SIMINERAL
SINDICATO DAS INDÚSTRIAS MINERAIS DO ESTADO DO PARÁ

ESG Report 2026

First Carta Santarém report ·
Base year 2025

CARTA SANTARÉM



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MESSAGE FROM SIMINERAL

Commitment to Responsible Mining in the Amazon

Mining plays a strategic role in the development of Pará and Brazil. Operating in a territory of high environmental and social sensitivity such as the Amazon requires heightened responsibility, technical rigor and an ongoing commitment to improving sector practices.

Through this report, the Sindicato das Indústrias Minerais do Estado do Pará (SIMINERAL – Pará State Mining Industries Association) reaffirms its commitment to promoting responsible mining in the Amazon. This first ESG Positioning Report, referring to 2026 (base year 2025), consolidates the Pará mineral sector's vision of sustainability, socio-environmental responsibility and governance, going beyond the presentation of indicators and adopting a structured, transparent and evolving approach.

The Santarém Charter represents an important institutional milestone in this process. Developed through dialogue among companies, public authorities and society, the Charter establishes guidelines for responsible mining activities in the Amazon territory, guiding the sector in integrating the environmental, social and governance pillars. More than a statement of position, the Charter aligns the sector's commitment with a structured sustainability agenda and with strengthening its social legitimacy.

By structuring the report around the Environmental, Social and Governance pillars, SIMINERAL seeks to provide a transparent view of the principal risks, opportunities and management instruments associated with mining in Pará, strengthening legal certainty, social legitimacy and sector transparency through ongoing dialogue with member companies, public authorities, investors and society.

SIMINERAL ESG Roadmap

Since 2019, SIMINERAL has progressively incorporated the ESG agenda into its institutional activities, recognizing sustainability as a central element of the mineral sector's competitiveness and legitimacy.

Beginning in 2025, with the creation of an Executive Board, the organization began structuring and strengthening sectoral governance in coordination with its member companies, with the goal of building an integrated position that demonstrates mining's positive relevance to the industrial sustainability of Pará and Brazil.

EVOLUTION OF REPORTING, GOVERNANCE AND SECTORAL ACTIVITIES

2025

Communication and Positioning (Report ref. 2024)

- Publication of an institutional report in 2025, used as a sector-positioning document, following the creation of an Executive Board, workshops and technical events, technical meetings and the initial definition of sectoral governance, as well as institutional preparation for COP30.

2026

Technical Structuring and ESG Governance

- ESG Report 2026 (ref. 2025), with a revised structure, comparative indicators, a technical glossary and calculation formulas aligned with the ICMM, IFC and GRI.
- Structuring of SIMINERAL ESG Governance, including the definition of governance bodies and key institutional outputs.

2027

Governance in Operation and Consolidation (Report ref. 2026)

- ESG governance fully operational.
- ESG Report 2027 consolidated as the principal accountability instrument.

01
Introduction



Introduction

OBJECTIVE

This technical report presents the positioning of Pará's mineral sector in relation to the principal ESG (Environmental, Social and Governance) dimensions, based on selected indicators, technical analyses and structured sectoral narratives.

The report seeks to promote transparency, comparability and methodological consistency by establishing a sectoral baseline and serving as a reference for member companies, public authorities, investors and other stakeholders, as established in the Santarém Charter.

It also seeks to strengthen legal certainty, social legitimacy and transparency in Pará's mineral sector.

PREMISES

- SIMINERAL's first ESG Positioning Report.
- Structured around the Environmental, Social and Governance (ESG) pillars.
- Based on public data, recognized technical references, sectoral indicators and consolidated information provided by member companies.
- Certain figures use consolidated estimates, which are duly identified.
- Continuous improvement (PDCA), with annual evolution of reporting.

Methodological disclaimer. Certain figures presented in this report correspond to consolidated estimates (for example, mining's share of Pará's GDP), a common practice in sectoral reports and economic analyses.

These estimates are explicitly identified throughout the text and are used exclusively for contextualization and sector-positioning purposes, in order to avoid inappropriate interpretations or methodological questions.

2026 ESG Pillars and Strategic Topics

The Environmental, Social and Governance (ESG) pillars were consolidated within the United Nations framework beginning in the 2000s, particularly through the Who Cares Wins initiative (UN, 2004), which established ESG as a reference for assessing corporate risk, performance and sustainability. The strategic topics presented here reflect the material priorities of Pará's mineral sector in 2025 and may evolve in scope and focus over time according to the regulatory and territorial context and SIMINERAL's institutional positioning.

E Pillar – Environmental

- E1 – Environmental Licensing
- E2 – Protected Areas and Biodiversity
- E3 – Water Use
- E4 – Climate and Energy

S Pillar – Social

- S1 – Occupational Health and Safety
- S2 – Human Rights
- S3 – Diversity, Equity and Inclusion
- S4 – Social Investment and Territorial Development

G Pillar – Governance

- G1 – Tailings Dam Management and Emergency Preparedness
- G2 – ESG Governance

02

SIMINERAL Members and Production 2026



SIMINERAL Member Companies 2026

Since 2019, SIMINERAL member companies, which include some of Brazil's and the world's leading and largest integrated mining companies, have progressively incorporated the ESG agenda into their operations in Pará. Beginning in 2025, with the creation of an Executive Board, SIMINERAL began structuring and strengthening sectoral governance, acting as a platform for coordination, dissemination of best practices and support for the sector's institutional representation, with the goal of raising the technical standard of mining and demonstrating its positive contribution to the industrial sustainability of Pará and Brazil.



Production, Economy and Public Returns

PRODUCTION

+300 MTPA

Volume in 2025

27 %

Share of Brazilian mineral production volume in 2025

ECONOMY

BRL 103 billion

Mineral Production Value / sector revenue 2025

34.5 %

Share of Brazilian mineral-sector revenue in 2025

>150% cumulative growth over 10 years

PUBLIC RETURNS

~BRL 3.1 billion

CFEM collected in Pará, 2025

~39%

Share of national CFEM collections in 2025

KPI – Production

Total mineral production volume in Pará in 2025, in million tonnes per year (MTPA), and the state's percentage share of Brazilian mineral production, based on public data from the National Mining Agency (ANM).

KPI – Economy

Mineral Production Value (VPM) in Pará in 2025, the state's percentage share of Brazilian mining revenue and the cumulative evolution of VPM over the last 10 years, based on public data from the National Mining Agency (ANM), the Brazilian Mining Institute (IBRAM) and IBGE.

KPI – Public Returns

Total amount collected in Pará in 2025 through the Financial Compensation for Mineral Resource Exploitation (CFEM) and the state's percentage share of total collections in Brazil, based on public ANM data.

Mineral Production and Economic Relevance in Pará

Mining in Pará has consolidated its position as one of the principal pillars of Brazil's mineral economy and as a mineral province of international relevance. The state is home to world-class operations and plays a strategic role in supplying iron ore, copper, nickel, bauxite and gold to domestic and global markets. In 2025, Pará accounted for approximately 300 million tonnes of mineral production per year (MTPA), representing around 27% of Brazilian mineral production by volume and consolidating the state as one of the country's most significant mining territories.

In addition to its large production scale, Pará's mineral sector has national prominence in economic value creation. In 2023, the state's Mineral Production Value (VPM) reached approximately BRL 89.6 billion, corresponding to 34.3% of the total value of Brazilian mineral production. In 2025, sector estimates indicate that mining revenue in Pará reached around BRL 103 billion, equivalent to approximately 34.5% of national mineral-sector revenue. Over the last ten years, the state recorded cumulative growth of more than 150% in mineral production value, reflecting sector expansion, the increased competitiveness of Brazilian mineral commodities and Pará's strategic relevance in the global minerals market.

Mining plays a structuring role in the state economy, driving value chains associated with logistics, energy, infrastructure, services and foreign trade. The sector also makes a significant contribution to state and municipal public finances through both tax revenue and the Financial Compensation for Mineral Resource Exploitation (CFEM). In 2025, CFEM collections in Pará reached approximately BRL 3.1 billion, representing around 39% of national collections and reinforcing the state's role as Brazil's leading generator of mineral revenues.

Taken together, these indicators demonstrate that mining in Pará combines large-scale production, strong economic value creation and a significant fiscal contribution, consolidating the state as one of Brazil's leading mining hubs and a strategic supplier of minerals to global markets.

Sources: National Mining Agency (ANM); Brazilian Mining Institute (IBRAM); Brazilian Institute of Geography and Statistics (IBGE); Pará State Secretariat for Economic Development, Mining and Energy (SEDEME-PA); Sindicato das Indústrias Minerais do Estado do Pará (SIMINERAL).

