



We are committed to a comprehensive transformation of the mining industry, including everything from the processes and techniques used to our relationships with people and nature. We recognise our relevance and influence within the contexts in which we are present, above all those related to socio-economic and environmental questions. We therefore understand that it is necessary to intensify how we listen and dialogue. We are available, open and have a genuine desire to evolve.

This document provides the foundations of this transformation. The sector has publically assumed the commitments outlined here, around which various actions, plans and targets will be developed and implemented, in order to enable society to learn about and accompany, both transparently and objectively, the evolution of legal mining activities throughout Brazil. We understand that the greater the social participation, the better our decision making will be.

We therefore recognise our failures; we deeply regret the loss of lives; and the social, economic, environmental, cultural and psychological impacts resulting from the recent tailings dam failures. The suffering associated to these losses and impacts are now unfortunately part of our history and serves as a warning of the unwavering necessity of honouring all efforts to guarantee operational safety.

The dam failures have jeopardised the ability for us to continue mining, in other words, our ability to continue providing a range of mineral resources to society that, once transformed into products, improve standards of living and enable human development. Mining can- and must- be a vector for development; an inducer of technological transformation; an active contributor to a balanced and inclusive way of life; a protagonist of circular economy, an agent of environmental preservation. Above all, mining should be responsible.

In this context, it is vital that we offer answers to questions regarding our operational safety and, consequently, the costs and benefits of our presence around the country.

What is the future of mining? And, more importantly, what does the mine of the future look like?

In light of everything that has happened, answering these questions is one of the ways in which we can offer accountability to society, learning from the lessons of the past and reaffirming our responsibility to guarantee the safety of our operations.

We do not condone mining at any cost. Fulfilling the commitments established in this document will mean undertaking a deep structural transformation of Brazilian mining over the next several years. This will be an transformation based on common objectives that will engage the whole sector, representing unprecedented measures enacted by an activity that has long been a part of Brazil. We understand that this is the only way to restore our relationships and re-establish our credibility re-regaining the trust of society and recognition that this industry is fully capable of offering greater safety and more sustainable production of the metals and minerals necessary for society.

The goal of this letter is to make a public declaration to make the changes to evolution the mining industry.

The Brazilian Mining Association hopes that as many national and international mining companies as possible will voluntarily adhere to this document. To this end, it will consistently report on our progress towards implementing the actions related to the fulfilment of the below commitments.



OPERATIONAL SAFETY

The Brazilian Mining Association believes that the identification of risks and dangers and the ability to control them through effective risks management and mitigation processes are vital to ensuring that the operations of any economic activity present a level of safety that meets or exceeds the required standards.

Actions

1. Contribute to a new framework of standards and laws that aim to regulate mining into the future.
2. Foster the creation of a centre of excellence for operational safety and research and development (R&D) within the mining sector to share and develop good practices.
3. Publish an annual report on operational safety developed through collaborative forums between mining companies, academic institutions and non-governmental organisations.

TAILINGS DISPOSAL DAMS AND STRUCTURES

The Brazilian Mining Association will make every possible effort to ensure that the management of tailings disposal dams and structures meet the best global standards, publicising all information regarding their safety, any impacts resulting from incidents and the actions to be taken in emergency situations.

Actions

1. Provide greater transparency and visibility to the management and use of dams;
2. Carry out research in optimising processing with academia and suppliers, in order to reduce the generation of tailings and adopt new disposal practices;
3. Encourage companies to prioritise a cautious approach to managing dam risks, publicising mitigatory actions to ensure transparency and visibility.

OCCUPATIONAL HEALTH AND SAFETY

The Brazilian Mining Association expresses its commitment to the health and safety of its employees, whether direct or indirect, applying and expanding innovative measures that induce good practices which guarantee occupational health and appropriate work conditions, thus preserving both life and our way of life.

