevent recurrence in our operations.

**We have not experienced any fatalities at our facilities.**

**Our occurrence frequency rates are comparable to the best benchmarks in the industry.**

**4,122**  
**conditions were identified to anticipate risk, avoiding occurrences**

**A total of 25,159**

**25,159**  
**hours of training on occupational health and safety topics were recorded, reaching**

**2,189**  
**participants**



Outpatient Clinic- Morro do Ipê

CHAPTER 5

# Local Presence

The health of our company depends on the health of our community



## Social Responsibility Week

To further engage the employees in Morro do Ipê's Social Responsibility culture, which is guided by the Sustainable Development Policy, as well as emphasizing the purpose of the program SER: Sustainability, Balance and Respect, we held the 1st Social Responsibility Week between December 12 and 14, 2023. It was an occasion to share insights about the various programs and projects developed with the local community.

During the Week, several activities were carried out, including a meeting with Community Leaders from Brumadinho, Igarapé and São Joaquim de Bicas, an exhibition of the results of social projects, lectures, handout of gifts from the Solidarity Christmas Campaign across local schools, musical presentations by employees and guests, a Local Producers' Market, s Photography Contest, in addition to playful and interactive activities.



Social Responsibility Programs

"Through this partnership, people can discover my work, as well as the work of other artisans here, thereby contributing to the appreciation of local commerce."

**Reginalda Oliveira,** entrepreneur and resident of São Joaquim de Bicas, who attended the fair during the Social Responsibility Week.



To challenge employees to answer questions about the company's performance in the ESG pillars, a **giant board game** was set up, in which participants, when playing, learned and reflected on the topic, being awarded **ecobags**.

510 ecobags were made by members of the Igarapé Artisans Association [Associação dos Artesãos de Igarapé], reusing Ipê employee uniforms. The manufacture of ecobags boosts our sustainable purpose, encourages local commerce and contributes to the economic development of the region.

One of the highlights was the "Sustainable Views: My House, Our Planet" Photography Contest award ceremony. This initiative was held within the scope of the Environmental Education Program for students from local schools, employees and outsourced workers. The goal was to encourage participants

to reflect on the conscious consumption of water and the conservation of biodiversity through photographic records. Lectures and online chats were also conducted. Among the topics discussed were Non-violent Communication and the Sustainable Development Goals.

**In 2023, Ipê launched a regular Local Producers' Market, fostering closer connections between entrepreneurs, employees, and the community. This initiative provides opportunities to discover and support new products and services offered by local merchants. Six editions have already been held, with seven different groups of artisans.**



"The Week was a moment to present to our employees and other audiences the social responsibility actions and projects that Ipê has been carrying out with the communities of Brumadinho, Igarapé and São Joaquim de Bicas. It reinforces our commitment to permanent action to contribute to local development and the importance of close and transparent dialogue with residents".

**Raquel Rocha**, Social Responsibility and External Communication Manager.



"The Social Responsibility Week was great! The company looks after the community, which is where our family is and, with that, it also takes care of us, who are here at Ipê."

**Fabrício Ramos**, employee of the Maintenance area.

## Industry Challenges

Mining holds significant historical importance in Brazil, particularly in the state of Minas Gerais. It is a relevant activity, driven by the country's soil characteristic, which offers an abundance of mineral resources. Such resources are raw material for a multitude of products, present in the everyday life of every citizen. Mining has been fostering the development of urban centers,

commerce and diverse technologies. It represents a relevant contribution to the economy and to fundamental social issues, such as job and income generation, as well as projects in different areas that impact on improving the quality of life, as well as culture and education.

Addressing challenges at the interface between mining companies and neighboring communities

requires a foundation of dialogue, respect, and trust. In the realm of social challenges within the sector, impacts arise from changes in the landscape, potential dust and noise emissions from projects, and local economic dependence on mining activities. The recent collapses of mining dams in Minas Gerais have created uncertainty among people living or working near mining companies

and their dams, even those that are inactive.

These incidents underscore broader challenges faced in Brazil and globally, including social inequalities, human rights violations, and inadequate access to education, healthcare, and basic sanitation, among others.

## Our Commitment

Through our Sustainable Development Policy, we establish guidelines, values, and principles that define our social responsibility objectives and commitments. Conscious Capitalism and the SDGs serve as guiding frameworks for our responsible business development, reflected in our interactions with the communities where we operate (refer to our Journey towards

Sustainability Journey, page 14). Morro do Ipê is dedicated to ongoing dialogue with government institutions, social organizations, and local residents within the areas influenced by our operations. Our approach is rooted in information sharing, idea exchange, and the formation of partnerships aimed at regional development.

(GRI 413-1, 413-2)

**The social responsibility initiatives led by Morro do Ipê in 2023 impacted over**

**14,000**  
**individuals across the municipalities of Brumadinho, Igarapé, and São Joaquim de Bicas**

**49%**  
**of Morro do Ipê direct employees are residents of Igarapé, São Joaquim de Bicas and Brumadinho**

## Our Initiatives

We prioritize continuous engagement with stakeholders, particularly the community and local authorities. This includes conducting socio-environmental and economic assessments to better understand our operating regions. We implement social, cultural, sports, and environmental education programs and projects in collaboration with local partners and communities, respecting their cultural heritage. Additionally, we proactively identify, analyze, and mitigate risks associated with our business's interactions with society.

Our community relations are centered on contributing to local development and maintaining our social license to operate.

As part of our **Environmental Control Plan**, we are committed to five social and economic programs aimed at fulfilling our obligations. We also engage in voluntary social investments, supporting and sponsoring projects that promote meaningful initiatives benefiting residents and workers in the region.

(GRI 203-2, 413-1)



Planting seedlings:  
Arbor Day

The action fronts in 2023 were:

**SOCIAL AND ECONOMIC PROGRAMS**

**Social Communication**

**Program:** It provides the opportunity for dialogue with the company's external audience in order to inform about the activities carried out and, simultaneously, learn the demands and desires of the community to clarify doubts with transparency and develop integrated actions.

- 12 published editions of the Casa Ipê Informa newsletter
- 315 demands fulfilled by the Ombudsman Channels
- Attendance 360 individuals in the Visits Program
- More than 80,000 followers in Morro do Ipê's LinkedIn profile
- More than 80 publications in the press

Since 2022, guided tours have allowed visitors to explore our operations, including deactivated dams with their monitoring and safety equipment, the Geotechnical Monitoring Center, the tailings filtration system, and areas of the Tico-Tico mine. Visitors also receive information about the various programs developed in the region.



Visits Program to the facilities of Morro do Ipê

**Environmental Education**

**Program:** It raises awareness and engages the community, employees and their families in environmental issues related to the presence of Morro do Ipê within such territory and the local natural characteristics. It informs about the company's responsible use and stewardship of natural resources, ensuring transparency in our environmental management practices.

- 330 participants in the Forest Burning and Fire Prevention Program
- 500 participants in the lecture and workshop program: Morro do Ipê with the Community
- 460 participations in the Environmental Dialogues with Employees
- More than 180 participants engaged in activities through the Environmental Value Program, celebrating significant environmental dates



Gathering within the Community Health Program

### Health and Epidemiological Control Program:

It provides healthcare services to employees and their dependents, implementing disease prevention and health promotion measures for our workforce and local communities through informative and awareness campaigns in collaboration with local authorities.