SIMINERAL MEMBERS AND PRODUCTION 2026

Mining in Pará in 2025

Sector performance and contribution to the economy and to Brazil

BASE YEAR
2025

PARÁ: NATIONAL LEADER
In value generation and mineral revenue

LEADING ROLE
In the global mineral supply chain

KPI 1 · PRODUCTION

+300 MTPA

TOTAL MINERAL PRODUCTION VOLUME IN PARÁ IN 2025

Million tonnes per year

~27% Pará's share of Brazilian mineral production
Of Brazil's total

KPI 2 · ECONOMY

~BRL 103 billion

VALUE OF MINERAL PRODUCTION (VPM) IN PARÁ IN 2025

Mining revenue

~34.5% Pará's share of Brazilian mining revenue
Of Brazil's total

>150% Cumulative growth of VPM over the last 10 years
(Nominal values)

KPI 3 · PUBLIC RETURN

~BRL 3.1 billion

REVENUE FROM THE FINANCIAL COMPENSATION FOR THE EXPLOITATION OF MINERAL RESOURCES (CFEM) IN PARÁ IN 2025

~39% Pará's share of CFEM revenue in Brazil
Of Brazil's total

Sources: National Mining Agency (ANM) | Brazilian Mining Institute (IBRAM) | Brazilian Institute of Geography and Statistics (IBGE) | Pará State Secretariat for Economic Development, Mining and Energy (SEDEME-PA) | Pará State Mining Industries Association (SIMINERAL)

The strategic role of mining in Pará

Mining in Pará combines a large production scale, strong economic value generation, and a significant fiscal contribution, consolidating the state as Brazil's leading mineral hub.

The sector drives essential value chains, including logistics, energy, infrastructure, services, and foreign trade, while also generating jobs and promoting regional development.

The 2025 results reinforce Pará's leading role in Brazilian mining and its strategic importance in supplying critical minerals to the world.

Mining that generates value, development, and a future for Pará and Brazil.

E

E Pillar – Environmental

E1	Environmental Licensing
E2	Protected Areas and Biodiversity
E3	Water Use
E4	Climate and Energy



E PILLAR – ENVIRONMENTAL

E1

Environmental Licensing

E1	**Environmental Licensing**
E2	Protected Areas and Biodiversity
E3	Water Use
E4	Climate and Energy



E1 • Environmental Licensing

LICENSING CONDITIONS

100 %

on schedule

TERRITORIAL INTEGRATION

100 %

FPIC

60%

of companies

KPI – Licensing Conditions

Percentage of environmental licensing conditions fulfilled, being fulfilled or dependent on approval by the environmental authority, aligned with the environmental-compliance disclosures of GRI 307 and the environmental-commitment management requirements of IFC Performance Standard 1.

KPI – Territorial Integration

Percentage of member companies that implement Free, Prior and Informed Consent (FPIC) in their management of traditional, Indigenous and Quilombola communities, aligned with the social disclosures of GRI 413, the UN Guiding Principles on Business and Human Rights and IFC Performance Standard 7 (IFC PS7).

Note: For the purposes of these KPIs, only Environmental Licenses (LP, LI and LO) issued by federal or state environmental authorities are considered.
Water-use permits, vegetation-suppression authorizations, wildlife-management permits, ancillary authorizations and other specific approvals are not included.

E1 • Environmental Licensing

The consolidated indicators demonstrate a high degree of environmental compliance among SIMINERAL member companies, reflecting stronger environmental-management systems, socio-environmental governance and monitoring mechanisms implemented by the sector.

With regard to environmental licensing conditions, consolidated data indicate that 100% are fulfilled or in the process of being fulfilled, demonstrating the adoption of structured processes for monitoring, managing and meeting the obligations established through environmental-licensing procedures.

The results also demonstrate the increasing incorporation of international practices related to socio-environmental management and engagement with Indigenous peoples and traditional communities. Around 60% of companies identify potential applicability for Free, Prior and Informed Consent (FPIC) processes, and 100% of those companies already have structures in place or are in the process of implementing procedures compatible with this instrument, aligned with international best practices.

These indicators demonstrate the evolution of ESG maturity in Pará's mining sector and the commitment of member companies to continuous improvement in their management systems, transparency and stakeholder engagement, reinforcing the sector's alignment with the principal international sustainability references, including the IFC Performance Standards, the ICMM Mining Principles and other frameworks applicable to responsible mining.

Sources: IFC PS1; ICMM; IBAMA; SEMAS/PA; Brazilian environmental-licensing legislation; consolidated data from companies participating in the 2025 sectoral survey.

E PILLAR – ENVIRONMENTAL

Environmental licensing for mining in Pará

Regulatory predictability, responsible management, and commitment to environmental protection.

HIGHLIGHTS OF THE MINING SECTOR IN PARÁ

100%
of environmental conditions fulfilled or in the process of being fulfilled

60%
of companies with potential applicability for FPIC protocols[2]

100%
of companies prepared or in the process of preparing to implement FPIC

Robust systems
for environmental management and socioenvironmental governance

ENVIRONMENTAL PERFORMANCE

100% of environmental conditions fulfilled or in the process of being fulfilled within the established timeframe.

82.5% of environmental conditions currently being addressed within the established timeframe.

Evidence of structured environmental management systems and continuous monitoring.

SOCIAL ENGAGEMENT AND HUMAN RIGHTS

60% of companies identify potential applicability for FPIC protocols[2]

100% of companies already have structures in place or are in the process of preparing to adopt FPIC.

Commitment to qualified dialogue and respect for the rights of traditional peoples and communities.

E PILLAR – ENVIRONMENTAL

Environmental licensing for mining in Pará

BRAZIL'S ENVIRONMENTAL LICENSING SYSTEM IS ROBUST AND TRANSPARENT

EIA/RIMA
Environmental Impact Studies required by law

PUBLIC HEARINGS
Social participation and transparency in the process

TECHNICAL ANALYSIS
Multidisciplinary assessment by competent environmental agencies

DECISION AND CONDITIONS
Definition of control measures, environmental programs, and commitments

CONTINUOUS MONITORING
Monitoring compliance with conditions and continuous improvement

REGIONAL HIGHLIGHT – PARÁ

The strengthening of regional environmental licensing promotes continuous technical improvement, the exchange of experiences between developers and licensing agencies, more context-specific decisions, and greater alignment with best practices, contributing to environmental protection, regulatory predictability, and the technical development of the mining sector in Pará.

ALIGNED WITH INTERNATIONAL STANDARDS

IFC · PERFORMANCE STANDARD 1
Management of environmental and social risks and impacts

ICMM · INTERNATIONAL COUNCIL ON MINING & METALS
Good governance, risk management, and socioenvironmental performance

Sources: IBAMA; SEMAS/PA; Brazilian environmental licensing legislation; IFC PS1; ICMM; consolidated data from companies participating in the 2025 sectoral survey.

E PILLAR – ENVIRONMENTAL

E2

Protected Areas and Biodiversity

E1 Environmental Licensing

E2 Protected Areas and Biodiversity

E3 Water Use

E4 Climate and Energy



E2 • Protected Areas and Biodiversity

OPERATIONAL AREAS AND AREAS AFFECTED BY MINING

≈ 154 thousand ha

≈ 50% (≈ 77 thousand ha)
area affected by mining

AREAS UNDER PRAD REHABILITATION

≈ 5 thousand ha

≈ 6.5%
of affected areas

PERMANENT PROTECTION

≈ 786 thousand ha

≈ 500%
of companies' operational areas

PROTECTION VS. IMPACT

≈ 10:1

KPI – Companies' Operational Areas
Total area, in hectares, under direct company management, including mining areas, infrastructure, legal reserves, Permanent Preservation Areas and other areas associated with the operations.

KPI – Area Directly Affected by Mining
Total area, in hectares and as a percentage of the operational area, subject to physical intervention resulting from mining activities and associated structures.

KPI – Areas under PRAD Rehabilitation (2025)
Total area, in hectares, undergoing environmental rehabilitation through Degraded Area Recovery Plans (PRADs) and other ecological-restoration initiatives.

KPI – Protected and Conserved Areas (2025)
Total area, in hectares, designated for environmental conservation or supported by companies through protection, monitoring, territorial-management and shared-governance activities.

KPI – Conservation vs. Affected Areas (2025)
Ratio between protected or conserved areas and areas directly affected by mining activities, demonstrating the sector's contribution to environmental conservation and territorial management.

E2 • Protected Areas and Biodiversity

Operational Area – Definition

Total area, in hectares, for which the company has management, monitoring or control responsibilities arising from ownership, concession, licensing or other territorial-use instruments, regardless of whether physical intervention has occurred.

Area Affected by Mining – Definition

Area used for mining activities, including the mine, access routes, operating facilities, administrative buildings, infrastructure and other areas associated with the operation.

Protected and Conserved Areas – Definition

Areas designated for environmental protection under company responsibility, including Permanent Preservation Areas (APPs), Legal Reserves, compensation areas, areas under rehabilitation (PRADs) and avoided areas.

Avoided Areas – Definition

Areas licensed for use or operation but not used, which remained without physical intervention and retained their original environmental conditions.

