



ARIS MINING

**SUSTAINABILITY  
REPORT  
2022**



# MOVING FORWARD WITH POSITIVE IMPACT

## ABOUT THIS REPORT

This sustainability report provides an overview of Aris Mining's commitment to sustainable practices and a summary of its efforts to minimize environmental impacts, promote social responsibility, and contribute to the long-term development of the communities in which it operates. As a Canadian gold mining Company with operations in Colombia and Guyana, we recognize the importance of integrating sustainability into all aspects of our business.

At Aris Mining, we understand that responsible mining practices are vital for safeguarding the environment and the well-being of local communities. This report provides a transparent account of our sustainability performance, revealing the progress achieved, the challenges faced, and the strategies implemented to address them. It also reflects our commitment to meaningful dialogue with stakeholders and the continuous improvement of our efforts in this field.

We acknowledge that sustainable mining practices require ongoing collaboration, innovation, and adaptation. As we move forward, Aris Mining maintains its commitment to advancing our sustainability agenda, embracing new technologies and best practices. All of this while working collaboratively with our stakeholders to create a positive and lasting impact on the environment, society, and the economy in the areas in which we operate.



## SCOPE AND REPORT STRUCTURE

This report encompasses sustainability matters for all the mines owned and operated by Aris Mining during 2022. On September 26, 2022, GCM Mining and Aris Gold combined to form Aris Mining Corporation. Unless otherwise stated, the operational and financial results included herein incorporate those operational and financial results from Aris Gold's assets as of September 26, 2022.

References to "Aris Mining," the "Company," "GCM Mining," "we," "us" and "our" refer to Aris Mining Corporation. All amounts in this report are expressed in United States dollars (USD) unless specified otherwise, and an average rate of exchange for 2022 of COP \$3,700 to US \$1 was used to convert COP to USD.



# ARIS MINING, ITS VISION & VALUES

Aris Mining is a gold producer in the Americas with a growth-oriented strategy built upon partnerships with local communities. Our growth strategy involves optimizing current operations and cashflow generation, extending mine life, building new mines, and exploring acquisitions.

In 2022, the Company produced 235,379 ounces of gold from the Segovia Operations (Antioquia, Colombia) and Marmato Mine (Caldas, Colombia). Aris Mining is on track to produce +400koz gold per year in Colombia, based on steady-state Segovia Operations and the expanded Marmato Mine. Aris Mining is led by an executive team with substantial experience in building highly competitive mining companies with a global presence.

The Company also operates and owns 20% of the world-class Soto Norte project in Colombia, with an option to increase its interest to 50% and has a 100% interest in the advanced-stage Toroparu project in Guyana and the Juby project in Ontario, Canada.

Aris Mining is headquartered in Vancouver, Canada, and is listed on the Toronto Stock Exchange (TSX) under the ticker symbol ARIS and on the New York Stock Exchange (NYSE) under the ticker symbol ARMN. In furtherance of our commitment as a socially and environmentally conscious gold producer in Colombia and around the world, we promote the formalization of artisanal and small-scale mining. We provide support for these activities to ensure they are undertaken in accordance with the rule of law and with environmentally and occupationally safe conditions.

## 2022 Production

**235,379**  
ounces of gold



**Our Operations**  
Segovia (Antioquia)  
Marmato (Caldas)

## Our Values

In order to generate enduring social and economic advantages within the communities in which we operate, we pledge to incorporate these elements into the Company's decision-making. Our actions will be steered by the following principles: making health and safety a top priority; giving precedence to environmental responsibility; actively involving and supporting the communities; and maintaining continuous transparency and social responsibility.

## OUR OPERATIONS

Aris Mining's assets include two producing operations: the Segovia Operations which comprise four mines (Sandra K, Carla, El Silencio and Providencia) and the Marmato Upper Mine. Both generate cash flow to support the Company's growth projects, which encompass the Marmato Lower Mine, the Soto Norte joint venture, and the Toroparu and Juby projects.

### British Columbia, Canada Aris Mining Headquarters

### Departamento de Antioquia, Colombia Segovia Operations:

- Generated US\$88.6 million in positive free cash flow from operations in 2022.
- Produced 210,163 ounces of gold achieving the production guidance for 2022 of 210,000 to 225,000 ounces of gold.
- The Segovia Operations include the purchase of material extracted from contractor and artisanal and small-scale mining segments of the Segovia Operations (collectively "partner-operated mining"), which accounted for approximately 43% of the production at the Segovia Operations in 2022.
- The Segovia Operations completed the expansion of the María Dama processing plant increasing capacity from 1,500 tpd to 2,000 tonne per day (tpd) in [Q4 2022].

### Caldas, Colombia Marmato Mine

- Underground gold mine currently under modernization and expansion program including the construction of a new underground mine, 4,000 tpd carbon-in-pulp processing plant, and dry stack tailings facility.

#### • Marmato Upper Mine:

- Continuous production since 1993.
- Narrow vein sulfide rich mineralization.
- Current processing plant capacity of 1,200 tpd.
- Annual production of 25,216 ounces of gold in 2022.

#### • Marmato Lower Mine Project:

- Construction of the Lower Mine has commenced in 2023.
- Located immediately below the Upper Mine and will provide access to the wider porphyry mineralization that will be mined using more productive longhole stoping methods.

### Santander, Colombia Soto Norte Project

- Aris Mining is the operator and owner of a 20% interest, with an option to increase its interest to 50%, where environmental licensing is advancing to develop a new underground gold, silver and copper mine.

### Cuyuni-Mazaruni, Guyana Toroparu Project

- Advanced-stage gold project with a large-scale gold and copper deposit.
- Progressing additional studies to update, fully define and optimize the development plan.

### Ontario, Canada JUBY PROJECT

- Largely unexplored area located within the Shining Tree area in the southern part of Canada's Abitibi Greenstone Belt, with regional geological similarities to the gold camps of Kirkland Lake and Timmins.
- 10,000-metre drilling program completed to test the extension between the Golden Lake and Big Dome deposits and to confirm known high-grade mineralized zones.





## Message from our CEO:

### Dear valued stakeholders:

We extend a warm welcome to our 2022 Sustainability Report, a milestone publication that stands as a testament to our commitment to Environmental, Social and Governance (ESG) principles that underpin our gold mining business.

— Neil Woodyer, CEO

Aris Mining takes immense pride in its identity as an environmentally and socially conscious mining Company. Our core ethos is centered around the belief that successful mining in Colombia hinges on our collaboration with and support of local Artisanal and Small-scale Miners (ASM).

This report serves as both a reflection of our journey thus far and a roadmap for the path ahead. The merger of GCM Mining and Aris Gold in 2022 has given rise to a strengthened entity with an expanded Sustainability and ESG Strategy, and a dedicated ESG team. We recognize that the fusion of the traditional expertise and knowledge held by our ASM partners with the technological advancements, infrastructural capabilities, and access-to capital of large-scale miners is pivotal for the evolution of the industry in Colombia. This alliance is fortified by a commitment to leading environmental practices, responsible health and safety standards, and transparent and continuous engagement with our communities and other stakeholders.

As we stride forward, our ESG strategy shall be the guiding light for our operations. We remain steadfast in our dedication to upholding these principles, fostering meaningful partnerships, and driving sustainable mining practices that are not only economically viable but also environmentally regenerative and socially empowering. We also extend an invitation to others to join us in shaping the future where responsible mining is not just a goal, but a shared reality.

### The road to a fruitful partnership with our communities and artisanal and small-scale miners:

I believe that there are two main challenges to promote formalization and coexistence programs in Colombia.

The main issue to address is the current structure of Colombia's gold mining industry. It is reported that 86% of the country's gold production comes from informal and illegal miners. There are only 7 mines operated by large-scale industrial miners in Colombia, which represent approximately 10% of the country's production. However, because of licensing requirements, their technical expertise, and the access to capital, these operate clean processing facilities (i.e. environmentally sustainable and technically compliant with Colombian and international standards). There are some medium-scale producers, which have licensed, yet limited processing facilities, but results in most of the Colombian gold output being treated in sub-optimal conditions.

According to the Colombian government, as of the end of 2022, there were 27,000 miners, from about 800 mining communities, which could be potentially formalized. However, as clean processing facilities are not widely available, it would take time to license and build, and are capital intensive. Neither the ASMs



nor the State have the capacity to quickly overcome this problem. This is where industrial mining can contribute through partnerships with the ASMs and the government.

A second challenge could be grouped as follows. Even if a formalization process is successful, with clean processing facilities, they can fail due to the lack of capital, financial expertise, and technology, to create profitable businesses. Their use of mercury, artisanal processing plants, and incorrect waste and water disposal, are some of the environmental challenges that we must address with them, to create a fruitful partnership and preserve the ecosystems where we operate. Industrial mining provides an answer to these issues and can team up with ASM's traditional skills and local expertise, to create positive solutions.

We have proven this in Segovia, where we have formalized more than 2,900 miners, onboarded more than 12,000 people with social security, and enabled access to banking, among other benefits. These operations are covered by our environmental license and are constantly monitoring them for compliance. By May 2023, our new Sandra-K ASM partners at Segovia have started operations with 200 local miners and is rapidly scaling up to 500 by year-end. We are also following suit in Marmato, with the first 200 formalized miners currently operating in 2023, and in Soto Norte, with another 160 miners, known as "Calimineros". It should be noted that both in Marmato and in Soto Norte, these are the first industrial miner – ASM partnerships in their 450 years of mining tradition.

We have structured, with reputed universities, training programs in environmental, health and safety standards, accounting, tax and labor law, and compliance, to assist our ASM partners to implement and manage their new opportunities and responsibilities. We have also continued to invest in improving roadways, training to prevent landslides and accidents, implementing gas measurements with alarms for better response and expanded shelters, all in an effort of protecting the lives and physical integrity of our employees and ASM partners.

The continued interest in integrating these ASM units into our model, not only makes business sense, it also helps into eliminating gold as an instrument to finance conflict in Colombia. This is a critical part of our commitment to become reporting members of the Voluntary Principles on Security and Human Rights.

## Managing Environmental Impacts: The quest for the "net-zero mine"

At Aris Mining, our unwavering commitment to sustainability extends to the careful measurement and management of our environmental impact. In the previous year, our Segovia Operations underwent a comprehensive evaluation by Skarn and Associates, benchmarked against peers within the same production tier.

This assessment revealed our standing as one of the world's top 5 mines in terms of operational efficiency, specifically in relation to CO2 emissions per ounce of gold produced. This achievement can be attributed to our innovative renewable energy matrix, which predominantly relies on local hydroelectric power sources.