Actions

1. Aim to eliminate fatalities and incapacitating occupational diseases;
2. Guarantee that risk managements is efficiently integrated throughout our processes, in turn becoming a reference in Brazil.
3. Promote investment in technological innovation, research, development and training focused on promoting health and an appropriate work environment, in order to minimise risk exposure to people.

MITIGATION OF ENVIRONMENTAL IMPACTS

As in any other productive activity, the mining industry generates environmental impacts. However, before our impacts begin we conduct studies aimed at preventing, mitigating, recovering and/or compensating these via environmental controls. Fully aware of our responsibility, the Brazilian mining sector commits to improving environmental impact studies and existing environmental controls, thus contributing to the



preservation of ecosystems and biodiversity.

Actions

1. Incorporate all environmental control measures into business plans seeking to improve mining processes. Develop and optimize technologies that guarantee the improvement of environmental controls;
2. Plan, implement and operationalise mine closure measures and minimise environmental liabilities associated with our operations, with the involvement of society.
3. Encourage companies that operates within the same region to implement best practices related to environmental controls, identifying synergies and potential for positive impacts.

LOCAL AND FUTURE DEVELOPMENT OF TERRITORIES

The Brazilian Mining Association will encourage the mining sector ensure our development coexisting harmoniously with other economic segments, contributing to the preservation of their viability and respecting local dynamics. It is therefore understood that mining activities must be inclusive and capable of effectively sharing value with all parties affected by our activities into future in the territories in which the activities take place or exert an influence.

Actions

1. Promote multi-sector governance in mining territories to define a positive and transformative agenda, sharing value with all stakeholders.
2. Encourage mining companies to voluntarily increase investments targeting local development and managing impacts.
3. Stimulate the adoption of Sustainable Development Objectives (SDO), in order to establish agendas for local development, taking into account the particularities and potential of each territory.
4. Encourage mining companies to create, implement and disseminate mining leadership programs across mining territories with a focus on long-term development.

COMMUNITY RELATIONSHIPS

The Brazilian Mining Association believes that relationships with the communities affected by mining activities must be guided by a proactive and respectful approach, including frank, inclusive and participatory dialogue that considers the local realities and expectations, striving for interactions that promote opportunities for free and equal expression.

Actions

1. Develop programmes that meet the society's expectations in relation to health, safety, environment, community relations, diversity, inclusion, and impacts, amongst others, by way of a participatory dialogue process based on continuous improvement and evaluation;
2. Promote and expand society's access to dialogue channels with the mining sector, taking into account community interests in decision making;
3. Prepare mining professionals and communities for the challenges of the future, considering all interfaces and points of view;
4. In collaboration with communities, build transparency mechanisms for monitoring the application of Financial Compensation for the Exploration of Mineral Resources (CFEM).



COMMUNICATION & REPUTATION

The Brazilian Mining Association believes that all interactions and communication must occur in an accessible and comprehensible manner, in a timely, transparent and authentic manner. The sector will reinforce actions that are recognised by diverse stakeholders and which result in the improvement of management and operational practices.

Actions

1. Present the sector to society, including identified risks and mitigation actions in a timely, transparent, clear, coherent, simple, proactive and authentic manner;
2. Strengthen the institutional presence of the sector in municipal, state and federal spheres;
3. Encourage mining companies to adopt compliance programmes and practices.

DIVERSITY & INCLUSION

The Brazilian Mining Association recognises that respect for diversity is essential to establishing social inclusion. In recognising the equal rights of all human beings, the mining sector recognizes the value of our individualities, and the respect for heterogeneity in all its forms: class, gender, ethnicity, sexual orientation, and disabilities, amongst others.

Actions

1. Encourage mining companies to foster work environments that value diversity and promote inclusion in such a way that employees are empowered to fulfil their potential and that can attract, retain and develop people;
2. Stimulate our companies to make the mining sector more diverse and inclusive through actions that value identities, particularly in regards to gender, ethnicity, LGBTQI+, persons with disabilities, refugees and traditional peoples;
3. Encourage the sector to prepare their internal environments for diversity & inclusion.