E2 • Protected Areas and Biodiversity

The results indicate that mining in Pará operates within a landscape of high environmental relevance, in which protected and conserved areas associated with mining projects greatly exceed the areas directly affected by operations, demonstrating compatibility between mineral production at a global scale and biodiversity conservation in the Amazon.

SIMINERAL member companies manage approximately 154,000 hectares of operational areas, of which around 77,000 hectares are subject to intervention associated with mining activity. This means that approximately half of the areas under direct operational management remain without physical impacts associated with mining and are allocated to environmental functions, protection, ecological connectivity, infrastructure or planned future use.

In addition, around 5,000 hectares are undergoing active environmental rehabilitation through Degraded Area Recovery Plans (PRADs), reflecting the sector's ongoing efforts to restore areas previously used by operations. At the same time, protected, conserved or supported areas managed through territorial-management, environmental-monitoring and shared-governance mechanisms total approximately 786,000 hectares.

The data indicate an approximate ratio of 10 hectares protected or conserved for every hectare directly affected by mining. Protected areas associated with operations also correspond to approximately five times the companies' total operational area, demonstrating a territorial-management model aligned with the mitigation hierarchy of IFC Performance Standard 6 (PS6) and with international biodiversity-conservation best practices promoted by the ICMM.

At the state level, Pará has approximately 75 million hectares covered by different public conservation and territorial-planning instruments. Within this context, the protected and conserved areas associated with SIMINERAL-linked projects make a relevant contribution to maintaining ecological integrity, landscape connectivity and territorial monitoring in one of the most biodiverse regions on the planet.

Taken together, these indicators demonstrate that mining in Pará combines mineral production at a global scale with structured territorial management, continuous environmental rehabilitation and support for the conservation of extensive natural areas, reinforcing the integration of mining activity, biodiversity protection and sustainable development in the Amazon.

Sources: IFC PS6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources; ICMM – Mining Principles; IBGE; SEMAS/PA; National Registry of Conservation Units (CNUC); consolidated data from companies participating in the 2025 sectoral survey.

E PILLAR – ENVIRONMENTAL

Mining in Pará: production at scale, conservation as a priority.

Responsible mining, integrated with the conservation of the Amazon and the protection of biodiversity.

CONSERVATION IS A PRIORITY
Protected areas are 10 times larger than impacted areas.

RESPONSIBLE MANAGEMENT
Planning, control, and environmental recovery at every stage.

COMMITMENT TO THE AMAZON
Mining that contributes to the protection and sustainable development of the region.

MINING OPERATES IN A HIGHLY CONSERVED LANDSCAPE

10:1

PROTECTED AREA FOR EVERY HECTARE IMPACTED

2025 ratio

> **Reference aligned with the IFC PS6 Mitigation Hierarchy and ICMM practices.**

TERRITORIAL MANAGEMENT OF MEMBER COMPANIES (SIMINERAL)

Protected, conserved, or monitored area[1]	**786** thousand hectares
10x the operational area	
Operational area (direct management)	**154** thousand hectares
Area with mining activity intervention	**77** thousand hectares
50% of the operational area	
Area under environmental recovery (PRAD)	**5** thousand hectares

[1] Includes legally protected areas, legal reserves, voluntary conservation areas, and areas of influence and ecological connectivity under the management or monitoring of member companies.

E PILLAR – ENVIRONMENTAL

Mining in Pará: production at scale, conservation as a priority.

STATE CONTEXT – PARÁ (COMPARATIVE REFERENCE)

~75
million hectares
of areas protected through public instruments in the State of Pará.

1.1%
Protected areas under management, influence, or connectivity associated with SIMINERAL mining operations represent approximately 1.1% of the state total.

Formal mining as an ally in conservation, territorial monitoring, and biodiversity protection in the Amazon.

MINING'S CONTRIBUTION TO THE AMAZON

CONSERVES LARGE AREAS OF FOREST
Protected, conserved, or monitored areas are 10 times larger than the impacted area.

RECOVERS AND RESTORES AREAS
More than 5 thousand hectares under active environmental recovery (PRAD).

MANAGEMENT ALIGNED WITH INTERNATIONAL STANDARDS
Commitment to IFC PS6, ICMM, and best practices in socioenvironmental management.

CREATES SHARED VALUE FOR SOCIETY
Protects biodiversity, strengthens territories, and contributes to the sustainable development of the Amazon.

MINING THAT GENERATES POSITIVE RESULTS FOR TODAY AND FOR THE FUTURE.

RESPONSIBLE PRODUCTION
Compatibility between production scale and environmental conservation.

PROTECTED BIODIVERSITY
Territorial management that preserves ecosystems and essential environmental services.

SUSTAINABLE FUTURE
Mining integrated with the sustainable development of the Amazon.

CONTINUOUS COMMITMENT
Continuous progress in governance, innovation, and environmental performance.

Sources: Consolidated data from companies participating in the 2025 sectoral survey; IBGE; SEMAS/PA; National Registry of Conservation Units (CNUC); IFC PS6; ICMM Mining Principles.

Protected Areas and Biodiversity



Mining in Pará operates in a highly conserved landscape in which protected areas greatly exceed the areas directly affected, reinforcing the compatibility between large-scale mineral production and biodiversity conservation in the Amazon.

E PILLAR – ENVIRONMENTAL

E3

Water Use

E1 Environmental Licensing

E2 Protected Areas and Biodiversity

E3 Water Use

E4 Climate and Energy



E3 • Water Use

REUSE

75 %

of consumption

45 %

increase over the last 10 years (average)

SURFACE WATER WITHDRAWAL

79 %

of new-water demand

86%

permitted

GROUNDWATER WITHDRAWAL

18 %

of new-water demand

REUSED VOLUME

12.6 (billion m³)

2025

~7.5 (billion m³)

growth 2015–2025

KPI – Water Reuse (2025)

Average percentage of water reuse among companies, including the cumulative percentage increase in reuse over the last 10 years, aligned with GRI 303 disclosures on water efficiency, reuse and recirculation and with the water-resource management best practices recognized by the CEO Water Mandate.

KPI – Groundwater Withdrawal (2025)

Percentage of groundwater withdrawal in relation to total new-water demand for production processes and total volume withdrawn, in million cubic meters (m³), indicating the permitted share, aligned with GRI 303 water-withdrawal disclosures and principles for sustainable aquifer management.

KPI – Surface Water Withdrawal (2025)

Percentage of surface-water withdrawal in relation to total new-water demand for production processes and total volume withdrawn, in million cubic meters (m³), indicating the permitted share, aligned with GRI 303 water-withdrawal disclosures and principles for lawful and responsible water management.

KPI – Reused Volume (2025)

Total volume of water reused by the companies, in million cubic meters (m³), and the cumulative percentage change in reused volume over the last 10 years, aligned with GRI 303 disclosures on water reuse, recycling and water-use efficiency.

E3 • Water Use

Consolidated 2025 data indicate a high level of maturity in water management in industrial mining in Pará, characterized by widespread adoption of recirculation systems, withdrawal controls and monitoring of water use throughout production processes.

The consolidated information indicates that member companies have average water-reuse rates of approximately 75%, with a cumulative increase of around 45% over the last ten years, reflecting continuous investment in water efficiency and recirculation technologies.

New water withdrawn to supply operations comes predominantly from surface sources (79%), with groundwater providing a complementary share (18%). Withdrawals are carried out under the applicable water-control, monitoring and regularization processes, including water-use permits and regulatory oversight. At the same time, the total volume of water reused in production processes reaches approximately 12.6 million m^3, reinforcing the adoption of practices aligned with GRI 303, the CEO Water Mandate and the ICMM's international Water Stewardship guidelines.

In the Amazon context, where major water-quality risks are frequently associated with activities lacking regulatory control and with limited environmental-monitoring capacity, licensed industrial mining in Pará has been expanding the adoption of lower-water-intensity technologies. Sector estimates indicate that approximately 73% of new projects implemented in the state use dry processes or systems with reduced water use, lowering the need for water withdrawal and increasing operating efficiency.

Taken together, these indicators demonstrate that mining in Pará combines production scale with efficient use of water resources, helping reduce pressure on natural sources and reinforcing formal mining's alignment with international best practices in water management and operational sustainability in the Amazon.

Sources: GRI 303 – Water and Effluents; ICMM – Water Stewardship Position Statement; CEO Water Mandate (UN Global Compact); ANA; IBRAM; consolidated data from companies participating in the 2025 sectoral survey.