We remain dedicated to identifying and incorporating additional renewable energy sources throughout the course of 2023 and beyond. This pursuit is particularly significant against the backdrop of a growing global demand for gold. Our commitment to maintaining low CO2 emissions not only aligns with Colombia's energy transition policies but also showcases the viability of harmonizing mining operations with renewable energy practices. As part of our vision, we are exploring the prospect of community-driven energy transition solutions, alongside the expansion of solar-powered energy consumption. These endeavors are key to usher our operations towards the goal of net-zero mines.

Beyond energy, our dedication to responsible resource utilization extends to water management. Notably, we treat 100% of the domestic water withdrawn, and a significant portion— 45% —is channeled back to the community providing drinking water to over 2500 individuals. This contribution holds special significance in the broader context, given that less than 30% of the rural population in Antioquia, as documented publicly, has access to clean water sources.<sup>1</sup>

Our commitment to innovation for sustainability is further demonstrated by the successful operation of our polymetallic plant. This initiative, conceived initially as an environmentally conscious approach to processing waste material, has yielded remarkable results. By extracting zinc and lead, this process has substantially enhanced the quality of residual waste. Consequently, we have been able to implement more environmentally sound tailings disposal methods while concurrently establishing an additional revenue stream.

At Aris Mining, sustainability is not just an abstract concept; it's a core value that drives our actions.

<sup>1</sup> <https://colombiavisible.com/antioquia-cobertura-agua-potable-ruralidad/#:~:text=Menos%20del%2030%20%25%20de%20la,de%20que%20son%20poblaciones%20dispersas>



## Thinking ahead: the next mining generation

At Aris Mining, our belief in education as a foundational pillar of our social investment initiatives has driven us to create a lasting impact within our operational areas. Our "La Salada" School, situated within our tenement, stands as a beacon of progress, touching the lives of over 800 students. Through this endeavour, we are not only providing access to quality education but also fostering bilingual skills that broaden horizons.

We are thrilled to announce the impending graduation of our very first high-school class in 2024. These graduates stand as a testament to the transformative power of education, equipped with the tools they need to shape their futures. Furthermore, our efforts extend to more than 2,500 students whom we are diligently preparing for state examinations. Our goal is to open doors to higher education, offering expanded opportunities for a brighter tomorrow.

Our dedication to our local communities remains unwavering. We continue to champion local employment and suppliers, with a distinct focus on integrating families into our business fabric, ensuring its seamless continuity. A cornerstone of this endeavour is our dedication to diversity and inclusion, particularly in the empowerment of women. Women bring fresh perspectives, talent, and innovation to our operations. This experience has translated into tangible progress, as women now occupy 10% of available positions across our organization – a significant increase from 2020 and 2021.

As we embark on the development of our Lower Mine at Marmato, which we commenced in Q3-2023, we are poised to replicate and enhance the success we have achieved at the Segovia Operations. This

expansion presents us with the opportunity to extend our positive influence in new regions, impacting not only our operations but also the communities and ASM units in Marmato. Aligned with our commitment to environmental stewardship, we are diligently aligning our contractors and suppliers with our stringent ESG standards. This is facilitated through comprehensive training initiatives and regular audits that ensure adherence to our principles.

Moreover, our dedication to responsible ASM practices is reflected in our pursuit of new partnerships in Soto Norte. By doing so, we are actively addressing the environmental challenges stemming from informal mining, specifically in the Suratá river region. This commitment underscores our ethos of being not just a responsible mining entity, but a catalyst for positive change in the larger ecosystem.

As Aris Mining looks ahead, we remain committed to our core values – education, community engagement, diversity, and environmental responsibility. It is our privilege to contribute to the betterment of lives, to nurture talent, and to be a harbinger of sustainable progress.

**Thank you for your continued trust and support.**

**Sincerely,**



**Neil Woodyer**  
CEO



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## Message from the Chair of the Sustainability Committee: Monica de Greiff

Collaboration is critical to achieving success in development. NGO's, multilateral organizations, government, companies, and communities to name a few, united, in tackling the largest challenges of our time. We conduct a materiality analysis to determine which Sustainable Development Goals (SDGs) are most pertinent to our stakeholders and where our impact can be maximized.



We are firm believers that there is no "one size fits all" solution to development and at Aris Mining we have the ability to tailor strategies to a given context. We are confident that the SDG framework allows our efforts in the communities in which we operate to be more measurable, long lasting and gratifying.

As the Chair of the Sustainability Committee, I am responsible for broad oversight of the companies ESG initiatives. Best practices measure our performance, and embarks on a path of continuous improvement.

There is no telling how powerful a Company culture can be in influencing good health and how critical good health is to Company performance and thriving communities. Amongst our workers we not only promote activities that guarantee their integrity within our operations, but habits of daily living and workplace safety that will improve their health. Having gyms on site, providing workers with safe drinking water and balanced meals are a few of the ways we contribute to fostering healthy culture among our employees then take these habits to their homes and influence behaviors in the broader community.

In the SDG related to health and well-being, the UN is focused on ensuring that populations have safe drinking water and coverage of essential health services. We have contributed to both by cleaning creeks, treating domestic water we withdraw to make it potable and readily available to the community, and committing to water efficiency within our activities. We also support local health services and infrastructure by improving facilities, donating ambulances, providing health brigades and other activities of first necessity.

We believe knowledge is power and understand the importance of increasing the number of people with a complete primary and secondary education in the communities in which we operate. For this we have implemented initiatives aimed at ensuring increased access to quality education for the children of these communities. Through targeted

partnerships and programs, we strive to empower young minds and remove barriers that hinder educational opportunities. By providing scholarships, educational resources, and supporting infrastructure improvements, we aspire to create an environment where children have the encouragement and means to attend school, continue their studies, and build brighter futures for themselves and their communities. Aris Mining firmly believes that investing in education not only enhances individual prospects but also contributes to the overall well-being and growth of the regions we are privileged to serve.

For the UN, it is also important to support teens and adults that access other levels of vocational training beyond basic schooling in order to access better employment opportunities within our industry. This is why we provide on-site training for mining related and activities unrelated to mining that allow our employees to become better at doing their job and more aware of the world around them.

Finally, in line with our core strategy of empowering artisanal and small-scale miners and protecting ecosystems around them we are committed to responsible production and consumption of goods and services. That means among other measures, controlling the use of cyanide and mercury, promoting recycling and the proper disposal of tailings, as well as promoting renewable energy opportunities. It also means empowering communities to operate for the good of the many and not the few.

Thank you for your continued support on this sustainability journey,

**Monica de Greiff**  
Sustainability Committee Chair



OUR SUSTAINABILITY PILLARS  
 UNITED NATIONS  
 SUSTAINABLE DEVELOPMENT  
 GOALS (SDGs)

Aligning priorities and efforts with a globally recognized framework like the United Nations Sustainable Development Goals (SDGs) helps Aris Mining strengthen commitments and act in ways that benefit all stakeholders, including our communities, investors and the governments in the host countries in which we operate.

The SDGs and their associated targets are a compilation of interconnected goals, which means that progress toward one goal can impact progress in another, both positively and negatively. The SDGs also assist us in setting ambitious goals that can guide our ESG strategy.

Out of the 17 SDGs, we have selected the following six that align with our business activities, and we will begin to track Aris Mining's progress in respect of those SDGs.



### Defining Materiality

In 2020 and 2021, we conducted the materiality analysis for our Marmato Mine and Segovia Operations in accordance with best sustainability practices. These results provided the foundation for establishing the sustainability strategies of each operation.

We will conduct a new materiality analysis in 2023 that will account for both, the Segovia Operations and the Marmato Mine. With the updated materiality analysis we hope to better understand the current interests and priorities of our stakeholders thus allowing us to align our actions under a single sustainability framework with aligned strategies.

We are dedicated to conducting this process in a transparent and participatory manner, involving our key stakeholders in the development of this new unified strategy. Through collaboration and active communication, we aim to ensure that our operations reflect the needs and expectations of, among others, local communities, governments, employees and investors.

As we move forward with this process, we commit to maintaining open and transparent communication with all stakeholders, providing updates on our progress and achievements in implementing this unified strategy.

The 2022 Sustainability Report summarizes the sustainability matters relevant to the Company following the progress of the materiality analysis conducted in 2020 and 2021.



### Material Issues identified in 2021 and 2022

Segovia Operations:	Marmato Operations:
Tailings Management	Grievance Mechanism
Water Use and Management	Tax and Royalty Payments
Relationship with Local Communities	Human Rights
Occupational Health	Talent Retention
Working Conditions	Water Management
Risk Management	Community Relations
Good Mining Practices	Gender Equality
Artisanal / Illegal Mining	Health and Safety
Code of Ethics	Child Labor
Human Rights and Security	Local Employment
	Attracting the Best Talent
	Environmental Management



## ARIS MINING: BEYOND MINING, A SOCIAL COMMITMENT

At Aris Mining, we are acutely aware that as we grow, we face more challenges in making growth sustainable and inclusive. The communities surrounding us, their self-sufficiency, and their desire for autonomy through alternatives to mining activities has formed the foundation for our US\$16 million investment in social and environmental projects in 2022, with a projected investment of US\$24 million in 2023. Our 2022 investment accounted for over 10% of our EBITDA. This ability to create and share value is independent of the indirect economic benefits generated by our operation, such as royalties and taxes of over US\$60 million. Additionally, our artisanal and small-scale mining formalization program, which contributed 90,928 ounces to the Company's consolidated production in 2022, is also a source of value creation for our stakeholders.

In 2022, we employed a total of 3,234 individuals. In municipalities like Segovia, we employed over 7% of the Segovia's adult population, showcasing the extent of the Company's presence in this municipality and its potential for positive impact. Our influence is even greater in Marmato, where we employ over 8% of Marmato's adult population.

In 2023, we will create a grassroots-driven Social Investment Framework aimed at addressing the most pressing requirements of the communities in which we operate. For instance, we will consolidate initiatives aimed at positioning **"Stellar Women"** and their valuable skills ranging from jewelry making to launching scrap metal businesses. We will work to protect our environment, continue to expand access to education and develop our local suppliers.

The ultimate goal is value creation and to leave the communities in a position where once mining is exhausted a viable economy remains. At Aris Mining, we will continue to work diligently to do our part, hoping to inspire others to join in building the next major gold producer in the Americas with the capacity to create and share value.



### Investment in Social and Environmental Projects

- **2022: US\$16 million**
- **2023: US\$24 million projected**



We employed  
**3,234**  
INDIVIDUALS in 2022

- **7% of Segovia's**  
adult population
- **8% of Marmato's**  
adult population





## CORPORATE GOVERNANCE

At Aris Mining, sustainability is not just integrated into our operations; it's the foundation of our actions. **We consider ourselves to be a socially and environmentally conscious mining company.** We strive to go beyond our environmental and social obligations to our surroundings and eventually become a benchmark for responsible mining in our host countries. At Aris Mining, we recognize that good corporate governance is essential for effective risk management, long-term value creation, and the promotion of transparency and accountability in all our operations.