- More than 90 participants from the communities in

lectures and awareness meetings on health issues

- Monthly communication of disease prevention and health promotion topics in the Casa Ipê Informa newsletter
- Comprehensive healthcare at Morro do Ipê includes coverage for employees and their families, with a 24-hour medical outpatient clinic serving both our staff and those of contracted companies

### Labor and Local Suppliers Prioritization Program:

It emphasizes local employment, offers professional training courses, and stimulates economic growth by sourcing products and services from local entrepreneurs. Moreover, it undertakes initiatives to enhance and support regional vocations unrelated to mining activities.

In 2023, responding to specific demands for skilled labor, we

collaborated with the National Industrial Learning Service to provide a Plant Operation course. Twenty-seven residents from areas near Ipê completed the training, with a majority being women, and were subsequently hired. In partnership with the Municipality of São Joaquim de Bicas, we conducted training in Welding Processes and Custom Sewing, benefitting 39 students.

**Our objective is to enhance the skills of the local workforce, creating opportunities and contributing to the economic development of the region. We prioritize hiring residents, companies, and suppliers based in our operational areas: Brumadinho, Igarapé and São Joaquim de Bicas.**

(GRI 3-3, 404-2)

"The opportunity to study and learn about the mining industry, the extraction process, and ore processing was the encouragement I needed to pursue my dream of building a solid career at Ipê."

**Dayanne Dias**, student and current Ipê Power Plant Operator.





Prioritizing local labor



Professional qualification for residents



Training as a support for local development

**Purchases made with local suppliers in Brumadinho, Igarapé and São Joaquim de Bicas amounted to**

**BRL 93 million** in 2023, an increase of over 1,000% between the years 2020 and 2023.

(GRI 204-1)

**Monitoring Program for Social and Economic Indicators:**

It monitors the developmental trends in the municipalities of Igarapé, São Joaquim de Bicas, and Brumadinho. Its focus is on identifying impacts and strengthening Morro do Ipê's presence in these regions.

**10 dimensions are monitored:** health, education, social assistance and development, demography, human development, economy and finance, housing, infrastructure, labor market and public security.

COMMUNICATION AND SOCIAL RESPONSIBILITY INITIATIVES ASSOCIATED WITH THE PAEBM

Morro do Ipê has carefully planned actions for actions related to PAEBM. The company goes to great lengths to ensure that the population belonging to the Self-Rescue Zones feels supported in any need for information or support.	of a hotsite with updated information on the status of dams, statements and studies; customized communications for ZAS residents, online and in-person service channels and a program of visits to Morro do Ipê, which includes the presentation of the Geotechnical Monitoring Center and the	tailings filtration system, visits to deactivated dam structures and clarification of questions with experts.	specific situations, door-to-door approaches are made to reinforce important information.	information about the Self-Rescue Zone, signage and actions to be carried out in the event of a real emergency situation. It is an activity that involves the participation of the entrepreneur and local authorities, such as representatives of the Civil Defense, Public Ministry, Military Police,	Fire Department, among others.
PAEBM's communication plan includes the provision		The Social Responsibility team carries out individual contact with residents and/or businesses that have emergency warning signs or sirens on their properties. If necessary, in	Annually, orientation seminars are held for the community, a time to present the situation of the dams and the decharacterization process, to provide		Simulated exercises are also carried out, where people are invited to follow the escape routes and head to the meeting points, to check the adequacy of signage, travel times, among other measurements.



More than  
**1,200**  
attendants participated in the  
guidance seminars and drills  
promoted by Morro do Ipê in  
2023.

More than 2,000 individuals participated in the Environmental Education Program in 2023: The Culture of Prevention program includes mobilizing and training teachers and employees from schools, CRAS (Social Assistance Reference Centers), and Health Centers. It involves activities like affective cartography to map risks in the territory and presentations of the theatrical play "Maia, defesa civil e MMI por uma cultura de prevenção" [Maia, Civil Defense, and MMI for a Culture of Prevention].

**Ipê started the Environmental Education Program: Culture of Prevention, aimed at students from municipal schools and people served by Social Assistance Centers (CRAS) and Health Units located in ZAS. The objective of the Program is to raise awareness about the importance of prevention and the risks of the territory, one of which is the presence of dams. Based on crucial information, the initiative has the potential to empower residents, whether adults or children, to deal with environmental and safety challenges.**



Environmental Education Program: Prevention Culture

## CORPORATE SOCIAL INVESTMENT

Social investment is a cornerstone of Morro do Ipê's commitment to responsible action, aimed at fostering development in the regions where we operate. These investments complement rather than replace the mitigation or compensation of environmental and social impacts for which the company is directly accountable.

In 2023, we supported seven significant projects through sponsorship facilitated by tax incentive laws. This approach allows us to allocate taxes towards cultural, sporting, and educational initiatives that benefit the community.



Photography Workshop- Sustainable Cinema



**Minas Gerais Philharmonic Orchestra:** Over 1,600 people attended concerts held in public squares in Igarapé and São Joaquim de Bicas. Additionally, more than 70 students and teachers from music schools in these towns, along with over 60 employees from Morro do Ipê and their families, had the opportunity to experience performances by the full Orchestra at Sala Minas Gerais in Belo Horizonte.

**Accomplished by:** Instituto Cultural Filarmônica



**Mobile Culture Point [Ponto Volante de Cultura]:** Initiatives to promote reading and playful activities through a library truck include reading workshops, storytelling, musical shows, and interactive play, engaging over 1,700 people in Igarapé.

**Accomplished by:** Serviço Social da Indústria- Sesi MG



**Sustainable Cinema:** Video and photography workshops, production of documentary videos on cultural aspects of cities and screening of films with free popcorn in public spaces. The action involved and delighted over 1,000 attendees in Igarapé and São Joaquim de Bicas.

**Accomplished by:** Muito Mais Promoções



**Inimá de Paula Museum in schools:**

Activities showcasing the life and work of artist Inimá de Paula, including lectures and creativity workshops, reaching over 600 children from Igarapé, São Joaquim de Bicas, and Brumadinho.

**Accomplished by:** Fundação Inimá de Paula



**Theater play "Dengue: o fim da picada e da água parada" [Dengue: a fly in the ointment and no more standing water]:** A show that creatively and entertainingly combined themes of health and environmental education. More than 1,800 students from Igarapé, São Joaquim Bicas and Brumadinho attended the event.

**Accomplished by:** Komedi/LUMAX



**Sports Initiation at School:** 75 students from the Alcina Alves da Rocha Municipal School, in Igarapé, participated in weekly sports initiation activities over the months. The objective of the project extends beyond the courts, offering opportunities to reinforce skills such as teamwork, cooperation, discipline, and focus.

**Accomplished by:** Associação Cidadania em Movimento

Support for the **professional qualification of young people at Cidade dos Meninos São Vicente de Paula**, a project of the Divine Providence System, benefiting over 400 socially vulnerable youths in Belo Horizonte.