Mining in Pará | Water management – 2025

Operational excellence and commitment to the sustainable use of water

AVERAGE WATER REUSE RATE

75%

+45% increase over the last 10 years

VOLUME OF WATER REUSED IN 2025

12.6 million m³

Volume reused in production processes

NEW PROJECTS WITH DRY PROCESSING OR REDUCED WATER USE

73%

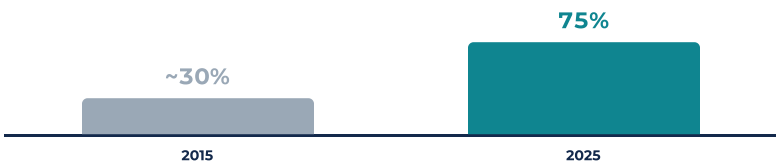
Lower water withdrawal requirements and greater operational efficiency

OPERATIONS WITH WATER USE AUTHORIZATION AND MONITORING

~77%

of surface water withdrawals have authorization[1] and all are monitored

EVOLUTION OF THE WATER REUSE RATE



+45 p.p. over the last decade

WATER WITHDRAWAL SOURCES – NEW WATER[2]

Surface water	79%
Groundwater	18%
Other sources[3]	3%

Withdrawals are carried out under control, monitoring, and regulatory requirements applicable to the operations.

[1] Percentage of surface water withdrawals that hold a water use authorization. Other withdrawals may be exempt from authorization under current legislation.
[2] Percentages calculated on the total volume of new water withdrawn.
[3] Includes stored rainwater harvesting and other sources not classified as surface water or groundwater.

E PILLAR – ENVIRONMENTAL

Mining in Pará | Water management – 2025

PERFORMANCE THAT GENERATES POSITIVE IMPACT

- **LOWER PRESSURE ON NATURAL RESOURCES**
- **EFFICIENCY AND COMPETITIVENESS**
- **RESPONSIBLE AND TRANSPARENT MANAGEMENT**
- **COMMITMENT TO THE AMAZON**

RESULTS THAT STRENGTHEN MINING IN PARÁ

75%	average water reuse rate in Pará's mining sector.
+45%	increase in the reuse rate over the last 10 years.
12.6	million m³ of water reused in 2025.
79%	of new water withdrawn from surface sources.
73%	of new projects with dry processing or reduced water use.
~77%	of surface water withdrawals have authorization[1].

FACTORS THAT DRIVE WATER MANAGEMENT EXCELLENCE

- Investments in recirculation and lower-water-intensity technologies
- Continuous monitoring and performance management
- Governance and stakeholder engagement
- Alignment with international best practices

Sources: Consolidated data from companies participating in the 2025 sectoral survey; GRI 303 (Water and Effluents); ICMM Water Stewardship Position Statement; CEO Water Mandate; ANA; IBRAM.

E PILLAR – ENVIRONMENTAL

E4

Climate and Energy

E1 Environmental Licensing

E2 Protected Areas and Biodiversity

E3 Water Use

E4 Climate and Energy

E4 • Climate and Energy

EMISSIONS INVENTORY

~90%

operations with Scope 1 and 2 emissions inventories

ELECTRIFICATION OF OPERATIONS

~ 43%

of total energy consumption

RENEWABLE ENERGY

85%

electricity from renewable sources

FOSSIL FUELS

>60%

of total energy consumption

KPI – Emissions

Percentage of operations with greenhouse-gas emissions inventories covering Scopes 1 and 2, aligned with GRI 305 emissions disclosures, the GHG Protocol and TCFD recommendations.

KPI – Renewable Energy

Percentage of electricity from renewable sources in relation to total electricity consumption, aligned with GRI 302 disclosures, the GHG Protocol (Scope 2) and TCFD recommendations.

KPI – Electrification

Percentage of electricity consumption in relation to the operations' total energy consumption, aligned with GRI 302 energy-consumption disclosures and energy-transition strategies reported under the TCFD.

KPI – Fossil Fuels

Percentage of total energy consumption derived from fossil fuels, aligned with GRI 302 energy-mix disclosures and TCFD recommendations.

E4 • Climate and Energy

Consolidated 2025 data indicate that mining in Pará has levels of climate and energy management that are compatible with, or higher than, the average observed in Brazilian mining, particularly in emissions monitoring and the use of electricity from renewable sources.

However, results related to process electrification still show a significant opportunity for sector development in the coming years, in line with the principal decarbonization challenges identified for mining in Brazil and globally.

The consolidated information indicates that approximately 90% of operations maintain formal greenhouse-gas emissions inventories covering Scopes 1 and 2, aligned with the GHG Protocol, GRI 305 and TCFD recommendations, reflecting a level of maturity consistent with practices observed among Brazil's leading mining companies.

In energy terms, electricity represents around 43% of total energy consumption across operations, indicating good progress in the electrification of industrial processes while still showing growth potential to accelerate the sector's energy transition. Approximately 85% of the electricity consumed comes from renewable sources, consistent with Brazil's electricity mix, in which the renewable share exceeds 85%, according to EPE and MME data.

At the same time, fossil fuels represent approximately 60% of the operations' energy mix. This result is consistent with IBRAM studies indicating that around 60% of direct emissions from Brazilian mining are associated with diesel consumption in mobile equipment and mining activities, reinforcing opportunities to expand electrification and adopt lower-carbon-intensity fuels.

Taken together, these indicators demonstrate a progressive energy-transition process aligned with the principal international climate-management and reporting references adopted by the mineral sector, including GRI, the GHG Protocol, TCFD and ICMM.

Sources: ANM (Brazilian Mineral Yearbook; Mineral Report 4Q 2024); FAPESPA (Pará Mining Bulletin 2024); SIMINERAL ESG consolidation (2025 baseline); company sustainability disclosures (Vale; Hydro).

E PILLAR – ENVIRONMENTAL

Mining in Pará | Climate and energy management – 2025

Current performance and key opportunities for improvement

PROGRESS

~90% of operations have formal GHG emissions inventories (Scopes 1 and 2)

In line with practices in Brazil's mining sector[1]

~85% of electricity consumed comes from renewable sources

Benefit of Brazil's electricity mix, with >85% renewables[2, 3]

Adoption of international climate management and reporting frameworks

GHG Protocol | GRI 305 | TCFD | ICMM

OPPORTUNITIES



LOW ELECTRIFICATION

Electricity accounts for only ~43% of the operations' total energy consumption

Significant potential to expand process electrification



HIGH DEPENDENCE ON FOSSIL FUELS

Fossil fuels account for ~60% of the operations' energy mix

Consistent with the sector: ~60% of direct emissions from Brazilian mining come from diesel consumption in mobile equipment[4]

Accelerate the energy transition: opportunity to expand electrification, adopt lower-carbon-intensity fuels, and increase energy efficiency

Pará's mining sector demonstrates maturity in climate management and renewable energy use, with clear opportunities to accelerate decarbonization.

[1] IBRAM (2024) – Brazilian Mining GHG Emissions Inventory | [2] EPE (2025) – National Energy Balance (BEN 2025) | [3] MME (2025) – Brazilian electricity mix data | [4] IBRAM (2024) – Brazilian Mining GHG Emissions Inventory

E Pillar – Environmental (Water and Energy)

> **Water efficiency and the energy transition as pillars of sustainable mining in the Amazon.**

Sources: ANM (Brazilian Mineral Yearbook; Mineral Report 4Q 2024); FAPESPA (Pará Mining Bulletin 2024); SIMINERAL ESG consolidation (2025 baseline); company sustainability disclosures (Vale; Hydro).

S

S Pillar – Social

S1	Occupational Health and Safety
S2	Human Rights and the Voluntary Principles
S3	Diversity, Equity and Inclusion
S4	Social Investment and Territorial Development



S PILLAR – SOCIAL

S1

Occupational Health and Safety

S1	**Occupational Health and Safety**
S2	Human Rights and the Voluntary Principles
S3	Diversity, Equity and Inclusion
S4	Social Investment and Territorial Development

S PILLAR – SOCIAL

S1 • Occupational Health and Safety

OCCUPATIONAL HEALTH

100 %

workers covered by an OHS Management System

90 %

companies with mental-health support programs

CONTRACTOR MANAGEMENT

100% contracts

with specific OHS annexes

100 %

contractors trained

ACCIDENT FREQUENCY

LTIFR = 0.73

(average)

90 %

operations with fatality-prevention committees implemented

KPI – Occupational Health

Average percentage of employees of member companies covered by an Occupational Health and Safety (OHS) management system, including the proportion of companies implementing mental-health support programs, aligned with GRI 403 disclosures on occupational health and health promotion.

KPI – Contractor Management

Average percentage of contractor agreements that include specific Occupational Health and Safety (OHS) annexes and percentage of contractor workers trained in OHS before beginning activities, aligned with GRI 403 disclosures on employee and contractor management.

KPI – Accident Frequency

Average Lost-Time Injury Frequency Rate (LTIFR) of member companies, calculated as the number of lost-time accidents divided by total hours worked and multiplied by 1,000,000, including the percentage of companies with fatality-prevention committees implemented, aligned with GRI 403 occupational-accident and prevention indicators.

S1 • Occupational Health and Safety

Consolidated 2025 data indicate a high level of maturity in Occupational Health and Safety (OHS) management in Pará's mineral sector, reflected in the widespread adoption of formal occupational-risk management systems and structured accident-prevention programs.

The consolidated information indicates that 100% of employees of member companies are covered by OHS management systems aligned with GRI 403 guidelines, including health-promotion initiatives and mental-health support programs implemented by approximately 90% of companies.