We are committed to establishing and maintaining high standards of corporate governance, ensuring that our policies, processes, and practices reflect fundamental principles of transparency, ethics, and responsibility. You can find more about our policies relating sustainability, health and industrial safety, environment and corporate social responsibility, ethics, anti-corruption, and diversity matters, among others, on our website.

Our Board of Directors is comprised of a diverse group of nine leaders with extensive experience in mining, sustainability, and building successful businesses. We value the inclusion of different perspectives, experiences, and knowledge in our decision-making, and we recognize that the diversity among our Board of Directors and executive team strengthens our capacity for innovation and enables us to effectively respond to the changing demands of the business and social environment in which we operate. Two of our nine members are women recognized as knowledgeable leaders in mining and sustainability. You can find more information about each of our directors on our website.

Our Board of Directors is supported by four committees : the Compensation Committee, Audit Committee, Governance and Nominating Committee, and Sustainability Committee.

The Sustainability Committee of the Board of Directors plays a crucial role in driving **Aris Mining's** sustainability agenda. Committee members work closely with senior management to ensure that sustainability guidelines and commitments are integrated across all areas of the Company.

The Sustainability Committee establishes clear policies and strategies that reflect our values and commitments in terms of sustainability, ranging from responsible resource use to environmental management and the promotion of fair labor practices, and respect for human rights, among others.





## Leadership and Sustainability in Action

The Management-level Sustainability Committee is responsible for driving and overseeing sustainability initiatives throughout the Company. This Committee includes leaders from several areas of **Aris Mining**, ensuring that the sustainability strategy is applied in every aspect of the Company's activities.

This Committee sets annual compliance objectives aligned with the material issues identified in the materiality analysis and meets once a month to review the Company's performance on sustainability matters including assessing progress on established objectives, and addressing any challenges or opportunities that arise. This fosters a culture of sustainability across the entire Company.





# OPERATIONAL EXCELLENCE

Business sustainability is achieved through increased job opportunities, increased financial capacity for allocation, and opportunities for innovation.

## INFLUENCE AND SUSTAINABLE GROWTH (Excerpt from the 2022 Annual MD&A)

In 2022, our combined operations produced 235,379 ounces of gold, and we achieved an EBITDA of US\$116.9 million, made of US\$45.7 million in sustaining capital investments and US\$73.2 million in long-term growth investments. These growth investments include US\$7.4 million at our Segovia Operations, US\$5.1 million in at the Upper and Lower Marmato Mine, and US\$60.7 million in the Toroparu Project. We reported net earnings of US\$0.6 million or US\$0.01 per share and adjusted earnings of US\$50.3 million or \$0.46 per share.

Continuing with our strong cash position, we had US\$299.5 million in cash and cash equivalents as of December 31, 2022.

**Revenue from mining operations increased by 10% in the fourth quarter of 2022 compared to the same period in 2021, reaching US\$103,4 million. For the fiscal year 2022, revenue increased by 5% compared to 2021, reaching US\$400 million.**

Over the past eight quarters of results, earnings from mining operations have consistently remained in the range of US\$35 million to US\$43 million, driven by consistent gold sales of between 50,000 and 55,000 ounces per quarter.

### A Glimpse into Our Future: Proven and Probable Mineral Reserves:

Category	Property	Tonnes (kt)	Gold grade (g/t)	Silver grade (g/t)	Contained gold (koz)	Contained silver (koz)
Proven	Marmato	2,196	4.31	16	304	1,157
Probable	Marmato	29,082	3.08	5	2,874	4,980
Probable	Soto Norte	4,953	6.22	34	990	5,477
Proven	Segovia	229	10.92		81	
Probable	Segovia	2,132	9.84		675	
<b>Total P&amp;P</b>					<b>4,924</b>	<b>11,614</b>

**Notes:** Totals may not add due to rounding. Mineral reserve estimates for Soto Norte represent the portion of mineral reserves attributable to Aris Mining based on its 20% ownership interest. Mineral reserves were estimated using a gold price of US\$1,500 per ounce at Marmato, US\$1,300 per ounce at Soto Norte, and US\$1,700 per ounce at Segovia. The mineral reserve effective dates are June 30, 2022 for Marmato, January 1, 2021 for Soto Norte, and December 31, 2022 for Segovia. This disclosure of mineral reserve estimates has been approved by Pamela De Mark, P. Geo, Senior Vice President Technical Services of Aris Mining, who is a Qualified Person as defined by National Instrument 43-101.



## ARIS MINING, FOR MORE ASPIRING ENTREPRENEURS

*The Artisanal and Small-Scale Mining Program is an industry-leading Colombian initiative for the integration of informal artisanal and small-scale miners into the value chain through partnerships, and has associated environmental, social, training, safety, and operational benefits.*

### With 65 contracts, we:



formalized  
**2,900 miners**



produced  
**90,928 ounces**



contributed  
**US\$12.9 million in royalties**

**While generating increased incomes for the artisanal and small-scale miners**



Provided social security benefits to over  
**12,000 family members**

With over 65 contracts with 'partner-operated' mining groups, we have successfully formalized 2,900 miners, produced 90,928 ounces per annum, and contributed US \$12.9 million in royalties, all while generating increased incomes for artisanal and small-scale miners. Additionally, we extend social security benefits to the families of those 2,900 miners, relieving pressure on municipal services, which can then be redirected to support less privileged populations. Through our business, we foster progress, which is reflected in labour and family stability, responsible use of environmental resources, and fair compensation to the government. This is how we create Shared Value.

Formalization not only results in increased revenue to artisanal and small-scale miners, but also leads to improved health and safety conditions and a general reduction in illegal ancillary activities. For example, Aris Mining requires that explosives be procured through legal supply chains, that mined materials are processed in modern and secure facilities, and we facilitate the opening of bank accounts – keeping hard earned income safer.

We are aligned with current public policy that seeks to empower traditional miners, which is critical in continuing to guide the country toward legal mining. We believe that working together with the government and local institutions, we can create an environment for small miners to receive fair compensation for their knowledge and modernize their practices while safeguarding the environment and improving health and safety outcomes.

### Priorities for 2023

1

Introduce and consolidate our partnership and formalization model at Marmato, which aims to enhance commercial expectations for current mines as well as for our Lower Mine project while establishing on-site capabilities.

2

Attract more partners at the Segovia Operations by (i) improving current contract conditions and (ii) enhancing the ancillary benefits of being a business partner, such as access to training programs.

2

Continue the trend of generating economic value and improving living conditions for our partners and the community.





# OUR ENVIRONMENT

**Aris Mining's** dedication to sustainable mining is fundamentally anchored in its environmental management practices.

Both the Segovia Operations and Marmato Mine have a symbiotic relationship with the environment and nearby communities. Their presence acts as a deterrent against the expansion of illicit activities in the region, which often result in significant environmental harm. Our team of dedicated experts is committed to monitoring and managing various aspects such as water, waste, tailings, and biodiversity. This meticulous approach guarantees adherence to environmental laws and regulations. Spearheading these efforts is a seasoned legacy team with extensive knowledge of the area, much like the community itself.

## SEGOVIA OPERATIONS

In accordance with Colombian Environmental legislation, projects that have yet to initiate operations need to request an Environmental License to operate. Nevertheless, activities that were initiated prior to December 1993 and have maintained continuous operation with approved permits are exempt from the licensing requirement. Instead, such projects are obligated to report on the Environmental Management Plan (PMA) which requires periodic reporting and updating, and additional minor permits for the use of renewable natural resources.

The mining operations within the Segovia Operations improve RPP 140 are encompassed by a single Environmental Management Plan (PMA) along with 42 "minor" environmental permits that have either been granted or are currently in the process of approval. For the Carla mine an Environmental License was granted. Operating under a PMA requires us to be at the forefront of environmental best practices ensuring that we manage this asset with the same meticulousness as we would under an Environmental License.

Currently, we have achieved a 93% adherence to the EMP guidelines. The remaining 7% pertains to the environmental practices of the artisanal and small-scale miners operating within the Segovia Operations mining title. We are actively taking steps to improve these practices and achieve complete compliance.

### Our Contribution to Mitigating Deforestation Effects in Antioquia:

According to Global ForestWatch, between 2001 and 2022, Antioquia lost 565,000 hectares of relative tree cover, representing an 11% decrease compared to the year 2000. The primary driver of this loss is illegal mining, **which is one of the reasons why Aris Mining is dedicated to the formalization and inclusion of artisanal and small-scale mining in our supply chain, as environmental protection is better achieved through formalization.**

Legal mining, on the other hand, has a significantly smaller environmental impact. Approximately half of the legal mining concessions in Colombia result in less than one hectare of deforestation. With controlled deforestation, we can contribute to conserving high-resource areas, protecting water cycle disruptions, reducing biodiversity loss, and mitigating the effects of climate change which are exacerbated by the lack of trees to absorb emitted CO<sub>2</sub>.

In 2022, we successfully restored a total of 5.21 hectares through a combination of mandatory and voluntary compensation planting. This initiative has created conducive environments for diverse habitats and species conservation. As of December 31st, 2022, we planted a cumulative count of 19,990 trees. This figure includes 19,650 trees attributed to our compensation obligations, and an additional 340 trees through voluntary planting initiatives.

In June 2022, Aris Mining Segovia conducted a rapid ecological assessment of vertebrate fauna in the closed shaft deposit. This showed that the recovering areas have complex vegetation structures and composition, offering diverse microhabitats and resources that are used by different species. These areas also have abundant water sources such as rivers and nearby streams. The flow of species between these habitats is important, as some species prefer ecological zones that provide a variety of food resources.

At the end of 2022, we received communication from the Corantioquia Zenufaná territorial office, commending our efforts in proficient forestry management and our significant contribution to the preservation of crucial ecosystems. This recognition serves as a motivating factor to continue our efforts on biodiversity.



In **2022**  
We restored  
**5.21 Ha**



We planted a total of  
**19,990 trees**  
**340 trees**  
were planted voluntarily

## Coexisting with Biodiversity: Our Achievements

As evidence of our dedication to biodiversity, numerous species sightings were recorded in 2022. This demonstrates that we have successfully coexisted with these animals and contributed to their proliferation in the territory in which we operate.

Throughout the year, we engaged in the rescue of 20 animals, of which six were entrusted to the municipal Environmental Department, while 14 were relocated to natural areas situated within our area of influence.

## Priorities for 2023:

In 2023, we aim to compensate for 11,743 trees across 18.79 hectares, pending approval of the environmental authority.