**Accomplished by:** Associação de Promoção Humana Divina Providência



## Hand in Hand with the Community

Throughout 2023, Morro do Ipê contributed to and partnered with several other projects, such as the Santo Antônio Festival and Race [Festa e Corrida de Santo Antônio], the Featured Kitchen Project [Projeto Cozinha Destaque]—recognizing professionals in the food sector at public schools in Igarapé, and the donation of equipment to support professional qualification courses conducted by Casa Fiari Association in São Joaquim de Bicas.

(GRI 203-1)

Morro do Ipê recognizes the significant value of initiatives carried out in close partnership with local associations and residents. In 2023, notable projects included the enhancement of public roads in the communities of Vale do Ingá and Quéias, Brumadinho, and the creation of Leisure Streets in Igarapé and São Joaquim de Bicas. These efforts involved collaborative actions among Morro do Ipê, the community, and public authorities, directly benefiting over a thousand people.



The Leisure Streets initiative saw voluntary participation from Ipê employees and the community, bringing joy and enjoyment to local residents.

## VOLUNTEER ACTIONS

Some of Ipê's social initiatives rely on the voluntary participation of employees from various departments of the company, who are invited to engage during special times of the year.

In 2023, campaigns were organized to collect clothes and blankets for the cold season, with donations destined for Social Assistance Reference Centers to benefit children and elderly people in the municipalities where Morro do Ipê operates directly.

During Christmas, over 570 sponsored children received gifts and heartfelt care, thanks to the solidarity of hundreds of employees and third-party companies.



Delivery of donations from the Winter Clothing Campaign



Solidarity Christmas in schools

## COMMUNITY SERVICE CHANNELS

Through any of these channels, the community can request services, seek information, suggest improvements, give praise, or lodge complaints.



**Contact Us:** 0800 942 3135



**WhatsApp:** (31) 97118-9922

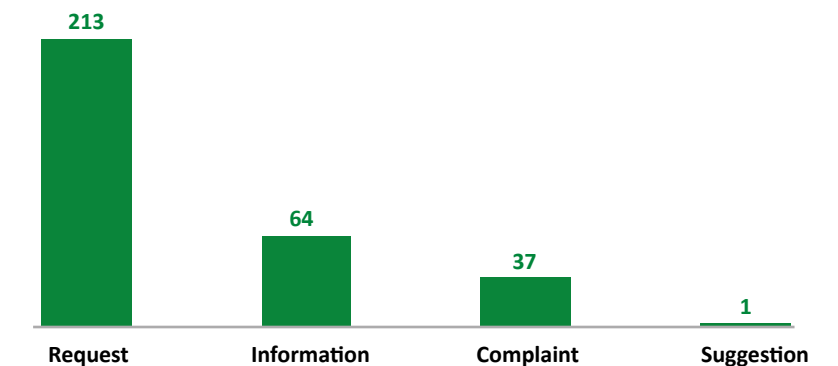


**Casa Ipê:** face-to-face service.  
Address: Rua Vila Rica, 571,  
Bairro São Sebastião, Igarapé.



**Website:** <https://www.canaldatransparencia.com.br/faleconoscoipemineracao/>  
(GRI 2-26)

### 315 REQUESTS WERE RECEIVED THROUGH THE OMBUDSMAN CHANNELS IN 2023, INCLUDING:



CHAPTER 6

# Ethics, Integrity and Compliance

Honesty is an attitude.  
There are no shortcuts.



Compliance Day Lecture

We believe that a company is built by its people, the relationships among them, and their interaction with society. Therefore, we adhere to a coordinated model aimed at safeguarding the company and its employees, enhancing process efficiency, and fostering transparent information sharing.

## Committees as Allies of Corporate Governance

To enhance corporate governance concerning behavioral investigations of our employees, we established the Ethics and Compliance Committee in 2022 (refer to page 82, Our Initiatives). Our professionals from the Governance, Risks, Compliance, Internal Audit, and Digital Transformation

departments are equipped to identify any actions contrary to the company's principles or failures in professional responsibility.

In cases where the risk to compliance with laws and employee conduct is deemed high, a mitigation plan is developed, and the matter is reported to the Ethics and Compliance

Committee. This committee then assesses potential sanctions for those who violate the compliance program policies. Furthermore, all violations are reported to the Audit, Risks, and Compliance Committee (ARCC).

(GRI 2-15)

**ALL MMI EMPLOYEES COMPLETE THE CONFLICTS OF INTEREST FORM TO IDENTIFY POTENTIAL RISKS. ADDITIONALLY, THEY ACCEPT THE CODE OF ETHICS, AND SIGN BOTH THE ANNUAL DECLARATION OF BUSINESS INTEGRITY AND THE DECLARATION OF AWARENESS OF THE GENERAL DATA PROTECTION LAW. COMPLAINTS ABOUT UNETHICAL CONDUCT AND THAT VIOLATE CURRENT LEGISLATION CAN BE MADE THROUGH A CONFIDENTIAL CHANNEL.**

Every week, during the Executive Board Meeting, leaders from various departments across the company convene to discuss and align agendas concerning legal compliance, encompassing economic, environmental, and social aspects.

### 875 ACTIVE EMPLOYEES



"We integrate governance, risk management, and compliance within a coordinated framework to safeguard the company and its employees, enhance process efficiency, and ensure transparent information sharing."

**Luís Pedroza**, GRC Manager.



## Industry Challenges

When the Anti-Corruption Law was enacted in Brazil in 2014, companies began implementing compliance programs to ensure adherence to current legislation and ethical conduct among their employees, emphasizing integrity and transparency in their professional activities. However, merely having a compliance

program is insufficient; ensuring its effectiveness requires engaging all employees, starting with senior management and managers who are key advocates of the guidelines and standards. Non-compliance with regulations can lead to financial penalties and damage to the company's reputation.

## Our Commitment

We prioritize trustworthy and transparent relationships with our stakeholders. To uphold this approach, we have a **Compliance Program** comprising mechanisms and documents that govern interactions among employees, communities, shareholders, suppliers,

and customers, always aligned with our core values and principles, encapsulated in our 5Hs.  
(GRI 2-26; 2-27)

We have implemented a structured program to ensure the organization's compliance with current internal and external laws, rules, and regulations.