Contractor management also shows a high degree of structuring. Approximately 100% of contracts with service providers include specific OHS-requirement annexes, while 100% of contractor workers receive safety training before beginning activities, reinforcing the extension of risk-management practices throughout the entire operating chain.

In performance terms, the sector's Lost-Time Injury Frequency Rate (LTIFR) is approximately 0.73 per million hours worked, a level compatible with benchmarks observed among leading Brazilian mining companies affiliated with IBRAM and significantly below historical averages recorded in industrial segments with higher operating risk. In addition, around 90% of member companies have formal committees for fatality prevention or high-potential events, reinforcing a culture of prevention, organizational learning and continuous improvement.

Taken together, these indicators demonstrate that mining in Pará operates under structured safety-management systems, operational-risk controls and preventive governance aligned with international occupational-health-and-safety best practices adopted by the mineral sector, including GRI 403, ICMM and international references for fatality prevention and critical-risk management.

Sources: IBRAM; SmartLab / Observatory for Occupational Safety and Health; GRI 403; ICMM; consolidated data from companies participating in the 2025 sectoral survey.

Mining in Pará | Occupational health and safety – 2025

Mature management, prevention that saves lives, and performance above the Brazilian industry average.

SAFETY PERFORMANCE

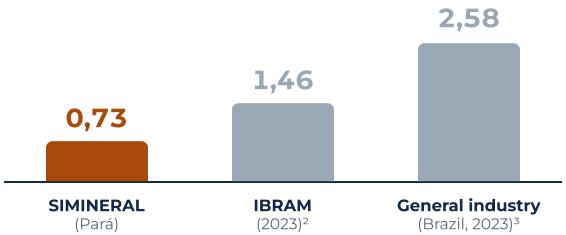
0,73 Lost-time accident frequency rate (LTIFR) per million hours worked

~90% of companies have formal fatality prevention or high-potential event committees

Performance consistent with best practices in Brazilian mining (IBRAM) and significantly lower than the industry in general.

PERFORMANCE: SIMINERAL VS. PUBLIC BENCHMARKS[1]

Lost-time accident frequency rate (LTIFR) per million hours worked



SIMINERAL'S PERFORMANCE IS:

50% better than the average performance of the mining sector (IBRAM)

72% better than the average for Brazilian industry

EXCELLENCE THAT PROTECTS PEOPLE AND CREATES VALUE

- Prevention and continuous improvement culture
- Risk management across the entire operational chain
- Alignment with international best practices (GRI 403, ICMM)

[1] Benchmarks: IBRAM – Brazilian Mineral Yearbook 2023; SmartLab/Occupational Safety and Health Observatory – Workplace Accident Overview 2023. [2] Mining: average of IBRAM member companies (2023). [3] General industry: average for manufacturing, extractive industries, and construction (2023).

Mining in Pará | Occupational health and safety – 2025

MATURITY AND SCOPE OF OHS MANAGEMENT

100%
of employees covered by OHS management systems (GRI 403)

~90%
of companies have health promotion and mental health support programs

100%
of contracts with service providers include specific OHS requirements

100%
of contractors receive safety training before starting activities

PRACTICES THAT STRENGTHEN SAFETY AND WELL-BEING

- Identification and control of critical risks
- Visible leadership and engagement
- Promotion of physical and mental health
- Continuous training and capacity building
- Event investigation and organizational learning
- Indicators and targets focused on results

Mining in Pará operates with structured safety management systems, aligned with international best practices and with performance above the industry average.

Sources: IBRAM; SmartLab/Occupational Safety and Health Observatory; GRI 403; ICMM; consolidated data from companies participating in the 2025 sectoral survey.

Occupational Health and Safety

Taken together, these indicators demonstrate that mining in Pará operates under structured safety-management systems, operational-risk controls and preventive governance aligned with international occupational-health-and-safety best practices adopted by the mineral sector, including GRI 403, ICMM and international references for fatality prevention and critical-risk management.

S PILLAR – SOCIAL

S2

Human Rights and the Voluntary Principles

S1 Occupational Health and Safety

S2 Human Rights and the Voluntary Principles

S3 Diversity, Equity and Inclusion

S4 Social Investment and Territorial Development

S PILLAR – SOCIAL

S2 • Human Rights and the Voluntary Principles

FORMAL HUMAN RIGHTS POLICY

80 %

have a policy

VOLUNTARY PRINCIPLES ON SECURITY AND HUMAN RIGHTS

~68 %

under implementation (average)

HUMAN RIGHTS DUE DILIGENCE

70 %

due-diligence implementation

KPI – Human Rights Policy

Percentage of member companies with a formally established Human Rights Policy aligned with international references, consistent with GRI 2 disclosures on Human Rights policies and commitments and with the UN Guiding Principles on Business and Human Rights (UNGPs).

KPI – Voluntary Principles

Percentage of member companies implementing the Voluntary Principles on Security and Human Rights (VPSHR), with training implemented for employees and contractors, consistent with GRI 410 disclosures and the Voluntary Principles on Security and Human Rights.

KPI – Human Rights Due Diligence

Percentage of member companies that have implemented external Human Rights due-diligence processes, including coverage in relation to the universe of companies mapped by the Business and Human Rights Thermometer (Proactiva), aligned with GRI 412 and the UN Guiding Principles on Business and Human Rights (UNGPs).

S2 • Human Rights and the Voluntary Principles

Consolidated data indicate a high level of formalization of Human Rights policies in Pará's mineral sector, reflected in the growing adoption of governance instruments aligned with international references for corporate responsibility and social-risk management.

The consolidated information indicates that approximately 80% of member companies have formal Human Rights policies aligned with the UN Guiding Principles on Business and Human Rights (UNGPs) and the institutional disclosures provided for under GRI 2.

In addition, around 68% of companies are in the process of implementing the Voluntary Principles on Security and Human Rights (VPSHR), including specific training for employees and security teams, reinforcing the prevention of risks associated with interaction with public and private security forces.

In preventive management, approximately 70% of companies have implemented structured Human Rights due-diligence processes, aligned with GRI 412 and international best practices for identifying, preventing and mitigating social risks.

At the state level, Pará represents one of the country's most relevant environments for consolidating corporate Human Rights practices in the mineral sector, given the presence of Indigenous territories, traditional communities and high socio-environmental complexity. In this setting, formal mining has expanded the adoption of institutional policies, dialogue mechanisms, due-diligence processes and preventive protocols aligned with international references for social governance and stakeholder engagement.

Taken together, these indicators demonstrate a progressive strengthening of Human Rights governance in the mineral sector, aligned with international references for corporate responsibility, preventive social-risk management and good territorial-engagement practices.

Sources: UNGPs / United Nations; GRI 2; GRI 412; VPSHR; IFC Performance Standards; consolidated data from companies participating in the 2025 sectoral survey.

Human Rights in mining in Pará

STATE CONTEXT – PARÁ

Pará has one of the most structured environments in the country for the adoption of corporate Human Rights policies in the mining sector.

In a socially complex context, marked by the presence of Indigenous territories and traditional communities, formal mining has incorporated risk mitigation instruments, including institutional policies, due diligence processes, training, security protocols, and mechanisms for dialogue and territorial engagement.

- Dialogue and stakeholder engagement
- Social risk mitigation
- Respect for the rights of Indigenous peoples and communities
- Governance and transparency

NATIONAL COMPARISON – MINING

The level of formalization of Human Rights policies in Pará's mining sector is above the average for the sector in Brazil.



Public data indicate a trend of continuous progress in the Brazilian mining sector regarding Human Rights.

* Source: IBRAM – Brazilian Mineral Yearbook 2023 (reference: Human Rights policies)

Sources: UNGPs/UN; GRI 2; GRI 412; VPSHR; IFC Performance Standards; IBRAM – Brazilian Mineral Yearbook 2023; consolidated data from companies participating in the 2025 sectoral survey.

S PILLAR – SOCIAL

S3

Diversity, Equity and Inclusion

S1 Occupational Health and Safety

S2 Human Rights and the Voluntary Principles

S3 Diversity, Equity and Inclusion

S4 Social Investment and Territorial Development

S3 • Diversity, Equity and Inclusion

DIVERSITY, EQUITY AND NON-DISCRIMINATION POLICY

100%

companies with a policy implemented

FEMALE PARTICIPATION

16% total

(average)

% WOMEN IN MANAGEMENT POSITIONS

14%

(average)

PAY EQUITY

78% ratio

(average)

PERSONS WITH DISABILITIES (PWD)

80%

have targets

KPI – DEI Policy

Percentage of member companies with a formal Diversity, Equity and Inclusion (DEI) and non-discrimination policy implemented, including the existence of a grievance channel, aligned with GRI 2 and GRI 406 disclosures on policies, reporting mechanisms and non-discrimination.

KPI – Female Participation

Average percentage of women in the total workforce and in leadership positions at member companies, aligned with GRI 405 gender-diversity disclosures.