<sup>2</sup> <https://www.globalforestwatch.org/dashboards/country/CO/>

<sup>3</sup> <https://es.mongabay.com/2021/06/deforestacion-mineria-legal-en-colombia/>



## Preserving Resources: Our Water Strategy

Responsible water management in our operation comprises three main components:

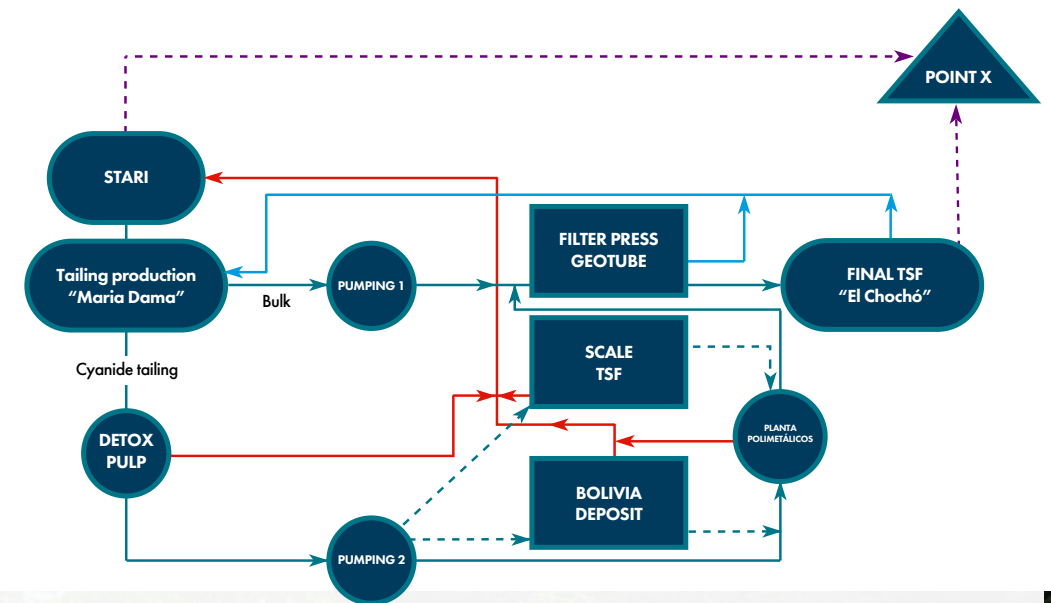
- Rational and efficient usage
- Conservation of water quality
- Proper disposal

According to information from Corantioquia, we are fortunate to operate in an area classified as having low water stress. In an effort to continue minimizing our impact, we have established treatment systems for both water intake and discharge (capture-disposal-utilization), focusing on recirculation and reuse within the operations to reduce the need for additional extraction beyond the permitted amounts.

In parallel with the resource utilization efforts undertaken by the organization, the ecological flow of each water source is ensured, sustaining both beneficiary communities and wild ecosystems.

Within the Segovia Operations, there are three potable water treatment plants serving the main operational centers (PTAPs: Doña Ana, Providencia, and Sandra K), a non-domestic wastewater treatment plant for cyanide-containing water from the Maria Dama beneficiation plant (STARI), and a domestic wastewater treatment plant located in the Silencio industrial zone (Biobox El Silencio). This becomes particularly significant when considering the potential harm to public health and the environment caused by the disposal of contaminants resulting from mining activities.

The image below illustrates the beneficiation process, distinguishing routes for solids, cyanide-contaminated waters, and non-contaminated liquids that are recirculated directly.



### LEGEND

- EFFLUENT TO TREATMENT
- EFFLUENT TO REUSE
- SOLIDS
- EFFLUENT TO DISCHARGE (OCCASIONAL)

The reprocessing of cyanide-loaded water involves a series of procedures: initial pre-treatment, advanced oxidation, high-rate sedimentation, peroxidation, filtration, microfiltration, and, when necessary, reverse osmosis for sporadic discharges.



# Total Water Extracted: 3,083,388 m³

Water management is performed within permitted limits, both in terms of quantity and quality. This requires careful planning of our water needs and resource optimization. In 2022, the total surface water allocated and consumed for domestic and industrial use was 2,746,379 m³.

Additionally, we had 185,167 m³ of allocated groundwater for our own operations and 151,843 m³ of allocated groundwater for the operations of artisanal and small-scale miners. In 2022, there were no incidents relating to or violations of water extraction permits.

## Actions Taken in 2022:

- Activated a plan to ensure potable water consumption, improving sanitary conditions for our employees through the construction of a second water treatment plant connected to the main aqueduct network (Doña Ana).
- Installed and initiated operation of the PTARD BioBox El Silencio at the end of the year, collecting domestic wastewater from the industrial area of El Silencio thus improving sanitary and environmental conditions.
- Constructed the sewage system for the Maria Dama treatment plant and preliminary works for the construction of a PTARD for treating domestic wastewater.
- The Industrial Wastewater Treatment System (STARI), responsible for treating wastewater containing cyanides, achieved 100% usage rate (recirculation) throughout the year, contributing to reducing water stress. The STARI recirculated 5,050 m³ in 2022.
- Constructed a box culvert as a passage structure over the La Gonzalita stream in the Sandra K mine, preventing vehicular traffic from negatively impacting the water quality.
- Replaced the pumping system of the Doña Ana water treatment plant, which benefited over 2,500 people, to optimize energy consumption and improve water quality.
- Implemented a drainage treatment system at the Carla mine, wherein a reservoir collects water from the operation, facilitating water purification.
- The hydro-sanitary remediation plan was carried out at the Maria Dama treatment plant at La Salada Club.
- Through incorporating production from artisanal and small- scale mining processing facilities, the use of at least 130 tonnes of mercury has been eliminated in the last 10 years. Approximately 11 tonnes of mercury were avoided in 2022 alone.

# ZERO (0)

incidents or violations regarding water extraction permits

## Priorities for 2023

- Implement a macro water metering system as a tool to measure flow rates in different supply system circuits (aqueducts and industrial water management systems - surface and groundwater) for the Segovia Operations.
- Raise awareness of efficient water use and conservation among the population of Aris Mining Segovia and other beneficiaries through training programs.



## Towards a Sustainable Future: Minimizing our Carbon Footprint

According to the National and Departmental Greenhouse Gas Inventory in Colombia, the mines and energy sector is responsible for 10% of the national greenhouse gas emissions. Its emission sources are diverse, with the main ones being the energy use of fossil fuels for power production, oil and gas production and refining. The distribution across departments in Colombia is closely related to the location of major oil and gas fields, refineries, and thermal power plants, none of which relate to our operations. This context is important to understand as it demonstrates that underground gold mining does not play as significant role in contributing to climate change as other industries. Nevertheless, aware that every action matters, we continue to seek ways to optimize the consumption of fossil energy in our operations. The energy consumption at Segovia in 2022 was 93,018,732 kWh. Our operations increased the consumption of renewable energy by 11.46% compared to the previous year by sourcing 43.76% of our energy from Doña Teresa (a hydroelectric power plant with no emissions), and the remaining 56.24% from EPM, a state-owned energy Company with a portfolio that is 91% hydro-based, thereby lowering the emissions index.

Part of our action plan, which sets goals and initiatives to measure and monitor energy use and emissions, is integrating low-impact electricity generation mechanisms into the operation.

Energy Consumption  
in Segovia 2022

Increase in renewable  
energy compared to 2021

93,018,732  
KWh

11,46%

Priorities  
for 2023

### Actions in 2022:

- Initiated feasibility studies for photovoltaic solar energy generation in connection with the design of a potential solar energy project.
- By the end of the year, air quality and fixed-source emission monitoring were conducted. Both monitoring efforts yielded favorable results, demonstrating that the operation complies with all parameters established by current Colombian regulations.
- Installed power factor compensation equipment to reduce reactive energy transport, achieving reduced costs due to electrical energy losses through conductors, improving the quality of electrical energy, and mitigating regulatory costs.
- Replaced incandescent systems in the mines, which had high electricity consumption, with LED technology.
- Optimized the Small Hydroelectric Power Plant (PCH) process to expand its utilization range, increasing its generation capacity from 20% to 30%; this was achieved by enhancing communication links in operations and improving maintenance.

Continue seeking for renewable energy projects that are compatible with our operations.



## Tailings Management, Amongst the Most Important Sustainability Topics of our Operations:

The tailings storage facilities at our Segovia Operations are designed to comply with industry standards, enduring changes in weather, seismic activity, and other factors that may impact their physical and chemical stability. The condition of dry tailings enhances the physical stability of the terrain, thereby helping prevent extreme or catastrophic impacts on the environment and communities.

Dewatering tailings at our Segovia Operations ensures water recirculation and increases the solids storage capacity. This is environmentally favorable because it covers fewer natural resources required by fauna and flora to thrive.

No reports of structural failures or anomalies that pose risks to the environment have ever been received in any of the five tailings storage facilities that the Segovia Operations have used to date.

Not only do we ensure that tailings storage facilities are safe sites that comply with the Company's environmental management plans and the commitments made to the relevant authorities, but we repurpose them as community recreational spaces. We are also using tailings to support the competitiveness of Antioquia. As of December 2022, 200,540 tonnes of waste material (sterile rock from the mining operations) had been delivered to a regional 4G road construction project (Alto Dolores- Remedios, and Remedios – La Cruzada- Zaragoza) to be used as aggregate in the road construction. This initiative, guided by the national circular economy policy and supported by the environmental authority (CORANTIOQUIA), helped reduce final disposal costs and allowed fewer renewable natural resources to be used for storage.

## CONTRIBUTING TO COMPETITIVENESS AND SUSTAINABILITY IN ANTIOQUIA

Delivered **200,540 tonnes** of waste material to Regional 4G road construction project:

Alto Dolores - Remedios, and Remedios – La Cruzada - Zaragoza)

(Supported by the environmental authority CORANTIOQUIA)



### Priorities for 2023

- 1 Implement a geotechnical exploration campaign to assess the conditions of the current tailings storage facilities and explore the possibility of expanding its capacity.
- 2 Free up space in Phase 2A of the tailings storage facility and continue with expansion opportunity of Phase 2B for 2024.
- 3 Conduct external audits to verify the safety and management standards of tailings deposits, in accordance with the international standard GISTM.





# MARMATO

The mining activity at the Marmato Mine is covered by a Contract in Spanish language known as “en virtud de aporte” which roughly translates as under contribution, granted by the National Mining Agency (ANM), which is valid until 2051; as well as an Environmental Management Plan (PMA), and permits for the use and exploitation of natural resources, authorized by the competent environmental authority (Caldas Autonomous Regional Corporation- Corpocaldas).