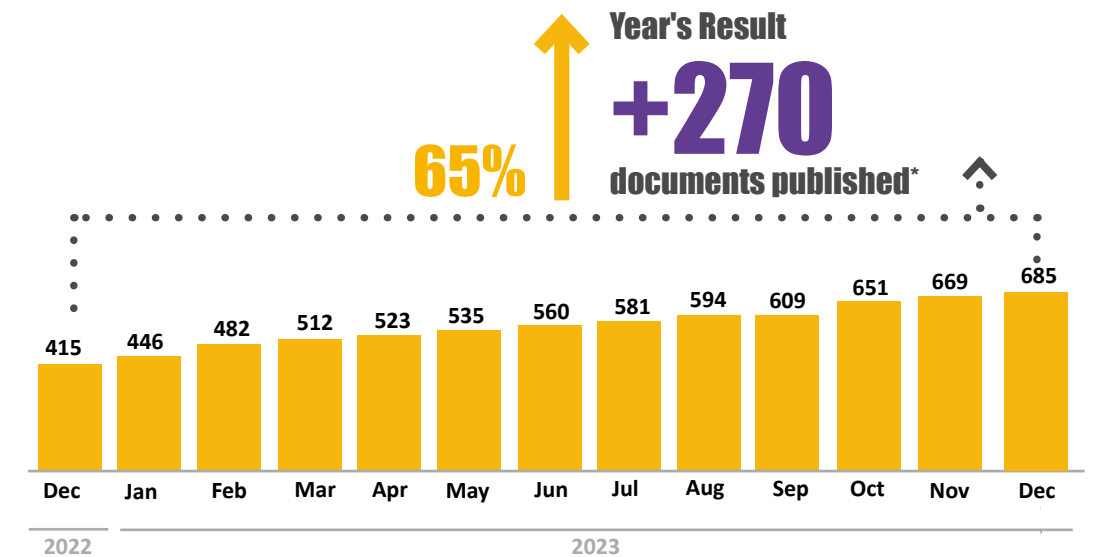
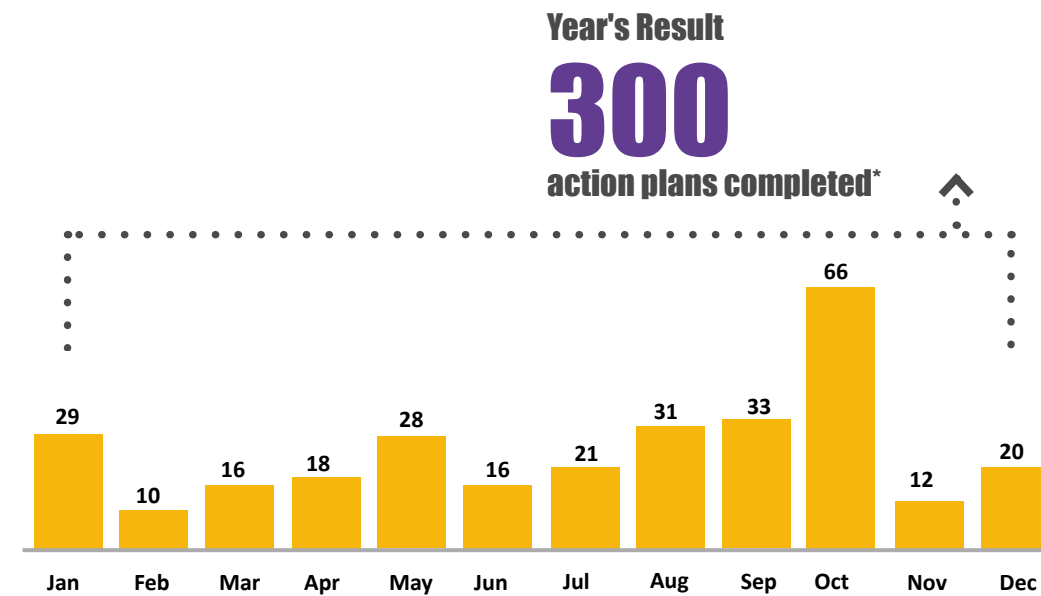
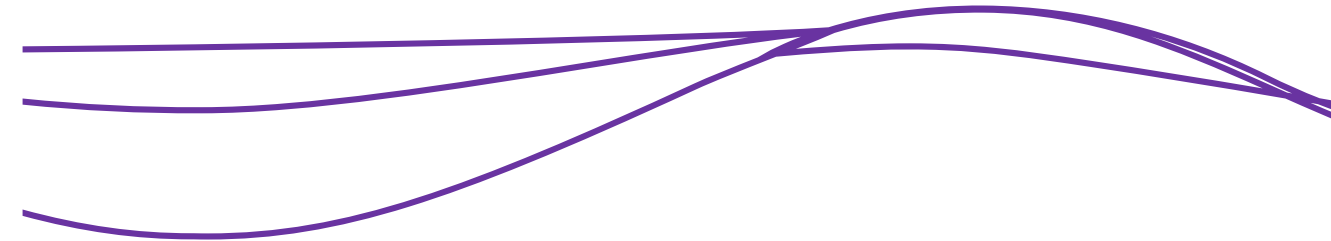


**Honesty stands as a fundamental pillar of our commitment, underpinned by the unwavering support of senior management, shareholders, and their committees. We take pride in the achievements and advancements we have accomplished thus far. It is with utmost confidence that we affirm our governance, control, and compliance mechanisms are robust, operational, and continuously improving.**

## GOVERNANCE

Our responsibility includes facilitating communication between process managers and auditors to oversee the implementation of action plans within specified timelines. The goal is to enhance governance, streamline processes, and strengthen internal controls to mitigate

risks and boost productivity across the company's operations. Normative documents guide employees in performing their duties correctly and consistently, thereby ensuring the attainment of operational and strategic objectives.