INNOVATION

The development and adoption of new technologies aims to increase the industrial efficiency of mining and reduce the socio-environmental impacts arising from our operations. The Brazilian Mining Association consider these to be essential to the business itself. By incorporation innovations into our processes, the sector reinforces its commitment to expand the collaboration related to finding solutions in conjunction with research and development centres, and create entrepreneurial opportunities for new projects.

MEASURES

1. Encourage increased investment in innovation and technology projects by mining companies, focusing on priority issues like safety, water, energy, tailings/waste and social development;
2. Expand the search for collaborative solutions through open innovation and cooperation between various agents by way of the Mining Hub, a space for innovation that is open to the mineral sector.

WATER

IBRAM commits to promoting and expanding the responsible use of water in processes, encouraging actions that target the preservation of water sources, both underground and surface, as well as through initiatives that increase the both the water availability in our rivers and the quality of water.



Actions

1. Establish a uniform methodology to define performance indicators for water use and consumption, defining and publish gradual reduction targets;
2. Publish and make available all information concerning the use, consumption and quality of water and effluent used and produced by the mining industry;
3. Effectively participate in and support the watershed committees, increasing their scope to incorporate studies associated to climate change and propose strategic actions for the sector and society in general.

ENERGY

For the Brazilian Mining Association, the use of alternative energy sources is a key issue when discussing climate change and the increasing consumption of inputs in modern society. We recognize that this is on the agenda of both nations and economic sectors. The Brazilian mining industry will make an undoubted contribution in this field by examining our the energy consumption and putting forward proposals for change, increasing the efficiency of our processes, increasing the use of renewable energy and reducing the consumption of raw materials, in a clear demonstration of social responsibility and zeal for the sustainability of our operations.

Actions

1. Promote a reduction in the consumption of natural energy inputs through improved efficiency of equipment and productive processes;
2. Increase the number of renewable energy sources within the energy matrix of mining activities;
3. Promote forums for the exchange of experiences and good practices/analysis of intra- and inter-sector benchmarking, as well as the preparation of technical guides.

WASTE MANAGEMENT

The management and reuse of the waste produced by the mineral industry are, in the view of the Brazilian Mining Association, amongst the biggest challenges of the sector, due to the volume of material generated by our operations. With the aim of contributing to the reduction of waste and increasing its re-use, the Brazilian mining industry assumes the commitment to make every effort to improve waste disposal, apply new technology and innovation to processes so as to reduce the amount produced, and foster business that can transform this waste into new products.

Actions

1. Encourage the strengthening of waste management, focusing on reducing the volume produced in collaboration with interested parties;
2. Promote and develop policies and studies of best practices for waste management (tailings, waste rock and other), thus reducing socio-environmental impacts;
3. Foster new business, focusing on the circular economy, in order to transform waste into new products.

This letter is the result of the involvement and reflections of 200 mining industry professionals and is endorsed by the body of executives and Brazil Members of IBRAM member companies.

Based on the endorsement and active participation of the member companies in relation to the

**BRAZILIAN MINING ASSOCIATION
(IBRAM) LETTER OF COMMITMENT
BEFORE SOCIETY**



IBRAM
INSTITUTO BRASILEIRO DE MINERAÇÃO
Brazilian Mining Association
Câmara Mineira de Brasil

aforementioned commitments, we want to propose and promoted the evolution of our way of mining in Brazil, meeting the expectations of society and using transparency and dialogue as tools that will help us to build the mining of the future and the future of mining.

Belo Horizonte, 9th September 2019

A handwritten signature in blue ink, appearing to read 'Wilson', with a long horizontal stroke extending to the right.

Wilson Nélio Brumer
IBRAM Chairman

A handwritten signature in blue ink, appearing to read 'Flávio Ottoni Penido', with a long horizontal stroke extending to the left.

Flávio Ottoni Penido
IBRAM Chief Executive