## ENVIRONMENTAL COMMITMENT AT MARMATO

### ENVIRONMENTAL MODERNIZATION

Trust fund for environmental modernization  
**US\$11 million**

In the pursuit of having Marmato meet the highest environmental standards, in 2023, following the Aris Mining transaction, we established a trust fund with resources exceeding US\$11 million for the modernization and upgrading of wastewater treatment systems, air emissions control, water purification and addressing environmental liabilities. Through our commitment to improve and reduce environmental risks, we have an internal and external team that continuously monitors the implementation of environmental programs and compliance with obligations imposed on the Company by Corpocaldas aiming to mitigate, prevent, correct and/or compensate possible environmental impacts associated with our operations.

One of our main achievements in 2022 was the approval of the modification of the PMA for the construction, operation, and decommissioning of the Cascabel 3 tailings storage facility, allowing for the continuation of the Upper Mine: and the initial stages of the construction of the Lower Mine project.

Furthermore, Corpocaldas approved a 5-year extension of the atmospheric emissions permit for fixed sources for smelting and metallurgical laboratory processes.

Engineering studies were also initiated for the update of the smoke and gas treatment system in the smelting process, increasing the efficiency of particulate matter and contaminant removal to over 90%. This enables us to continue complying with current environmental regulations.

A significant milestone achieved by **Aris Mining** Marmato in 2023 is the approval by Corpocaldas of the request for modification of the PMA for the construction, operation and decommissioning of the Lower Mine project, as well as obtaining permits for forest use and stream occupation. This project will bring progress and opportunities to the community and the region and will modernize mining operations in Marmato, extending the mining life of the Marmato Mine. All of this is done with the premise of avoiding and reducing potential environmental impacts thereby benefiting stakeholders.

To ensure compliance by all stakeholders engaged in the Company’s value chain with the environmental requirements outlined in the PMA an environmental annex is incorporated into all contracts with suppliers and contractors of the Marmato Mine. This enables us to present Environmental Compliance Reports for

our operations and activities to the environmental authority semi-annually.

## A Pact with Nature in Marmato

In 2022, we developed and disseminated a protocol so that the Company’s personnel and community could correctly manage and keep wildlife a safe distance away from our operations. This protocol aims to reduce potential harmful impacts on wildlife due to our operations. The implementation of this protocol enabled us to handle species appropriately. When found, they were handed over to Corpocaldas and relocated to areas with suitable vegetation cover away from the community and operations.

Additionally 340 trees were planted, 250 of them as a compensatory measure for isolated trees that were cut down during operations due to their threat of falling, the remaining 90 were planted as part of the environmental educational campaign called: "Sponsor a Tree".

## Priorities for 2023

1

We will continue strengthening biodiversity management by promoting the creation of biological corridors that connect ecosystems near the area where we operate through “applied nucleation” reforestation. We will also place artificial perches and burrows to attract and protect fauna.

2

Implement a reforestation plan for 3.88 hectares due to modifications to the Cascabel 1 (rear extension) and Cascabel 2 tailings storage facilities.

3

Implement a micro-watershed management and protection plan in partnership with the community action boards of nearby communities and the municipal administration.

## Efficient Management of Water in Marmato

The Marmato mine operates in an area of water stress according to municipal and departmental authorities. Therefore, it is crucial to find solutions that contribute to optimizing water in the operating area since our activities should not disrupt the balance of the surrounding communities and the environment.

As planned for 2022, detailed engineering studies were completed to expand and update the non-domestic wastewater treatment plant (dedicated to cyanide, metals, and sulfate destruction).

## Priorities for 2023

- 1 Commence the construction of the new non-domestic wastewater treatment plant whose commissioning and operation will begin towards 2024.
- 2 Optimize and centralize the treatment of domestic wastewater generated in the operations and La Palma camp. Design engineering will define and construct a compact treatment system that enhances organic matter removal efficiency before discharging in the site authorized by Corpocaldas.
- 3 Install flow meters at the supply tank and discharge of the beneficiation plant to determine water consumption at the Marmato Upper Mine.
- 4 Update and enhance the capacity of the water treatment and purification plant for domestic use in the facilities.

## Monitoring our Ecological Footprint:

GHG Emissions: In 2022, we had a reduction of 496.55 tonnes of CO<sub>2</sub>eq compared to 2021, all in scope 2, associated with a lower amount of KWh consumed, thanks to the implementation of different targeted actions including:

- Changes in electrical connections that were deteriorating.
- Installation of new crusher HP 300-335.
- Improvements in capacitor banks
- Retiring obsolete equipment
- Replacement of some deteriorated motors with more efficient motors, including those of the mill pumps.
- Change of the energy system from halogen to LED.

In the pursuit of contributing to energy management and greenhouse gas reduction, a review was conducted in 2022 to explore the possibility of an energy conversion to solar energy at Marmato. However, the assessment revealed that Marmato's topographical conditions do not allow for adequate utilization of solar radiation to make the implementation of a solar energy self-generation project feasible. Moreover, the economic investment required would significantly impact the cost-benefit ratio.








## Tailings in Marmato: Commitment and Responsibility at Every Step

In 2022, significant developments took place, including the expected decommissioning of Cascabel 1 and the initiation of the Cascabel 2 and 3 tailings storage facilities. The construction phase of the Cascabel 2 dry stack tailings facility commenced during 2022. This phase encompassed tasks such as vegetation cover removal, storage of organic soil, excavation, and filter installation, as well as slope cutting and stabilization.

The update of our operations' contingency plan was initiated to identify and establish action plans in case unforeseen events occur during our operations. Additionally, studies associated with the stability analysis of the Cascabel 1 tailings facility were updated to expand its capacity.

To meet international standards for the decommissioning of the Cascabel 1 tailings facility, the need to initiate detailed studies and designs was identified. This is aimed at ensuring future stability and environmental rehabilitation.

Based on the results of the 2021 audit by our external consultant Knight Piesold, the following recommendations were received in 2022, for which improvement actions were carried out to adhere to international standards:

-  Conduct an analysis of an entire section that includes the Cascabel 1 stacking and rear raise.
-  Perform borehole drilling on the foundation of the Cascabel 2, 3, and Cascabel Expansion projects.
-  Evaluate all technical information related to the execution process of the Cascabel 1 stacking. This should include the construction method, in-situ density control indicating the depth of the studied layer, quality controls conducted, permeability tests, and any other relevant information that sheds light on the status of the stacking.
-  Align the project to international parameters (GISTM)
-  Analyze a specific seismicity report for the project.

### Priorities for 2023

Continue to safely operate our Tailings Storage Facilities, carrying out the decommissioning of Cascabel 1, conditioning the foundations of Cascabel 2, initiating the Cascabel 2 tailings storage facility, and conducting complementary studies for the final construction design of the Cascabel 3 tailings storage facility.





# OUR PEOPLE: Quality, Health and Safety

**EVERY  
HELMET HAS  
A STORY TO  
TELL**

At Aris Mining, we view health and safety in terms of employees returning home every night without injuries. Because of this, we tirelessly work to become more safety conscious, minimizing accidents and injuries to the fullest extent possible.

## Building Safe Mines: Step-by-Step

Safety risks in the mining industry are extensive, ranging from illnesses and injuries, to death. We are committed to finding real and sustainable solutions to ensure that all our employees return home unharmed. In 2020, the last year measured by the ANM, emergencies and fatalities were mostly caused by rockfall collapses, explosives, and toxic atmospheres. This information provides us with a roadmap that our organization must follow to our efforts and ensure the protection of our employees.



## Among the Critical Safety Issues we Have Identified Are:



Our team at Aris Mining consists of professionals dedicated to preventing these risks in order to ensure a safe and sustainable working environment. This becomes particularly relevant when considering the prevalence of workplace accidents in our industry and their indirect consequences.



## Two Mines, One Vision: Safety First

The combination of the Segovia and Marmato mines under the Aris Mining umbrella represents an opportunity to implement best health and safety practices. During 2022, we conducted an initial assessment by area, identifying needs and improvement opportunities, which led to the adoption and development of the Vision Zerooo Safety Program. This program is based on the 12 Golden Rules listed below, emphasizing that every task must be performed safely and involve leaders at all levels of the organization.

## 12 Golden Rules

- 1 **Fit to Work.** Always be physically and mentally fit for work.
- 2 **Risk Analysis.** Stay alert and evaluate the associated risks of any task you perform.
- 3 **PPE and Equipment.** Always use the appropriate personal protective equipment (PPE) according to the task and the work environment.
- 4 **Safe Conditions in Places, Machines, and Tools.** Identify, report, and correct all unsafe conditions.
- 5 **Rockfall Prevention.** Take all necessary actions to prevent rockfall accidents.
- 6 **Energy Control.** Always identify and control hazardous energies.
- 7 **Road Safety.** Stay alert while moving through areas shared with pedestrians and/or vehicles, and act defensively.
- 8 **Hazardous Substances - Explosives.** Always follow safety regulations for the transport, storage, and handling of hazardous substances, including explosives.
- 9 **Working at Heights.** Ensure you have a work permit and use fall protection equipment when working at heights above two meters.
- 10 **Hot Work.** Before performing any hot work, make sure you have a work permit and all necessary fire protection resources.
- 11 **Lifting Loads.** Always ensure you have a lifting plan and never position yourself below a load being lifted.
- 12 **Confined Spaces.** Always guarantee safe conditions when working in confined spaces.

Furthermore, the implementation of the IBDS, a Spanish acronym (Base Safety Performance Index) was achieved, involving area leaders in conducting safety inspections and recognizing the adequate safety performance of all personnel.

In 2023 we will be reviewing and updating procedures across areas to generate timely and standardized responses in our operations and certify Aris Mining Marmato SAS in ISO 9001 and 45001 by 2024.

Obtain ISO 9001 and 45001 certification by

**2024**  
for MARMATO  
OPERATIONS



## Segovia Achievements



Delivery of the second refuge at El Silencio Mine, located on level 25 of Ramp 2 sector. This refuge has a capacity to provide refuge for 60 people for 72 hours. Additionally, the relocation of the Providencia Mine Refuge was carried out from its previous location on level 12 to a new location on level 15. The relocation of the Sandra K refuge is pending completion.



Completed the pedestrian pathway in the El Silencio Industrial Zone, which is 1.2 km long, in order to separate the more than 2,000 workers who move by foot within the area from the ongoing vehicular traffic in the area.

## Marmato Achievements

The efforts made in 2022 resulted in a significant reduction in the Accident Frequency Rate, reduced from 10.53 in the first half of the year to a year-end result of 3.19 per 200,000 man-hours worked. This accomplishment was possible due to proactive programs such as IBDS, Actuar Positivo (positive acting), weekly residual cleaning campaigns, inspection programs, providing training for working at heights and confined spaces, new employee orientation (Semillero Minero), standardization of critical tasks, and others.