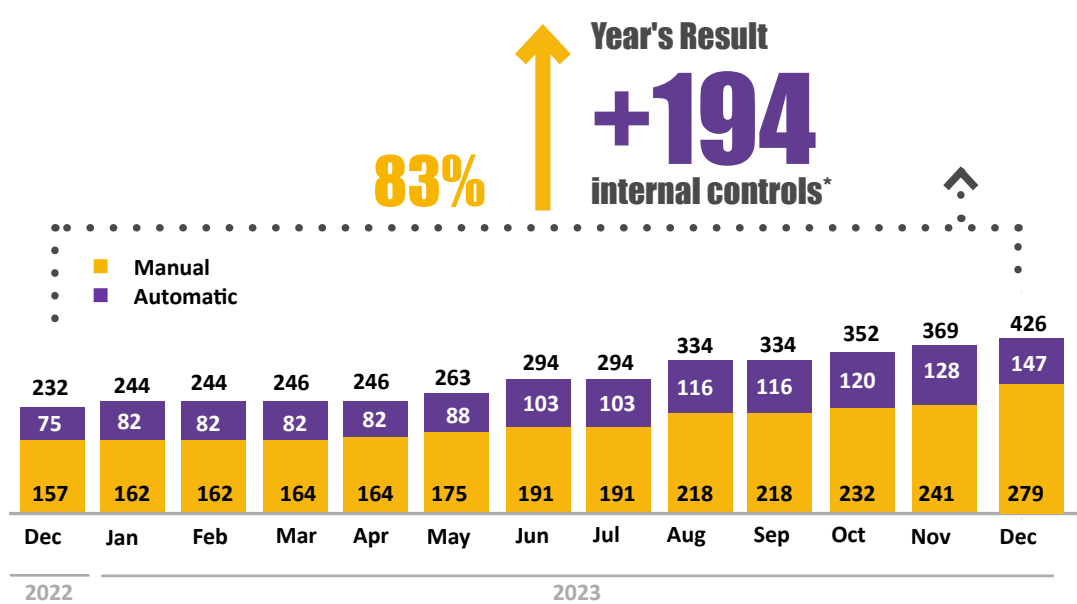
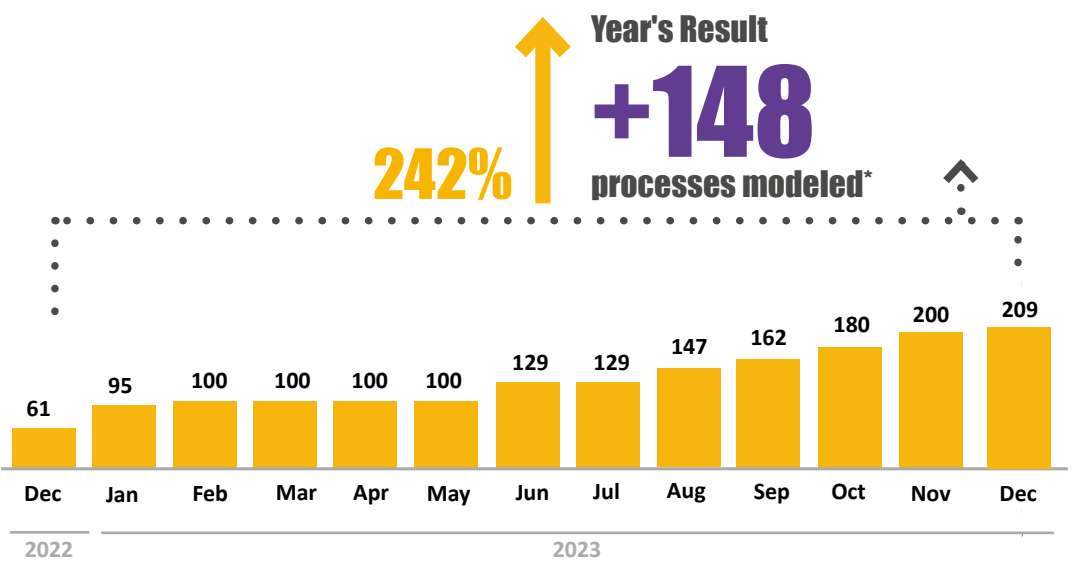


\* Data from MMI and Porto Sudeste, as the GRC area has standardized processes in both companies.

**RISK MANAGEMENT, PROCESSES AND  
INTERNAL CONTROLS**

Mapping and modeling processes are essential to ensure the efficiency and internal controls of activities conducted within management areas. Flowcharts serve as a method to model the execution of these activities, ensuring optimal resource utilization and business result optimization.

Once mitigation strategies are implemented, continuous monitoring and periodic reviews are crucial to assess progress and effectiveness. We conduct an annual strategic risk review cycle, convening meetings with process owners and their directors to analyze risks within their purview and ensure proactive management.



\* Data from MMI and Porto Sudeste, as the GRC area has standardized processes in both companies.

COMPLIANCE

It is the responsibility of each employee to actively ensure the inspection and faithful compliance with the Internal Policies at any degree or hierarchical level. All employees must adhere to the Internal Policies through the Statement of Agreement to the Code of Conduct and Ethics and the Anti-Corruption Policy.

promotion, in addition to employees from specific areas. In 2023, no cases of corruption were detected within the company.

Suppliers and clients, in addition to participating in the **due diligence reputational** process, also sign the integrity clauses in the contracts and agree to the Code of Ethics and the Anti-Corruption Policy.

(GRI 205-1, 205-3)

Investigation into the history, operations and reputation of who will close any type of business, contract or partnership.

ANTI-CORRUPTION EFFORTS

To inform and train employees about anti-corruption policies, internal campaigns are developed to comply with the company's guidelines. All leaders, from directors to supervisors, are subjected to reputational evaluation at the time of hiring or at the time of a

**If any employee of Morro do Ipê is requested, pressured or forced to act in disagreement with the values (5Hs), policies or guidelines of the company, the recommendation is: "on't do it and don't let anyone else do it!"**

Our Initiatives

INTEGRATED MANAGEMENT

Although independent, Morro do Ipê is controlled by two international companies: Mubadala and Trafigura (see About Us, on page 6). Thus, its corporate areas operate in an integrated and centralized manner, consolidating data and implementing actions transparently, ethically, efficiently, and sustainably.

• **Code of Conduct and Ethics:** guides our employees in conducting ethical attitudes and the integrity of their actions, disseminating good practices.

• **Anti-Corruption Policy:** in compliance with international commitments undertaken by Brazil and

applicable legislation, we adhere to anti-corruption rules. Our Anti-Corruption Policy is committed to combating corrupt practices that could harm society at large, and it outlines the application of appropriate legal and disciplinary measures against our employees.

• **Confidential Channel:** an external and independent channel where anyone can report acts of direct or outsourced employees considered unethical and that violate the principles and standards of conduct and/or the current legislation of our company. The information, whether provided anonymously or not, is received by an independent and specialized company, Aliant, ensuring absolute confidentiality and

appropriate handling of each situation by the senior management of Mineração Morro do Ipê and Porto Sudeste, free from conflicts of interest.

Visit the confidential channel website or call 0800 8820411 for a 24-hour service.

(GRI 2-16, 406-1)

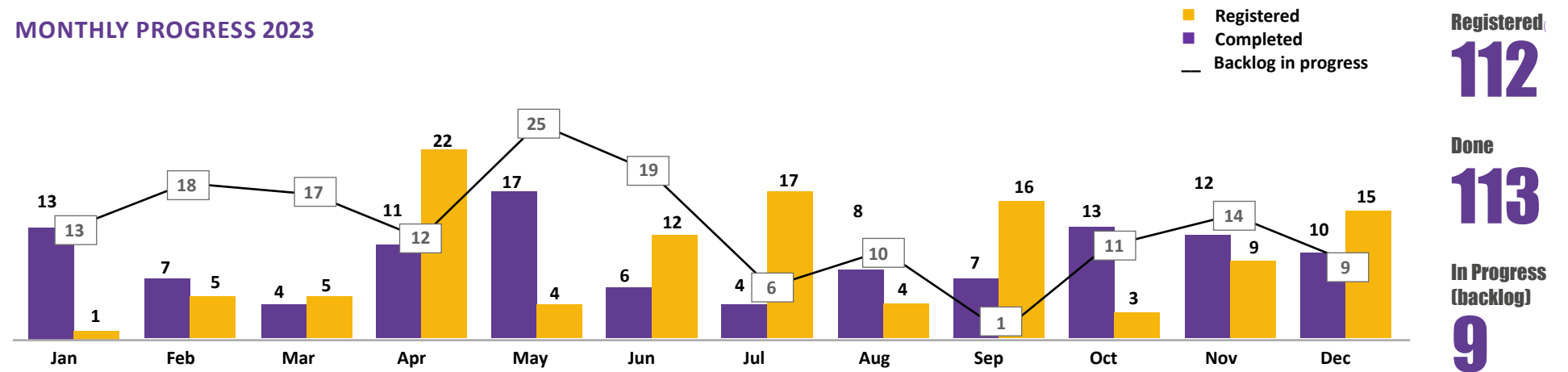
• **Ethics and Compliance Committee:** composed of a leader and a manager from the GRC area, a director and two HR coordinators, and a Property Security manager. In a collegiate and confidential manner, the committee members hold monthly or extraordinary meetings to analyze, discuss, and support decisions and sanctions related to behavioral investigations conducted through the

confidential channel. Complaints are only closed after the decisions are published in minutes, with the possible appropriate measures communicated to the managers of each area.