KPI – Pay Equity

Average ratio of women's base salary to men's base salary among member companies, and percentage of contractor companies that have formal pay-equity targets, procedures or policies, aligned with GRI 405 disclosures on equal-pay practices.

KPI – Persons with Disabilities (PwD)

Percentage of member companies and contractor companies that adopt inclusion targets for persons with disabilities equal to or higher than legal requirements, aligned with GRI 405 diversity-and-inclusion disclosures.

S3 • Diversity, Equity and Inclusion

The data collected indicate progressive advances in incorporating Diversity, Equity and Inclusion (DEI) policies into Pará's mineral sector, reflected in the formalization of corporate policies, reporting mechanisms and initiatives aimed at promoting more inclusive workplaces.

The consolidated information indicates that 100% of member companies have formal DEI and non-discrimination policies, accompanied by institutional grievance channels, aligned with GRI 2 and GRI 406.

In terms of gender diversity, women account for an average of approximately 16% of the total workforce of member companies and 14% of leadership positions, levels consistent with benchmarks observed in Brazilian mining and above historical averages for the national extractive industry.

In pay equity, the average ratio of women's base salary to men's reaches approximately 78%, reflecting gradual progress in a sector historically characterized by low female representation.

In addition, around 80% of member companies and their strategic suppliers adopt targets for the inclusion of persons with disabilities (PwD) equal to or higher than legal requirements, reinforcing the expansion of inclusion and accessibility practices in the workplace.

At the state level, formal mining in Pará has expanded initiatives focused on inclusion, attracting female talent, training and strengthening corporate practices of equity and non-discrimination, taking into account the social and cultural diversity present in the Amazon.

Taken together, these indicators demonstrate an ongoing process of strengthening diversity, equity and inclusion practices in the mineral sector, aligned with international references for corporate social governance and sustainable development.

Sources: GRI 2; GRI 405; GRI 406; UN Women; IBRAM; consolidated data from companies participating in the 2025 sectoral survey.

S PILLAR – SOCIAL

Diversity, Equity and Inclusion (DEI) in mining in Pará – 2025

Commitment to people, respect for differences, and inclusive work environments.

DEI POLICIES

100%

of companies have formal DEI and non-discrimination policies

With institutional reporting channels aligned with GRI 2 and GRI 406.

GENDER DIVERSITY

16%

women in the total workforce

14%

women in leadership positions

Levels compatible with Brazilian mining and above the historical averages of the national extractive industry.*

PAY EQUITY

78%

average ratio of women's base salary to men's

Aligned with GRI 405.

INCLUSION OF PEOPLE WITH DISABILITIES

80%

of companies and their strategic suppliers adopt targets for the inclusion of people with disabilities that meet or exceed legal requirements.

GOVERNANCE AND CULTURE

Ongoing process to strengthen a culture of respect, equity, and non-discrimination.

Training, awareness, and attraction initiatives for diverse talent.

Real progress. Continuous transformation.

* Source: IBRAM – Brazilian Mineral Yearbook 2023

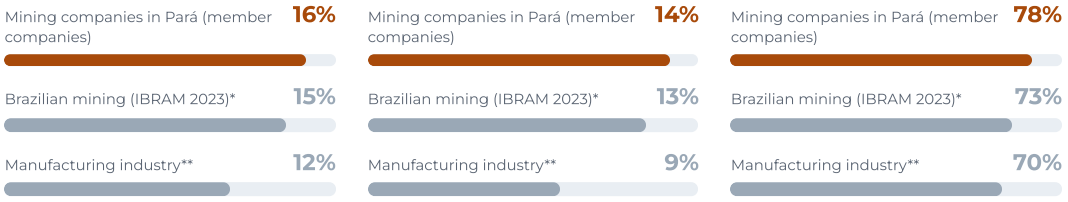
Diversity, Equity and Inclusion (DEI) in mining in Pará – 2025

STATE CONTEXT – PARÁ

Pará presents unique challenges and opportunities for promoting diversity and inclusion, considering the presence of traditional communities, cultural diversity, and the different social groups in the Amazon.

Formal mining has expanded initiatives focused on inclusion, training, attracting female talent, and strengthening corporate equity and non-discrimination practices.

COMPARISON – PUBLIC BENCHMARKS



The indicators of member companies in Pará show performance equal to or above the averages for Brazilian mining and the manufacturing industry.

REFERENCES AND STANDARDS

- **GRI 2** – General Disclosures
- **GRI 405** – Diversity and Equal Opportunity
- **GRI 406** – Non-discrimination
- **UN Women** – Gender and empowerment indicators
- **IBRAM** – Sectoral references for Brazilian mining

Sources: GRI 2; GRI 405; GRI 406; UN Women; IBRAM – Brazilian Mineral Yearbook 2023; consolidated data from companies participating in the 2025 sectoral survey. * Source: IBRAM – Brazilian Mineral Yearbook 2023. ** Source: IBGE – Annual Industrial Survey (2022)

Human Rights, Diversity and Inclusion



People at the center of the strategy: respect, inclusion and sustainable development.

S PILLAR – SOCIAL

S4

Social Investment and Territorial Development

S1 Occupational Health and Safety

S2 Human Rights and the Voluntary Principles

S3 Diversity, Equity and Inclusion

S4 Social Investment and Territorial Development

S4a – Social Investment – Employment and Benefits

LOCAL WORKFORCE

~72%

(average) workers from the State of Pará

LOCAL SUPPLIERS

~50%

(average) spending with suppliers in the state

LOCAL TAXES, FEES AND TRANSFERS

BRL 953M

total value distributed in Pará

KPI – Local Workforce

Average percentage of direct employees and contractors hired in the State of Pará, aligned with the concepts of local hiring and indirect economic impacts under GRI 202-2 and GRI 203.

KPI – Local Suppliers

Average percentage of spending with suppliers located in the State of Pará, in accordance with GRI 204-1 – Proportion of spending on local suppliers.

KPI – Local Taxes, Fees and Transfers

Total economic value distributed by companies in the State of Pará in 2025, including CFEM, taxes and community investments, in accordance with GRI 201-1.

S4a – Social Investment – Employment and Benefits

Consolidated 2025 data indicate that mining in Pará plays an important role in stimulating the regional economy through job creation, strengthening local value chains and distributing public revenues in the territories where operations are located.

The consolidated information indicates that approximately 72% of the direct and contractor workforce of member companies is hired in the State of Pará, reflecting local-hiring practices aligned with GRI 202-2 and GRI 203 guidelines.

In the supply chain, around 50% of companies' operating expenditures are directed to suppliers located in the state, contributing to strengthening the regional business base and expanding the indirect economic impacts of mining activity.

In mining economies, local hiring, stronger regional suppliers and redistribution of mineral revenues are recognized by the World Bank and ICMM as central mechanisms of territorial development. In Pará, this model combines regional job creation, stronger local value chains and public transfers associated with CFEM, expanding the local economic impacts of mining activity.

Taken together, these indicators demonstrate mining's role as a driver of territorial development, income generation and economic strengthening in Pará's mining municipalities, aligned with international references for indirect economic impacts and sustainable local development.

Sources: GRI – GRI 201 Economic Performance; GRI 202 Market Presence; GRI 203 Indirect Economic Impacts; GRI 204 Procurement Practices; SIMINERAL – Sectoral ESG Consolidation (2025).

S4b • Social Investment – General

MANDATORY – VALUE

BRL 213.2M

2025 value

VOLUNTARY – VALUE

BRL 1.79B

2025 value

KPI – Mandatory and Voluntary Social Investments (2025)

Total value of social investments made by companies in 2025, broken down between mandatory investments and voluntary investments, aligned with GRI 203 – Indirect Economic Impacts and GRI 413 – Local Communities.

*9 responding companies

S4b • Social Investment – General

Mandatory Social Investments – Definition

Mandatory social investments are those arising from legal, regulatory or contractual requirements necessary to enable, mitigate or compensate for impacts associated with the implementation, expansion or operation of projects. They include investments established through environmental licensing, licensing conditions, Conduct Adjustment Agreements (TACs), formal agreements with public authorities and other administrative or judicial instruments that establish social or community-infrastructure obligations. Technical references: GRI 203 – Indirect Economic Impacts / GRI 413 – Local Communities / IFC PS1 – Assessment and Management of Environmental and Social Risks and Impacts.

Voluntary Social Investments – Definition

Voluntary social investments are those defined on the company's own initiative, not required by any legal, regulatory or contractual instrument, whose principal benefit is directed to the community and which contribute to the social, economic or institutional development of the territories where the company operates. They include projects and programs in health, education, income generation and public infrastructure, provided that they are not linked to mitigating direct impacts of the operation. Technical references: GRI 203 – Indirect Economic Impacts / GRI 413 – Local Communities / UN Global Compact – Contribution to local development.

S4b • Social Investment – General

Preliminary data indicate that Pará's mineral sector maintains a structured portfolio of social investments focused on areas such as health, education, income generation, public infrastructure and institutional strengthening, contributing to the socioeconomic development of the territories where operations are located.