During the period from January to August 2022, the Incident Severity (IS) rate was 466.76 due to a fatal incident that occurred. However, for the second period from September to December 2022, the rate decreased to 9.88 per 200,000 hours worked.





## Segovia Achievements



Strengthened our ability to identify underground water bodies by developing prospecting plans carried out by our own personnel, integrating the exploration, geology, planning, Environmental and QHS (Quality, Health, and Safety) areas with the Mine departments. As a result of this integration, procedures for action have been established in the event of contact with these bodies, and these procedures are implemented by both our own personnel and contractors, particularly in tasks that are more exposed to this risk by their nature.



### Identified the following strategic projects:

1. Review and Update of Risk Matrix
2. Document Management and Conservation Program
3. Epidemiological Surveillance System
4. High-Risk Task Program for tasks involving working at heights, hazardous substances, confined spaces, mechanical risk, electrical risk, hot work, and load lifting.

## Marmato Achievements

A total of 2,025 hours were dedicated to training, involving 417 individuals in emergency response team training, mining rescuer training, and emergency response protocols.



Structuring of the health team and its proposed work methodology.



Regarding absenteeism, the first half of the year saw an absenteeism rate of 5.08 lost days due to injury or illness per 100,000 hours worked. This rate slightly improved in the second half of the year, resulting in an absenteeism rate of 4.72 days.



## Priorities for 2023

1

Achieve a disabling accident frequency rate of less than 1.0 per 200,000 hours worked, challenging us to have a maximum of one (1) LTI (Lost Time Incident) per month.

2

Consolidation of the Vision Zerooo Program, which started in 2022.

3

Fulfillment of plans and programs aimed at operational control.

4

Further development of the strategic direction aimed at achieving certification of the integrated management system in ISO 9001 and 45001 by 2024 for the Marmato Mine.



# OUR PEOPLE: EMPLOYEES

## ATTRACTING, RETAINING AND DEVELOPING TALENT

Our value proposition for retaining talent revolves around pursuing operational excellence while creating a positive environment for our employees. We aim to strengthen their skills and knowledge in mining, fostering a culture of workplace safety.

Recognizing the importance of retaining skilled individuals and the subsequent positive effects on productivity and stakeholder partnerships, we consistently work towards recognizing the valuable input of our workforce. This involves providing competitive salaries aligned with industry standards and arranging leisure and wellness initiatives that position **Aris Mining** as a compelling and preferred employer.

We believe that one of the key motivators in our talent retention strategy is inspirational leadership. **Aris Mining** is led by industry veterans with impeccable track records. Their vision as foreigners in Colombia provides them with a fresh perspective to seek solutions, in collaboration with local talent. In the context where we operate, having personnel who understand the operational dynamics, share our values, and can safeguard the value the Company is critical; this is why building a local workforce is our most important commitment.

Talent retention is challenging, especially given the prevalence of informal and illegal mining, alongside the high absenteeism and turnover rates in operational positions.

Below, you will find the statistics corresponding to the labor demographics as of December 31st, 2022, identifying the workforce by gender and location of employment in each of the Segovia and Marmato mining operations.

## Segovia Operations:

### ARIS MINING SEGOVIA WORKFORCE BY GENDER (2022)

Gender	Permanent Employees	Temporary Employees	Total
Women	170	42	212
Men	1,463	362	1,825
<b>Total employees</b>	<b>1,633</b>	<b>404</b>	<b>2,037</b>

### ARIS MINING SEGOVIA WORKFORCE BY MUNICIPALITY (2022)

Municipality	Permanent Employees	Temporary Employees	Total
Segovia	941	213	213
Remedios	324	93	93
<b>Total local employees</b>	<b>1,265</b>	<b>306</b>	<b>1,571</b>
Other municipalities	368	98	466
<b>Total employees</b>	<b>1,633</b>	<b>404</b>	<b>2,037</b>

## Marmato Operations:

### ARIS MINING MARMATO WORKFORCE BY GENDER (2022)

Gender	Permanent Employees	Temporary Employees	Total
Men	126	0	126
Women	1,071	0	1,071
<b>Total employees</b>	<b>1,197</b>	<b>0</b>	<b>1,197</b>

### ARIS MINING MARMATO WORKFORCE BY MUNICIPALITY (2022)

Municipality	Permanent Employees	Temporary Employees	Total
Marmato	196	0	196
Supía	420	0	420
Riosucio	286	0	286
Pacora	2	0	2
Other municipalities Caldas	69	0	0
<b>Total local employees</b>	<b>973</b>	<b>0</b>	<b>293</b>
Other municipalities	224	0	223
<b>Total employees</b>	<b>1,197</b>	<b>0</b>	<b>1,197</b>



## The Composition of our Human Talent and its Development:

Diversity and inclusion are integral aspects of Aris Mining's core values and are deeply ingrained in its corporate identity. This commitment is a testament to our continuous efforts to empower women within the industry. At the end of 2022, Aris Mining Segovia had a workforce of 2,037 employees, with around 10% being women. There are 1,197 employees at our Marmato Mine, of which 126 are women, accounting for 10.5% of the workforce.

Among the female workforce, more than 100 individuals hold operational positions—a noteworthy accomplishment credited to our corporate policies and community strategies. These initiatives focus on creating training avenues within the local regions and challenging preconceived notions about women in roles such as mine supervisors or underground machinery operators. Aris Mining has been one of the first companies in Colombia to extend these opportunities to women in these roles.

We are working to strengthen the inclusion rate of women in our workforce and seek to achieve 14% representation in both operations by the end of 2023.



## Segovia Operations in Detail:

We continue to be one of the preferred employers in the Segovia area, with a workforce representing approximately 7% of the adult population of Segovia and nearby municipalities<sup>4</sup>. In our efforts to retain them in the operations, we understand the importance of keeping our employees challenged and motivated. Throughout 2022, the Company successfully trained 1,698 individuals for a total of 11,525 training hours, achieving 90% of the targeted training and development objectives.



**1,698**  
individuals  
were trained  
for a total of  
**11,525**  
training hours

generating positive attitudes and increased satisfaction levels among employees. Activities such as health campaigns, karaoke sessions, culinary fairs, sports-recreational activities, artistic events, the *"Golden Families"* program, and the celebration of special occasions resumed.

Moreover, within the framework of fostering a harmonious work environment, we have established a "Coexistence Committee". This committee serves as a channel for employees to report any interpersonal matters that may arise among colleagues or with supervisors. These reports are subject to investigation and necessary action.

We also have agreements with the SENA (National Learning Service) and universities to facilitate technical and professional internship periods in fields related to our operation. These internships contribute to the professional development of individuals and serve as a pipeline for filling positions within the Company upon the completion of their internship period.

We emphasized programs that impacted all areas, both administrative and operational, targeting both interpersonal and technical skills.

Following COVID- related restrictions, returning to enjoying in-person integration after a period of isolation allowed us to rebuild connections,



<sup>4</sup><https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion/proyecciones-de-poblacion>

## Marmato Mine in Detail:

Our retention strategy takes on special significance at our Marmato Mine due to the existence of new mining projects in the area. Specialized and experienced personnel are in short supply, leading to increases in the offered salaries to hire and retain employees. The difficulty in finding suitable personnel leads to prolonged hiring processes and the need to expand the search to other regions or even internationally. Being aware of this situation in the Marmato Mine, we have implemented a strategy to mitigate the negative effects on the operation, including training current staff in the necessary skills and promoting mining-related careers to the people in the regions where we have an opportunity to expand the talent pool and provide job opportunities in the region.

## Collective Bargaining Agreements at Marmato Mine:

**Aris Mining's** commitment is to create a fair, safe, and rewarding work environment that contributes to the well-being of our employees. By establishing effective communication and negotiation channels with employee representatives, respecting labor and union rights, and promoting collaborative social dialogue, we aim to build the trust that supports this relationship.

Aris Mining Marmato has a collective bargaining agreement with two unions, Sintramienergetica Seccional Marmato with 669 members and Sintramineros Seccional Marmato with 106 members, out of a total of 1,019 workers who are part of the collective agreement.

In 2022, negotiations for the collective bargaining agreement were conducted with Sintramineros, focusing on increasing benefits that were in place, aiming to improve the quality of life of the union's members. These agreements included annual salary increases as defined by the government, increased days of bonuses during vacations and Christmas, increases in the value of current benefits such as transportation allowance, food, education, vacations, death, and disability benefits, among others.

Regular meetings are held with both union organizations throughout the year, where different topics are addressed and joint solutions are sought. The relationship with union leaders and other members of these organizations is harmonious and constructive.



## Priorities for 2023

1

Establish a culture aligned with the Company's health and safety vision (low absenteeism, Vision Zero, and high productivity).

2

Continue to promote operational awareness regarding the importance of complying with corporate policies at Aris Mining.

3

Strengthen training and development for new personnel joining the Company without mining experience, through structured entry-level programs.

4

Strengthen the inclusion of women in mining through mining training programs and increased recruitment of women for our operation, with a target of 14% for 2023.

### Key metrics/Objectives

### Performance during 2022

% of local hiring	86.5 %
% of women in the workforce	10.72 %



# OUR COMMUNITIES

## TRANSFORMING REALITIES, BUILDING FUTURES

At Aris Mining, we approach social investment through targeted investment to address community needs based on their self-determination and priorities, and also on leaving skill-sets that endure beyond the Company's presence in the community.

In the last quarter of 2022, the Company designed a robust Social Investment strategy that not only strengthens our relationships with the community and various local stakeholders, but also contributes to their transformation. Therefore, for 2023, we have an Investment Framework that acknowledges both the community's essential needs and concerns and a sustainable long-term investment to ensure improved conditions, opportunities and well-being for the community over time.

### Our 5 social investment targets are:

- 1 Education
- 2 Social and Economic Development
- 3 Infrastructure to Strengthen Competitiveness
- 4 Environment
- 5 Gender equality and inclusion

MANITOS CREATIVAS



## During 2022 we allocated resources as follows:

### Infrastructure for Competitiveness

#### Road Improvements

We carried out the construction of 1.3 kilometers of "placa huella" (reinforced road surface), enhancing access, mobility, and connectivity for the communities of the neighborhoods 20 de Julio, 7 de Agosto, Las Delicias, Manzanillo in Segovia, and La Hoga in Remedios. This initiative benefited more than 2,000 people.



Our aim is for the infrastructure to provide increased competitiveness to the community, through greater access and distribution of goods and services.

#### Road Maintenance

We performed general maintenance on 1.2 km of road that benefits both the community and small-scale mining for the transportation of minerals.