• **Audit, Risk and Compliance Committee (ARCC):** created with the mission to advise the Council of Porto Sudeste do Brasil (PSB) and the Investment Committee of Mineração Morro do Ipê (MMI), the committee oversees audit, risk, and compliance matters. It monitors risk management, accounting policies, financial statements, internal controls, and the internal audit function of both companies.

## CONFIDENTIAL CHANNEL DATA IN 2023

### MONTHLY PROGRESS 2023



### Anti-corruption communication and training

(GRI 205-2)

**100%** of the members of the governance bodies and employees were informed and trained on compliance topics, including anti-corruption measures.

### DIGITAL TRANSFORMATION

Numerous solutions have been developed such as portals, automations and dashboards, tools that facilitate the company's daily routine. To make all this a reality, the GRC (Governance, Risk, and Compliance) area spearheaded digital transformation projects in collaboration with the business units.



- Integranet integrated the Porto & Mina processes and accelerated the digital transformation, providing greater efficiency, productivity, innovation and employee satisfaction:
- We developed 28 portals and kept more than 450 automations up and running
  - We surpassed the milestone of 1.7 million total accesses
  - More than 140,000 cases were processed
  - We manage about 20,000 documents in over 200 databases

\* Data from MMI and Porto Sudeste, as the GRC area has standardized processes in both companies.

# Continuous Improvement and Innovation

Our employees are empowered to drive enhancements in processes, products, and services, supported by methodologies geared towards continuous improvement. Through these methods, we emphasize training and initiative management. Our Continuous Improvement and Innovation programs inspire each team member to innovate and find solutions that enhance occupational health and safety, quality standards, operational efficiency, social development, water and waste management, decarbonization, and sustainability across our operations. By fostering innovation, we aim to create value for our business and strengthen ties with neighboring communities.

A notable initiative within these efforts is the "Genius Ideas" program, where proposed improvements must align with one of five core pillars:

**PAZ:** reducing occupational, operational and administrative accidents

**SER:** reduce social and environmental liabilities

**Careers:** improve the organizational climate and work routine

**PN10:** increase productivity, reduce costs and expenses

**Governance:** automating business processes, indicators, and internal controls.

The good practices implemented, based on methodologies such as

the **Kaizen Solution or the PDCA Challenge**, are recognized and awarded at an event titled "Brilliant Ideas". We also appoint Innovation and Excellence ambassadors, employees who serve as key advocates for fostering a culture of continuous improvement and innovation. In 2023, out of 1,538 registered *kaizens*, 1,355 were successfully implemented\*.

*Kaizen:* methodology focused on small changes to optimize processes, quality and well-being in the workplace.

PDCA Challenge (Plan, Do, Check, and Act): a methodology that encourages groups of employees to develop innovative solutions in pursuit of continuous process improvement.

Additionally, we are actively engaged in the "Mina e Porto do Futuro" Program, aiming to establish global leadership in the iron ore mining and bulk logistics sectors. Through the development and implementation of innovative solutions, we aim to enhance autonomy, efficiency, and safety in mining operations. Concurrently, we are committed to advancing sustainability practices and optimizing bulk logistics processes. Our primary goal is to spearhead industry transformation, driving significant advancements in technologies and practices to create sectors that are safer, more efficient, better integrated with the community, and more sustainable.



Continuous Improvement and Innovation Employees

\*Data from Mineração Morro do Ipê and Porto Sudeste.

# Indicators Hub

## Chapter on Natural Resource Management and Climate Change

### DISPOSAL OF CAPTURED WATER

(GRI 303-1)

- Sealing and cooling pumps.
- Compressor cooling.
- Preparation of reagents.
- Diluting water for use in the process.
- Wash water on sieves.
- Washing filter fabrics.
- Cleaning services (service points).
- Flushing in the lines of slurry pumps.
- Level maintenance on slurry pump boxes.
- Water Treatment Plants (WTP).

### BIODIVERSITY

(GRI 304-4)

IUCN red list species and national conservation list species with habitats located in areas affected by the organization’s operations.

### LIST OF SPECIES OF INTEREST RECORDED IN THE RUPESTRIAN FIELD ON THE IRON FORMATION.

FAMILY	SPECIES	THREATENED			ENDEMIC	RARE	DISTRIBUTION (INCT, 2017)
		BIODIVERSITAS (2007)	MMA (2014)	IUCN (2016-3)	JACOBI ET AL. (2012)	GIULIETTI ET AL. (2009)	
Alstroemeriaceae	Alstroemeria Plantaginea	Endangered	-	-	-	-	BA, MG, SP
Asteraceae	Aspilia subpetiolata	Endangered	-	-	-	-	DF, MG, BA, MS
Asteraceae	Chromolaena nultifiosculosa	-	-	-	Endemic- QF	-	GO, MG, MT
Bromeliaceae	Cryptanthus schwackeanus	Vulnerable	-	-	Endemic- QF	-	MG
Bromeliaceae	Dyckia consimilis	-	-	-	Endemic of the Canga- QF	-	MG
Bromeliaceae	Vnesea minarum	Vulnerable	Endangered	-	Endemic of the cangas- QF	-	MG
Cactaceae	Arthrocereus glaziovii	Critically en- dangered	Endangered	Endan- gered	Endemic of the Canga- QF	Rare	MG
Convolvulaceae	Jacquemontia linarioides	-	-	-	Endemic of the Canga- QF	-	MG
Gesneriaceae	Paliavana sericiflora	Vulnerable	-	-	-	-	MG
Gesneriaceae	Sinningia rupicola	Vulnerable	Endangered	-	Endemic of the Canga- QF	-	MG
Orchidaceae	Cattleya caulencens	Endangered	Endangered	-	-	-	MG
Orchidaceae	Cattleya crispata	Endangered	-	-	-	-	MG
Poaceae	Sporobolus metallicolus	Vulnerable	-	-	-	-	MG, PR <sup>3</sup>

Caption: QF: the Iron Quadrangle Region, MG: Minas Gerais, SP: São Paulo, PR: Paraná, MT: Mato Grosso, BA: Bahia, MS: Mato Grosso do Sul, DF: Distrito Federal, GO: Goiás