In 2025, social investments made by member companies reached approximately BRL 213 million in mandatory and structured initiatives, in addition to more than BRL 1.7 billion in voluntary social investments, demonstrating the significance of the sector's social contribution to mining municipalities.

Resources are applied through programs and projects that directly benefit local populations and strengthen institutional capacities, the creation of economic opportunities and improvements in living conditions in the regions where mining activity is present.

At the state level, benefit-sharing mechanisms, such as corporate social investments and the redistribution of mineral revenues, are widely recognized in international mining jurisdictions as relevant instruments for promoting sustainable territorial development. In Pará, this model combines structuring private investments with the redistribution of public revenues from CFEM, strengthening the capacity to finance public policies and municipal investments.

Taken together, these initiatives demonstrate mining's role as a driver of territorial development and shared-value creation, aligned with international references for indirect economic impacts and community engagement under GRI 203 and GRI 413.

Sources: GRI 203; GRI 413; ICMM; ANM/CFEM; consolidated data from companies participating in the 2025 sectoral survey.

S4c – Social Investment – Projects

HEALTH

BRL 158.8M

2025 value

61,321

direct project beneficiaries

EDUCATION

BRL 43.8M

2025 value

7,602

direct project beneficiaries

INCOME GENERATION

BRL 63.9M

2025 value

1,278

families directly benefiting from projects

PUBLIC INFRASTRUCTURE

BRL 952M

2025 value

62,792

estimated indirect beneficiaries

KPI – Social Investment by Area (2025)

Total amount invested in Health, Education, Income Generation and Public Infrastructure, broken down between mandatory and voluntary investments, aligned with GRI 203 and GRI 413.

KPI – Beneficiaries of Social Projects (2025)

Total number of direct beneficiaries of social and infrastructure projects supported by the companies, aligned with GRI 413 disclosures on impacts on communities.

Note: 9 responding companies

S4c – Social Investment – Projects

Education – Definition

Includes investments in formal and non-formal education, such as support for schools, improvements to educational infrastructure, training programs, technical and professional education, scholarships, community education projects and educational-qualification initiatives.

Income Generation – Definition

Includes investments in local productive-development programs, professional training, support for entrepreneurship, strengthening local value chains, productive inclusion and initiatives aimed at the economic autonomy of communities. These do not include regular commercial contracts or ordinary operating expenses.

Public Infrastructure – Definition

Includes investments in public works, equipment or services whose principal benefit is community-oriented, such as sanitation, social facilities, urban or community infrastructure, supply systems, energy or local mobility, provided that they are not essential to the project's operations.

S4c – Social Investment – Projects

Social investments by mining companies in Pará convert operational presence into territorial development, strengthening essential services, local capacities and economic opportunities in mining municipalities.

Preliminary data indicate that sector social investments are concentrated in structuring projects in health, education, income generation and public infrastructure, aligned with international local-development practices recognized by the World Bank and ICMM, which highlight the role of extractive industries in promoting socioeconomic benefits in the territories where they operate.

In 2025, social investments in these areas reached approximately BRL 418.7 million, considering mandatory and voluntary investments. Of this total, approximately BRL 158.8 million was invested in health, BRL 43.8 million in education, BRL 63.9 million in income-generation programs and BRL 952 million in public infrastructure.

The supported initiatives directly benefited approximately 61.3 thousand people through health programs, 7.6 thousand beneficiaries through education projects, 1,278 families through income-generation initiatives and around 62.8 thousand indirect beneficiaries associated with investments in local infrastructure and public services.

Taken together, these initiatives demonstrate mining's contribution to strengthening local institutional and socioeconomic capacities, reinforcing the sector's role as a driver of sustainable territorial development in Pará.

Sources: GRI – GRI 203 Indirect Economic Impacts; GRI 413 Local Communities; ICMM – Mining Principles and Social Performance Framework; World Bank – Extractives Global Programmatic Support (EGPS); SIMINERAL – Sectoral ESG Consolidation (2025).

S PILLAR – SOCIAL

Social investments by the mining sector in Pará – 2025

Investing today to transform territories and generate sustainable development.

Social investments by mining companies in Pará convert operational presence into territorial development, strengthening essential services, local capacities and economic opportunities in mining municipalities.

Sector investments are concentrated in structuring projects in the areas of health, education, income generation, and public infrastructure, aligned with internationally recognized local development practices from the World Bank and ICMM.

Social investments that generate real impact and shared value in the territories.

SOCIAL INVESTMENTS BY AREA – 2025

HEALTH

BRL 158.8M

2025 value

61,321

direct project beneficiaries

EDUCATION

BRL 43.8M

2025 value

7,602

direct project beneficiaries

INCOME GENERATION

BRL 63.9M

2025 value

1,278

families directly benefiting from the projects

PUBLIC INFRASTRUCTURE

BRL 952M

2025 value

62,792

estimated indirect beneficiaries

S PILLAR – SOCIAL

Social investments by the mining sector in Pará – 2025

TOTAL INVESTED IN 2025

+ 2 billion reais

mandatory + voluntary investments

SOCIAL IMPACT IN 2025

+ 132 thousand

people benefiting directly and indirectly

STATE CONTEXT – PARÁ (COMPARATIVE REFERENCE)

In mining regions, the World Bank and ICMM recognize that social investments and the redistribution of mineral revenues are central mechanisms for territorial development.

In Pará, this model combines companies' social investments with the redistribution of public revenues from CFEM, strengthening public services and local opportunities.

Social investments by the mining sector strengthen capacities, create opportunities, and promote sustainable development in the territories where mining activities are present.

REFERENCES AND BENCHMARKS

World Bank	ICMM	GRI 203	GRI 413	ANM/CFEM
Local development drivers	Local development framework	Indirect Economic Impacts	Local Communities	Public data

Sources: World Bank; ICMM; GRI 203; GRI 413; ANM/CFEM; consolidated data from companies participating in the 2025 sectoral survey.

G

G Pillar – Governance

G1	Tailings Dam Management and Emergency Preparedness
G2	ESG Governance

G PILLAR – GOVERNANCE

G1

Tailings Dam Management and Emergency Preparedness

G1 **Tailings Dam Management and Emergency Preparedness**

G2 ESG Governance

G PILLAR – GOVERNANCE

G1a – Tailings Dams and Industrial Waste

LEGACY-LIABILITY MANAGEMENT

67%

decommissioning plans up to date

TECHNOLOGY TRANSITION

32.6%

production using dry tailings disposal

KPI – Legacy-Liability Management (2025)

Percentage of member companies with approved, ongoing or completed tailings-dam decommissioning plans, aligned with ANM regulatory requirements, GRI 2 risk-management disclosures and ICMM best practices.

KPI – Technology Transition (2025)

Percentage of member-company production using dry tailings disposal, as well as the percentage of companies with projects underway to transition from wet to dry tailings, aligned with GRI 302 operational-innovation guidelines, ANM technical recommendations and ICMM practices.

G1a – Tailings Dams and Industrial Waste

Consolidated 2025 member data indicate that mining in Pará has a relatively low exposure profile to upstream tailings dams, reflecting both the geographic distribution of these structures in Brazil and advances in risk-management practices and technological modernization in the state's mineral sector.

Public data from ANM and IBRAM show that the number of upstream dams in Brazil has been progressively reduced since 2019 as a result of regulatory requirements introduced following the Mariana and Brumadinho events. Within this context, Pará has a low relative share of these structures compared with historically established mining states, reflecting the predominance of more recent construction methods and disposal solutions aligned with the sector's regulatory evolution.

In legacy-liability management, approximately 67% of member companies have tailings-dam decommissioning plans that are approved, in progress or completed, in compliance with ANM requirements, the National Dam Safety Policy and international risk-management best practices applicable to mining.

At the same time, adoption of dry-tailings-disposal technologies has been progressing. Approximately 32.6% of the mineral production of member companies already uses dry-disposal methods, helping reduce dependence on conventional tailings-storage structures and reinforcing the transition toward operating models with lower geotechnical and water-related risk.

Taken together, these indicators demonstrate an ongoing process of strengthening tailings-dam governance, reducing risk and modernizing technology, aligned with ICMM guidelines, the Global Industry Standard on Tailings Management (GISTM) and Brazilian regulatory requirements for safe tailings management.

Sources: ANM – Integrated Dam Safety Management System; GRI – GRI 2 General Disclosures; ICMM – Global Industry Standard on Tailings Management (GISTM); SIMINERAL – Sectoral ESG Consolidation (2025).

G PILLAR – GOVERNANCE

G1b – Emergency Preparedness and Response and Institutional Integration

EMERGENCY RESPONSE PLAN (PAE)

90 %

companies with a PAE in place

PAE-BM – MINING DAM

85 %

dams with a PAE-BM in place

INSTITUTIONAL INTEGRATION

80 %

integrated plan with Civil Defense and/or municipal governments

KPI – PAE

Percentage of member companies with an Emergency Action Plan (PAE) in place, in compliance with ANM requirements, IFC PS1 risk-management guidelines and ICMM best practices.