#### Construction of Pedestrian Bridges

To improve safety conditions and facilitate community access to their homes, as well as protecting water sources, we designed and built two pedestrian bridges. One of them was constructed in the Marmajón area of the Remedios municipality, where over 200 children, teachers, and parents from the Huellas Doradas school pass daily. The other bridge was built in the Las Delicias sector in the municipality of Segovia, benefiting more than 500 residents.



#### Municipal Road Maintenance

We constructed 220 square meters of pavement on the main roads of the urban area of Segovia in order to mitigate accidents in an area where 5,000 people transit daily.



SEGOVIA







## SEGOVIA



## Infrastructure for Competitiveness

### Strengthening of Institutional Forces



We constructed accommodations for 30 soldiers of the National Army, assigned to Special Energy and Road Battalion #8, situated in Segovia. Similarly, we also carried out the renovation and adaptation of the police station in the La Cruzada neighborhood of the Remedios municipality, providing suitable facilities for 50 municipal police officers. These initiatives aim to enhance the operational capabilities and living conditions of the security personnel while contributing to the overall security and well-being of the communities they serve.



### Health Infrastructure

We strengthened the healthcare infrastructure by delivering new elevated water storage tanks to the San Juan de Dios Hospital in Segovia in 2022, benefiting approximately 41,000 residents.



### Infrastructure for Indigenous Communities

We installed a playground in the indigenous refuge of La Po in the Municipality of Segovia providing a space for recreation for over 100 children in the community.



### Educational Infrastructure

We carried out improvements in the facilities of the following educational institutions: Liborio Bataller School, San Mateo Branch; Liborio Bataller School, Main Branch in Segovia; and El Aporriado School. Similarly, in January 2022, we inaugurated the Puerto Calavera School.

In the municipality of Remedios, we enhanced the facilities of Pablo Sexto School, Santa Isabel Branch, and the San Ignacio Educational Institution, Puente Bagre Branch.



### Culvert Installations (Box Culvert)

In the municipality of Segovia, we completed the construction of two box culverts, which now provides safe passage for communities, mitigate flooding, and protect water sources. These structures facilitate access to the communities of Galán and 20 de Julio neighborhoods.



### Providing Construction Materials for Enhancement Projects

In collaboration with the municipalities of Segovia and Remedios, and with the coordination of the Community Action Boards (JAC), we delivered construction materials such as cement and rods, to enhance the access roads of the communities of El Hueso and San Joaquín in Segovia; and Los Almendros, in Remedios.





## SEGOVIA

### Environment

#### Colibrí Ecopark

The Colibrí Ecopark stands as one of Aris Mining's flagship projects, serving as an exemplary model and reference for the management and use of tailings storage facilities. It is a part of the initial phase of the Segovia Tailings Deposit Master Plan, recognized as a success story in Colombia and Latin America for its proper solid waste management.



Covering an area of 9,200 m<sup>2</sup>, this Ecopark features a sandy soccer field, a cycling route, a jogging track, a playground, an outdoor gym, a stage with seating for 300 people, and parking facilities.

### Education, Culture and Sports



#### Educational Infrastructure

Up until 2022, we have improved 20 educational institutions in the municipalities of Segovia and Remedios by enhancing the educational facilities.



#### Access to Education

Through the Gimnasio La Salada Educational Institution in Segovia (Antioquia), free education has been provided to over 4,000 children since 2012 through the Colibrí Azul scholarship program. Additionally, contributions have been made to the institution's infrastructure, providing students with a suitable environment for their development. For 2022, we awarded 805 scholarships to children in the municipality.



#### Participation in Cultural and Traditional Celebrations

Hosted christmas event for more than 800 children in partnership with COMFAMA.



#### Futbol con Corazón Soccer Program

We continued with this sports program benefiting 700 children in the communities of Campo Alegre, 20 de Julio, La Cruzada district, and the urban area of Remedios.



#### Capacity Building to Protect Kids

To promote the protection of the rights of girls and boys in our areas of influence, in 2022, with the support of Red Papaz, we reached 75,416 attendees in the "Escuela de Padres" (Parent University program) through 23 virtual conferences. Among them are members of 11 Educational Institutions in the municipalities of Segovia and Remedios.





## SEGOVIA

### Social and Economic Development



#### Community Spaces

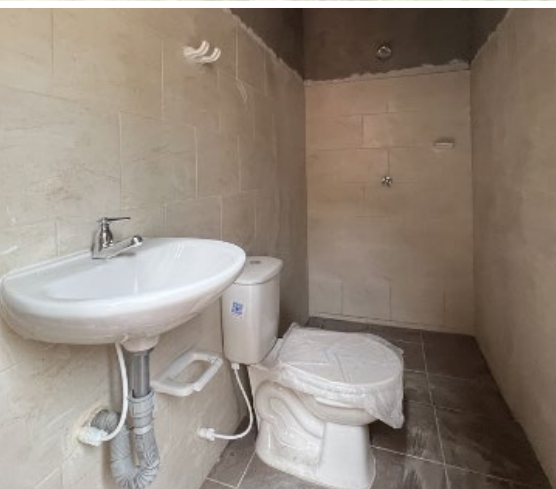
We provided the Marcelesh Club to Comfama, on loan, to strengthen community recreational activities. This club received nearly 30,000 people during the year.



#### Entrepreneurship Spaces

We loaned a space to the Association of Micro, Small, and Medium-sized Enterprises (ACOPM) to facilitate interaction between entrepreneurs and the association. We have also partnered with SENA (National Learning Service) by granting them a space to teach and train members of the community of Segovia, Remedios and neighboring towns.





## MARMATO

### Infrastructure for Competitiveness



#### Recovery of Ancestral Pathways

In agreement with the local municipal government we completed the adaptation of the Camino Real or "royal road" aimed at enhancing the historical and cultural value of this passage, which impacts around 2,000 users.



#### Pathways of Ubarbá

To improve access to the homes in the Ubarbá area, we constructed 208 linear meters of pedestrian pathways, benefiting around 60 individuals who previously traveled along a stretch of road with high accident rates and scarce access to essential goods and services. This effort has made a significant difference in the safety and convenience of their journeys.



#### Housing Improvements

In partnership with the Municipal Administration of Marmato, we undertook the enhancement and renovation of 12 households, benefiting 60 individuals in vulnerable conditions. Aris Mining contributed by providing materials and supplies, while the municipality, contributed the workforce for the improvement of bathrooms, living units, kitchens, and roofs.



#### Improvement of Cultural Spaces

Due to the absence and deterioration of recreational and community gathering spaces in the municipality of Marmato, Aris Mining strengthened and improved the Parish Atrium area in collaboration with the community, respecting the municipality's own cultural and religious traditions.



#### Community Infrastructure

We carried out the adaptations of the Community Development Center in Marmato, allowing it to provide services, training, and the implementation of comprehensive development activities for the benefit of the residents. Furthermore, this Community Center served as a shelter for over 300 individuals affected by the rainy season in the Municipality.





MARMATO

## Education, Culture and Sports

### Musical Education



The educational institutions in Marmato, San Juan, and El Llano received 78 musical instruments to support their musical programs. Additionally, we supported the institution of El Llano with a music teacher for the children in the municipality. Through these efforts, we have positively impacted over 300 children in Marmato, enhancing their access to musical education and cultural enrichment.



### Participation in the following Cultural and Traditional Celebrations of Marmato

San Antonio Festival/Marmato, Colación Festivals/Supía, Children's Day Celebration, Holy Week Celebration, Virgin of Carmen Festival/Marmato, Support for Folklore Fair Supía, Gold Fair/Marmato, and Community Christmas in the municipalities of Marmato, Supía, and Riosucio.



### Human Rights Program

In alliance with the Municipal Ombudsman's office, we trained 30 community leaders on awareness in fundamental, social, economic, and cultural rights, territorial planning, and the socio-political construction of the State, as well as mechanisms of citizen participation with a differential focus.



### Healthy Lifestyle and Prevention of Psychoactive Substance Abuse Program

Workshops on "Prevention of alcohol and other drug consumption" were conducted in five educational institutions (IED) in the municipality. These workshops were aimed at the primary and secondary school population and were facilitated by the professional team of Corporación País Solidario in partnership with the Municipal Ombudsman's Office.

## Social and Economical Development



### Visual Health Brigade

Access to eyeglasses and high-tech exams, impacting nearly 600 individuals ranging from the age of 6 to 93 in both the municipal center and rural areas like San Juan and El Llano.



### Food Assistance

Distribution of 26,000 food packages throughout the year in Marmato, Supía, and Riosucio helping to improve nutritional needs.



## Looking towards building a future in our communities, our focus is on the following highlighted projects:

1



### Local Suppliers

One of the community's most significant and reiterated expectations is the involvement in the Company's value chain processes and the execution of certain Social Investment projects. Therefore, for the year 2023, we are considering local offerings to contribute to the socio-economic development of the Municipality, through either leveraging existing local offerings or strengthening them. By doing this we also aim to generate efficiencies and cost savings for the Company, resulting in the creation of Shared Value.



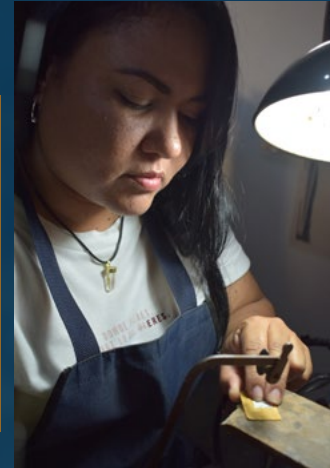
2



### Stellar Women: Jewelers

Within the Social Investment Strategy for the year 2023, women are recognized as the driving force and core of society. Therefore, we aim to dignify their role and offer special recognition for their contribution, exalting the traditional craftsmanship that our region holds in the art of Jewelry-making. We plan to provide comprehensive support to enhance the capabilities and consequently the competitiveness of women engaged in the craft of Jewelry-making.

We also acknowledge women participating in a traditional activity known as Subsistence Mining, unique to our territory as is the case with women who works with scrap metal. Thus, in 2023, they will also take center stage as a key focus within Aris Mining's Social Investment.



3



### Quality Education

The challenge in the field of education is substantial and demanding in the municipalities in which we operate. Therefore, in 2023, our contribution will be comprehensive, directed at improved facilities, equipment, furnishings, broader coverage, and enhanced infrastructure.

In addition to the aforementioned efforts, we will provide training and strengthen educational processes to improve the level of education in Segovia and Marmato and allow students to access better higher education opportunities.







4 Improving access roads for artisanal and small-scale miners:



We have identified needs within the main economic and productive sectors specific to the area. For instance, artisanal and small-scale miners currently face risks and considerable challenges in transporting extracted minerals, resulting in reduced productivity not only for these small mining units but also for the Company. Therefore, the improvement of roads represents a means of generating shared value, considering that it benefits both the local miners and Aris as strategic allies of these small-scale miners.