LIST OF SPECIES OF INTEREST RECORDED IN THE CERRADO FIELD

FAMILY	SPECIES	THREATENED			ENDEMIC	DISTRIBUTION (INCT, 2017)
		BIODIVERSITAS (2007)	MMA (2014)	IUCN (2016-3)	JACOBI ET AL. (2012)	
Asteraceae	Aldama tenuifolia	Endangered	-	-	-	GO, MG, SP
Asteraceae	Chresta sphaerocephala	Vulnerable	-	-	-	BA, DF, GO, MG, MS, PR, SP
Asteraceae	Lessingianthus pycnostachyus	Vulnerable	-	-	-	MG, BA, RJ, SP
Bignoniaceae	Anemopaegma arvence	-	Endangered	-	-	BA, DF, GO, MA, MG, MS, MT, PR, RJ, RO, SP, TO
Convolvulaceae	Jacquemontia Linarioides	-	-	-	Endemic of the Canga- QF	MG
Fabaceae	Machaerium villosum	-	-	Vulnerable	-	BA, CE, DF, GO, MG, MS, PI, PR, SP
Gesneriaceae	Paliavana sericiflora	Vulnerable	-	-	-	MG
Iridaceae	Neomarica glauca	Endangered	-	-	-	ES, MG, RJ, RN, SP
Malpighiaceae	Camarea hirsuta	Vulnerable	-	-	-	GO, MG, MS, SP

LIST OF THREATENED SPECIES RECORDED IN THE CERRADO FIELD

FAMILY	SPECIES	THREATENED			DISTRIBUTION (INCT, 2017)
		BIODIVERSITAS (2007)	MMA (2014)	IUCN (2016-3)	
Asteraceae	Aspilia subpetiolata	Endangered	-	-	MG, DF, GO, MS
Asteraceae	Chresta spherocephala	Vulnerable	-	-	BA, DF, GO, MG, MS, PR, SP
Asteraceae	Pseudobricklellia angustissima	Critically endangered	-	-	BA, DF, GO, MG, PI
Bignoniaceae	Anemopaegma arvense	-	Endangered	-	BA, DF, GO, MA, MG, MS, MT, PR, RJ, RO, SP, TO
Bromeliaceae	Dyckia consimilis	-	-	-	MG
Fabaceae	Machaerium villosum	-	-	Vulnerable	BA, CE, DF, GO, MG, MS, PI, PR, SP
Gesneriaceae	Paliavana sericiflora	Vulnerable	-	-	MG
Lythraceae	Diplusodon villosissimus	-	Vulnerable	-	MG, SP
Malpighiaceae	Camarea hirsuta	Vulnerable	-	-	GO, MG, MS, SP
Meliaceae	Cedrela fissilis	-	Vulnerable	Endangered	AC, AL, AM, BA, CE, DF, ES, GO, MA, MG, MS, MT, PA, PE, PI, PR, RJ, RO, RS, SC, SE, SP, SP, TO
Myrtaceae	Siphoneugena densiflora	-	-	Vulnerable	DF, ES, GO, MG, RJ, SP, MT, PR

Caption: MG: Minas Gerais, SP: São Paulo, ES: Espírito Santo, PR: Paraná, MT: Mato Grosso, BA: Bahia, MS: Mato Grosso do Sul, DF: Distrito Federal, GO: Goiás, PB: Paraíba, PE: Pernambuco, RO: Rondônia, RJ: Rio de Janeiro, CE: Ceará, RN: Rio Grande do Norte, PI: Piauí, TO: Tocantins, RS: Rio Grande do Sul, PA: Pará

TAXON	COMMON NAME	CONSERVATION STATUS	ENDEMISM
		IUCN (2016)	
Jacamaralcyon tridactyla	three-toed jacamar	VU	MA
Malacoptila striata	crescent-chested puffbird	NT	MA
Eleoscytalopus indigoticus	white-breasted tapaculo	NT	MA
Porphyrospiza cearulescens	blue finch	NT	CE
Neothraupis fasciata	white-banded tanager	NT	

SPECIES NAME COMMON	THREAT CATEGORIES			ENDEMISM	THREAT CRITERIA
	IUCN (2016)	MMA (2014)	COPAM (2010)		
Puma yagouroundi Jaguarundi	LC	VU	-	-	Habitat destruction and declining populations
Callicebus aff nigry- frons Guigó	NT	-	-	Atlantic Rainforest	-
Chrysocyon brachyurus Maned wolf	NT	VU	VU	-	Habitat destruction and declining populations
Puma concolor cougar	LC	VU	VU	-	Hunting, chasing, habitat destruction and declining populations
Leopardus aff pardalis Ocelot	LC	VU	VU	-	
Guerlinguetus ingrami	-	-	-	Atlantic Rainforest	Hunting, chasing, habitat destruction and declining populations

Caption: LC: Little concern, NT: near threatened, VU: Vulnerable



Laranjeiras Farm, São Joaquim de Bicas

DIRECT (SCOPE 1) GHG EMISSIONS IN 2023\*

(GRI 305-1)

Total Emissions: 16,665.53 tCO <sub>2</sub> e.
Gases included in the calculation: HCFC-22 (R22), HCFC-141b, CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs.
Biogenic CO <sub>2</sub> emissions in metric tons of CO <sub>2</sub> : 16,186,79 tCO <sub>2</sub> e.

\*Base year for calculation: 2022. Emission factors according to the GHG Protocol.

INDIRECT (SCOPE 2) GHG EMISSIONS RESULTING FROM THE PURCHASE OF ENERGY IN 2023

(GRI 305-2)

Scope 2 was accounted for in the category of electricity acquisition according to the location approach. Therefore, the total emissions value in this scope, calculated based on SIN factors, is 2,568.00 tCO<sub>2</sub>e.

OTHER INDIRECT GHG EMISSIONS (SCOPE 3)

(GRI 305-3)

CATEGORY	DESCRIPTION
Transportation and distribution (upstream)	Trucks from third-party companies that transport the product to the terminal.
Employee commute	Emissions from buses and minibuses chartered to transport employees.
Waste	Emissions from non-inert waste destined for landfill and waste incinerated by outsourced companies in 2023 were calculated based on information obtained from Waste Movement Declarations (DMR) from IPÊ and contracted companies. These calculations took into account the climatic characteristics of the city closest to the Betim region, where the waste is landfilled.
Industrial effluents	Emissions from the treatment of effluents (including sludge from septic tanks, oils, fats, among others) destined for third-party companies in 2023, for treatment by activated sludge.

The **Industrial Effluents** category corresponds to other indirect GHG emissions, which was 14,880.93 CO<sub>2</sub> in 2023.