KPI – PAE-BM

Percentage of member companies with mining dams covered by a Mining Dam Emergency Action Plan (PAE-BM), in compliance with ANM regulations and ICMM international guidelines.

KPI – Institutional Integration of PAE-BM

Percentage of member companies with PAE-BMs formally integrated with Civil Defense and municipal governments, including drills and integrated drill schedules, aligned with ANM requirements, IFC PS1 best practices for emergency preparedness and response and ICMM guidelines.

G1b – Emergency Preparedness and Response and Institutional Integration

Consolidated 2025 data indicate a high level of structuring of Emergency Action Plans (PAEs) among SIMINERAL member companies, reflecting the consolidation of preventive risk-management practices across mineral-sector operations in Pará.

The information collected indicates that approximately 90% of companies have formally established PAEs, while around 85% of dams have Mining Dam Emergency Action Plans (PAE-BMs), in compliance with ANM regulatory requirements and the National Dam Safety Policy.

In addition, approximately 80% of these plans are formally integrated with Civil Defense agencies and municipal governments, including periodic drills, training and joint emergency-preparedness exercises.

Under international references for operational-risk management, such as ICMM and IFC guidelines and the Global Industry Standard on Tailings Management (GISTM), institutional integration, communication protocols and drills are considered central elements of effective emergency-response systems.

Taken together, these indicators demonstrate a management model oriented toward prevention, operational readiness and institutional coordination, aligned with international best practices for risk management and operational safety in the mineral sector.

Sources: ANM; Federal Law No. 14,066/2020; ICMM; IFC; GISTM; consolidated data from companies participating in the 2025 sectoral survey.

Tailings Dam Management and Emergency Preparedness

Responsible and safe mining in Pará – 2025. Strengthening governance, reducing risks, and protecting people and territories.

DAMS – RISK MANAGEMENT AND MODERNIZATION

2025 data indicate that mining in Pará has a low level of exposure to dams raised using the upstream method, reflecting both the geographic distribution of these structures in Brazil and regulatory evolution and the adoption of modern tailings management practices, with a predominance of construction methods and technologies aligned with the sector's best practices. According to ANM's public register (SIGBM), there are currently no operating mining dams in the State of Pará built using the upstream raising method.

67% of member companies have dam decommissioning plans that are approved, underway or completed.

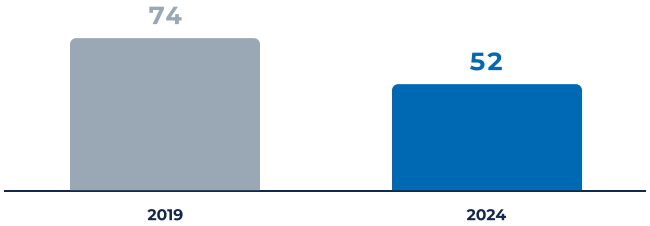
In compliance with ANM requirements, the National Dam Safety Policy, and international best practices.

32.6% of the mineral production of member companies already uses dry tailings disposal methods.

Reducing dependence on conventional structures and moving toward operating models with lower geotechnical and water-related risk.

UPSTREAM DAMS IN BRAZIL

Continuous reduction since 2019



Reduction of **29%** in the number of upstream dams in Brazil between 2019 and 2024*

The construction and raising of dams using the upstream method have been prohibited in Brazil since 2019 under ANM regulations, and the remaining structures are undergoing de-characterization processes.

* Source: ANM – Integrated Mining Dam Management System (SIGBM) | IBRAM – Sector Reports 2019–2024

G PILLAR – GOVERNANCE

Tailings Dam Management and Emergency Preparedness

2025 data indicate a high level of structuring of Emergency Action Plans (EAPs) among member companies, reflecting the consolidation of preventive risk management practices in mining operations in Pará.

Preventive management, technology, and institutional integration: pillars of safe and sustainable mining.

EMERGENCY ACTION PLANS – EAP

90%

of member companies have formally established EAPs.

85%

of dams have an Emergency Action Plan for Mining Dams (PAE-BM).

80%

of PAE-BM plans are formally integrated with Civil Defense agencies and municipal governments.

With periodic drills, training, and joint exercises.

In compliance with ANM regulatory requirements and the National Dam Safety Policy.

G PILLAR – GOVERNANCE

Tailings Dam Management and Emergency Preparedness

INTERNATIONAL REFERENCES

ICMM, IFC, and Global Industry Standard on Tailings Management (GISTM) guidelines consider institutional integration, community protection, and emergency drills to be central elements for the effectiveness of emergency response systems.

Continuous strengthening of dam governance, risk reduction, and technological modernization, aligned with ICMM and GISTM guidelines and Brazilian regulatory requirements for safe tailings management.

Management model focused on prevention, operational protection, and institutional coordination, aligned with international best practices in risk management and operational safety in the mining sector.

REFERENCES AND DATA SOURCES

ANM
National Mining Agency

IBRAM
Brazilian Mining Institute

Law 14,066/2020
National Dam Safety Policy

ICMM
International Council on Mining & Metals

GISTM
Global Industry Standard on Tailings Management

IFC
International Finance Corporation

Consolidated data from companies participating in the 2025 sectoral survey

G PILLAR – GOVERNANCE

G2

ESG Governance

G1 Tailings Dam Management and Emergency Preparedness

G2 **ESG Governance**

G2 – Sectoral Governance

PUBLIC ESG COMMITMENTS

80%

companies that are signatories or participants

CORPORATE POLICIES

100 %

companies have at least one ESG-related policy

SECTORAL ACTIONS

100 %

companies participate in sectoral actions

KPI – Public Commitments

Percentage of SIMINERAL member companies that are signatories to or participants in public ESG-related commitments, aligned with GRI 2 disclosures on commitments, memberships and external initiatives and with international references such as the UN Global Compact and OECD.

KPI – Corporate Policies

Percentage of SIMINERAL member companies that have at least one formal corporate policy related to ESG (e.g., Sustainability, Human Rights, Ethics, Compliance), aligned with GRI 2 disclosures on policies and governance.

KPI – Sectoral Actions

Percentage of SIMINERAL member companies participating in formal ESG-related sectoral actions, aligned with GRI 2 disclosures on collective engagement and collaborative initiatives and with ICMM sectoral best practices.

G2 – Sectoral Governance

Consolidated 2025 data indicate a high level of institutional engagement by SIMINERAL member companies in public commitments related to the ESG agenda, reflecting the consolidation of corporate-governance and sectoral-coordination practices.

The information collected shows that 80% of member companies are signatories to or participants in public initiatives related to the ESG agenda, including voluntary commitments and international sustainability platforms, aligned with GRI 2 disclosures and international references such as the United Nations Global Compact and the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises.

In addition, 100% of participating companies have formal corporate policies related to ESG topics, including sustainability, ethics, compliance and human rights, and participate in structured sectoral initiatives and actions promoted by SIMINERAL.

In international assessments of governance in the extractive sector, adoption of public commitments, corporate policies and collective sectoral actions is recognized by organizations such as the United Nations, the Organisation for Economic Co-operation and Development and the International Council on Mining and Metals as relevant to strengthening transparency, risk management and the social legitimacy of mining activities.

Sources: SIMINERAL institutional survey (2026); GRI 2; UN Global Compact; OECD Guidelines for Multinational Enterprises; ICMM Mining Principles.

03
Conclusion



Conclusion

Mining in Pará operates in one of the most sensitive and strategic territories on the planet, the Brazilian Amazon, even though its operations are concentrated primarily in established areas. This context requires high standards of environmental, social and governance responsibility.

The indicators consolidated in this report demonstrate that Pará's mineral sector has made consistent progress in managing its impacts, risks and opportunities, aligned with international ESG best practices.

Under the Environmental Pillar, key strengths include robust regional environmental licensing, structured management of protected areas and biodiversity, efficient and responsible water use, and continued progress in energy, climate and emissions management. These elements reinforce the sector's capacity to combine production scale with structured environmental governance in the Amazon.

Under the Social Pillar, the data demonstrate mining's important role in job and income generation, structuring social investment, promotion of Human Rights, occupational health and safety, diversity, equity and inclusion, and the strengthening of territorial development in Pará's mining municipalities.

Under the Governance Pillar, there is increasing maturity in tailings-dam management and emergency preparedness, as well as in the adoption of corporate policies, public commitments and coordinated sectoral actions, strengthening transparency, legal certainty and institutional trust.

Taken together, this evidence reinforces the role of Pará's mineral sector as an active participant in Brazil's industrial-sustainability agenda, contributing to the state's economic, social and environmental development.

Through the joint efforts of its member companies, SIMINERAL is consolidating its position as a platform for technical, institutional and strategic coordination supporting the continuous advancement of the ESG agenda for mining in Pará and the strengthening of responsible mining in the Amazon.



SIMINERAL

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