WASTE MANAGEMENT

GENERATED WASTE	GENERATED AMOUNT	DISPOSED AMOUNT	TECHNOLOGY
030105- Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04 (*)	10.39	10.39	-
130201(*)- Used or contaminated engine, gear and lubricating oils	14.26848	14.26848	-
130507(*)- Water with oil from oil/water separators	114.05	114.05	-
150103- Wooden packaging	285.52	285.52	-
150103- Wooden packaging	1.02	1.02	-
150202(*)- Sanitary pads, filter materials (including unspecified oil filters), wiping cloths, and protective clothing contaminated by hazardous substances	68.58	68.58	-
150202(*)- Sanitary pads, filter materials (including unspecified oil filters), wiping cloths, and protective clothing contaminated by hazardous substances	1.48	1.48	-
160117- Ferrous metal scrap	5.41	5.41	-
160126- Unserviceable/used truck and bus tires	0.25	0.25	-
190809- Mixtures of fats and oils, water/oil separation, containing only edible oils and fats	177.65	177.65	-
191211- Rubber	62.08	62.08	-
191211- Rubber	0.23	0.23	-
200101- Paper and paperboard	14.69	14.69	-
200108- Biodegradable kitchen and cafeteria waste	46.66	46.66	-
Class C- Waste for which no economically viable technologies or applications have been developed to enable its recycling or recovery.	74.21	74.21	-
010105- Waste not otherwise specified	349.8	349.8	-
Group A- Health Service Waste classified as Groups A1, A2, A3, A4 or A5, according to ANVISA RDC 222/2018- Includes waste codes 180101(*), 180102(*), 180103(*), 180104(*), 180105(*), 180106(*), 180107(*), 180108(*), 180109(*), 180110(*), 180111(*), 180112(*), 180113(*), 180114(*) and 180115(*) according to IBAMA 13/2012.	0.0653	0.0653	-
200304- Sludge from septic tanks	1653.9095	1653.9095	-
200304- Sludge from septic tanks	1268.79	1268.79	-
200140- Metal	167.55	167.55	-
200139- Plastic	5.74	5.74	-
200108- Biodegradable kitchen and cafeteria waste	73.21	73.21	-
200140- Metal	184.83	184.83	-
Group E- Sharps or scarifying materials such as razor blades, needles, scalpels, glass ampoules, drills, endodontic files, diamond tips, scalpel blades, lancets, capillary tubes, micropi- pettes, slides and coverslips, spatulas, and all broken glass utensils used in laboratories (such as pipettes, blood collection tubes, Petri dishes), and similar items. These materials are classified according to ANVISA RDC 222/2018 and include waste code 180401(*) as per IBAMA 13/2012.	0.0058	0.0058	-
060503- Sludge from local effluent treatment not covered by 06 05 02 (*)	14.38	14.38	-
	4594.76908	4594.76908	-

## Chapter on Employee Development

### EMPLOYEE PROFILE IN 2023

(GRI 2-7)

DECEMBER		
LOCATION	AMOUNT	%
Belo Horizonte	118	13%
Betim	67	8%
Brumadinho	49	6%
Contagem	36	4%
Igarapé	274	31%
Itaúna	68	8%
São Joaquim de Bicas	98	11%
Other	165	19%
<b>Total</b>	<b>875</b>	<b>100%</b>

### PERFORMANCE EVALUATION

Performance evaluation: 100% of eligible employees who have been with the company for more than six months and are under Consolidation of Labor Laws (CLT) contracts participate in this evaluation process. Trainees and young apprentices undergo evaluation using a separate performance tool.

(GRI 404-3)

### TURNOVER

THE MONTHLY AVERAGE TURNOVER STOOD AT 2.85% AT MMI IN 2023.

GENDER	HIRES		DISMISSALS	
Female	91	23.39%	26	16.99%
Male	298	76.61%	127	83.01%
<b>Total</b>	<b>389</b>		<b>153</b>	

(GRI 401-1)

## Chapter on Local Presence

### VENDORS

(GRI 204-1)

LINE LABELS	NO BILLING	BILLING	OVERALL TOTAL
Brumadinho	98	28	126
Igarapé	136	80	216
São Joaquim de Bicas	37	28	65
Overall total	271	136	407

LINE LABELS	BRUMADINHO AID	IGARAPÉ	SÃO JOAQUIM DE BICAS	TOTAL AID	SURROUNDINGS	OTHER	OVERALL TOTAL	VARIATION
2023	27,014,296.48	32,693,374.56	19,586,514.98	79,294,186.02	542,341,191.25	1,200,909,248.01	1,822,544,625.28	4.35%
Jan	1,489,738.22	3,416,532.36	13,889,903.37	18,806,173.95	51,049,472.64	85,343,512.46	155,199,159.05	12.12%
Feb	323,178.68	3,009,399.11	35,931.00	3,368,508.79	23,798,618.00	54,081,000.57	81,248,127.36	4.15%
Mar	2,755,983.30	3,244,727.17	1,567,657.93	7,568,368.40	49,299,908.13	108,490,659.38	165,358,935.91	4.58%
Apr	2,499,280.84	2,948,208.73	187,296.09	5,634,785.66	54,620,574.15	115,314,438.49	175,569,798.30	3.21%
May	1,907,066.91	2,909,646.73	528,857.15	5,345,570.79	40,171,128.26	88,248,935.73	133,765,634.78	4.00%
Jun	2,785,740.81	2,770,485.63	696,483.36	6,252,709.80	52,352,323.51	96,406,768.89	155,011,802.20	4.03%
Jul	2,316,997.85	2,863,083.43	336,965.67	5,517,046.95	51,756,494.34	90,279,328.46	147,552,869.75	3.74%
Aug	1,426,786.39	1,925,979.27	308,505.12	3,661,270.78	43,789,578.14	86,347,675.75	133,798,524.67	2.74%
Sep	2,699,297.20	1,902,688.70	211,620.08	4,813,605.98	35,927,494.27	74,269,116.84	115,010,217.09	4.19%
Oct	2,700,844.43	1,784,070.04	241,829.52	4,726,743.99	44,058,546.32	119,960,853.72	168,746,144.03	2.80%
Nov	3,626,370.94	2,609,821.63	25,795.50	6,261,988.07	30,031,302.73	103,657,101.33	139,950,392.16	4.47%
Dec	2,483,010.91	3,308,731.76	1,545,670.19	7,337,412.86	65,485,750.73	178,509,856.39	251,333,019.98	2.92%
2024	5,045,867.02	8,788,405.88	144,937.70	13,979,211.60	79,792,355.54	322,915,782.36	416,687,349.50	3.35%
Overall Total	32,060,163.50	41,481,781.44	19,731,452.68	93,273,397.62	622,133,546.79	1,523,825,030.37	2,239,231,974.78	

Filters applied: Removed from the supplier base of Mineração Morro do Ipê and Caixa PCP, ADM and BH office



# GRI Content Index\*

GRI Standards	CONTENT	PAGE	LOCATION IN THE REPORT	INFORMATION AND/OR OMISSION
GENERAL DISCLOSURES				
NATURAL RESOURCE MANAGEMENT AND CLIMATE CHANGE				
GRI 201: 2016 Economic Performance	201-2: Financial implications and other risks and opportunities due to climate change			In 2023, a survey was carried out of risks and opportunities that had not yet been monetized.
	303-2: Management of water discharge-related impacts	28		We conduct effluent analysis at both entry and exit points of control for sanitary and industrial effluents, adhering to parameters specified in the environmental control plans that underpinned MMI's operational licenses.
	303-3 Water abstraction			The volume of water collected at designated points is monitored to ensure compliance with limits set by the respective permits.
	303-4 Water discharge	88		Additionally, the water consumption per ton of ore produced is tracked as a key performance indicator contributing to MMI's overall ESG metrics.  We do not discharge effluents into water bodies.

\* Although this document does not follow a specific guideline for sustainability reports we intend, for the future cycles, to adopt recognized standards to report the company's ESG practices.

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