In 2023, we will continue to strengthen and enhance the roads that contribute to improved transit and safety for all of our local stakeholders.



5 Environmental Care:



- a) **Recyclers:** We will collaborate closely with professional recyclers to contribute to improved waste management and disposal initiatives as well as improve the recycler's working conditions and provide the necessary equipment to enhance their efforts.
- b) **Preservation of Our Water Sources:** In 2023, we will implement actions for the protection and conservation of water and forest resources. This will involve developing new sustainable production alternatives and raising awareness within the community and among employees about the importance of these resources.



6 Hacienda Curuná



Hacienda Curuná, located in the municipality of Remedios, features three productive industries: Plant Nursery, Agroforestry, and Swine Farming. Notably, the hacienda has the largest plant nursery in the Northeast of Antioquia, with over 180,000 available plants. A significant portion of its operations is managed by single mothers, generating more than 125 jobs. Additionally, it manages the swine farming industry, currently housing 527 animals with a projection to reach 1,000. The hacienda also utilizes pig manure to produce gas through a biodigester system, and the waste is transformed into compost used as fertilizer for the nursery, gardens, and plantations.

The social and environmental components of this project beyond being productive, are integral to environmental preservation, flora and fauna protection, education for children in preservation and care, and the donation of plants for beautification purposes.



## Permanent and Ongoing Dialogue with our Communities:

In 2022, we received a total of 45 grievances at our Marmato operation. We have a formal mechanism to receive and process grievances, aiming to address 100% of the requests from our stakeholders.

In Marmato, a quarter of the grievances received were related to discomfort caused by noise and vibrations from our operations. This presents an opportunity for improvement as we strive to coexist harmoniously with our surroundings. Agreed-upon actions were taken to address these concerns in collaboration with the local citizens.

In Segovia, a total of 218 grievances were received, with 71 being petitions, 141 requests, and six complaints. For 2023, efforts will be made to consolidate grievances within a unified management system.

## Local Procurement

As part of our vision for building the future, local procurement of goods and services is a crucial element. This approach aims to create a lasting impact beyond the duration of our operations by fostering local capacity. We have established a policy for engaging local suppliers, empowering them with the tools and opportunities necessary to grow their businesses and providing services to the Company while adhering to our quality standards and competitive pricing.

At Marmato, we set a target in 2022 to increase local purchases to 20% of the total possible purchases in the area of influence. It is important to note that certain goods and services, due to safety and specialized handling considerations, can only be provided by national or international entities. Additionally, the goal was to include three new services or products per month, gradually integrating new local suppliers into the Company's database and considering them in our expansion plans.

Furthermore, we collaborated closely with the Chamber of Commerce in Manizales to identify the Company's procurement needs and identify potential suppliers that could meet our needs. This is an ongoing and progressive effort, where we commit to prioritizing local suppliers whenever possible.

The following chart displays the local purchases made during 2022:

### Local Procurement 2022

Area of Influence	Percentage of Local Purchases/Total Purchases
Marmato and Caldas region	13 %
Segovia and Remedios	4 %
Antioquia (excluding Segovia and Remedios)	37 %

## Priorities for 2023

- 1 Continue to execute our social investment framework through the use of ANM and voluntary investment funds.
- 2 Increase the number of local suppliers by 5% compared to 2022.
- 3 In terms of direct local purchases, increase to 18% in Marmato and Caldas, 7% in Segovia and Remedios, and 45% in the broader Antioquia region (excluding Segovia and Remedios).
- 4 Request local contracting reports from our suppliers to establish a baseline for indirect local procurement.
- 5 Introduce at least five new products or services monthly during the year for both operations.
- 6 Strengthen the local supplier program with the support of corporate affairs to identify potential suppliers for our operations.





# SASB INDEX





Topic	Metric Description	SASB Code	Data Marmato	Data Segovia
GREENHOUSE GAS EMISSIONS	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations Quantitative Metric tons (t) CO2-e, Percentage (%)	EM-MM-110a.1	<p>Scope 1- Direct GHG Emissions 2022: 2,230.77 2021: 2.190,86 This scope includes the categories: Total fuel (fixed and mobile sources), fugitive emissions (Fire extinguishers and refrigerants), oils and lubricants, and explosives.</p> <p>Scope 2- Indirect GHG Emissions 2022: 3,247.98 2021: 3,784.44 This scope includes the total emissions for billed energy.</p> <p>Total Footprint 2022:5.478,75 2021: 5,975.30 The carbon footprint or GHG inventory results corresponds to the total TonCO2eq of the different scopes measured, in this case 1 and 2.</p>	<p>Scope 1 and 2: 13,778.54. (Electric Energy, Diésel, GLP)</p> <p>Tons of CO2eq of Electric Energy : 6,539.18</p>
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets	EM-MM-110a.2	Refer to section "Monitoring our ecological footprint"	Refer to section "Towards a sustainable future, minimizing our carbon footprint"
Air Quality	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	EM-MM-120a.1	Smelting: NOx: 1,58E-4 t	<p>The company has fixed sources as a result of the productive activity, one source corresponds to the smelting system of the María Dama beneficiation plant and two sources to the Chemical Laboratory.</p> <p>Smelting at Maria Dama = (1) CO: 6,136 mg/m3 (2) NOx: 35,183 mg/m3 (regulation 500 mg/m3) (3) SOx: SO2: 1,624 mg/m3 (regulation 500 mg/m3); SO3: 0.016 mg/m3 (regulation 150 mg/m3) (4) PM10: 6,227 mg/m3 (regulation 150 mg/m3) (5) Hg: 1,507 mg/m3 (6) Pb: 0.066 mg/m3 (regulation 1 mg/m3) (7) COV: 17,998 mg/m3</p>
			Lab: MP: 4,55E-5 t SO2: 3,39E-6 t NOx: 5,19E-5 t Pb: 2,06E-6 t Cd: 8,83E-9 t Cu: 0,00 t  In: Metric tons (t)	<p>Lab = (1) CO: 9,321 mg/m3 (2) NOx: 34,830 mg/m3 (regulation 500 mg/m3) (3) SOx: SO2: 2,330 mg/m3 (regulation 500 mg/m3); SO3: 0.142 mg/m3 (regulation 150 mg/m3) (4) PM10: 1,364 mg/m3 (regulation 150 mg/m3) (5) Hg: 0.006 mg/m3 (6) Pb: 0.093 mg/m3 (regulation 1 mg/m3) (7) COV: 17,418 mg/m3</p> <p>Smelting lab = (1) CO: 54,536 mg/m3 (regulation N/A) (2) NOx: 46,412 mg/m3 (regulation 500 mg/m3) (3) SOx: SO2: 1,794 mg/m3 (regulation 500 mg/m3); SO3: 0.055 mg/m3 (regulation 150 mg/m3) (4) PM10: 7,128 mg/m3 (regulation 150 mg/m3) (5) Hg: 0.014 mg/m3 (regulation N/A) (6) Pb: 0.055 mg/m3 (regulation 1 mg/m3) (7) COV: 18,582 mg/m3 (regulation N/A)</p>



Topic	Metric Description	SASB Code	Data Marmato	Data Segovia
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	EM-MM-130a.1	<div><div>1</div>Total energy consumed: 9,923.5 GJ</div> <div><div>2</div>Percentage of electricity from the grid: 100%</div> <div><div>3</div>Percentage of renewables: 0%</div> <div>In: Gigajoules (GJ), percent (%)"</div>	<div><div>1</div>Total energy consumed 93,018,732 KWh (Maria Dama Beneficiation Plant, El Silencio Mine,</div> <div><div>2</div>Providencia Mine, Sandra K Mine and Carla Mine). percentage of electricity from the network: 57% ( 53,007.58 KWh ).</div> <div><div>3</div>Percentage of renewables: 43% ( 40,011.15 KWk ).</div>
Water Management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	EM-MM-140a.1	Total fresh water: 0.01305 thousand m³  In: Thousand cubic meters (m³), percentage (%)	The total surface water concessioned and consumed in 2022: 2,746,378.5 m3. Additionally, we had 185,166.8 m³ of underground concession water for our own operation, and 151,842.7 m3 of underground concession water for the operations of the small mining Units.
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	EM-MM-140a.2	<div>During the follow-up monitoring of the first and second semester of 2022, it was evidenced that some parameters of domestic and non-domestic (industrial) wastewater discharges presented a deviation with respect to the permissible limits established in Resolution 631 of 2015. Other non compliances, corresponds to collection for domestic use, which is greater than the flow granted by environmental corporation.</div> <div>For 2022, there were 5 incidents related to spills onto the ground caused by overflows from the non-domestic wastewater treatment system and domestic water due to pipe ruptures.</div>	0
Waste and Hazardous Material Management	Total weight of mineral processing waste, percentage recycled	EM-MM-150a.1	<div><div>1</div>Total tons of waste generated: 1,159.244 tons</div> <div><div>2</div>Percentage recycled: 87%</div> <div>In: Metric tons (t), percentage (%)</div>	<div><div>1</div>Total tons of waste produced 2,134 (t),</div> <div><div>2</div>Recycling Percentage 44.3%</div> <div>In: Metric Tons (t), Percentage (%)</div>
	Total weight of waste from mineral processing, percentage recycled	EM-MM-150a.2	Total tons of mineral waste: 280,395 Ton Sterile 2022: 15,010 tons Recycled percentage: 73.60%  In: Metric tons (t), percentage (%)	The scope includes the waste generated during the processing of metals (axis: smelting and refining) for the case SLUDGE: 611,765 (t), correctly disposed MINE STERILES: 350,571 (t), 100% of this activity is recycled In: Metric tons (t), percentage (%).

In: Gigajoules (GJ), percent (%)"



Topic	Metric Description	SASB Code	Data Marmato	Data Segovia
Waste and Hazardous Material Management	Number of tailings impoundments, broken down by MSHA hazard potential	EM-MM-150a.3	<ul style="list-style-type: none"><li>● Cascabel 1: Oldest tailings dam in which tailings deposit has been suspended, classified by Dynami, current SRK, with Low risk potential. As the water table of the reservoir decreases, the factor of safety will continue to increase, which it is currently doing.</li></ul>	Tailings Dams:
			<ul style="list-style-type: none"><li>● Cascabel 1 Dry Stack: Tailings deposit co-disposed with mine waste, classified as a dehydrated tailings deposit. It was classified with Low risk potential. It is currently in the closing stage.</li></ul>	<ul style="list-style-type: none"><li>● Higuieron- Status: closed- Capacity: 188,332 m³</li></ul>
			<ul style="list-style-type: none"><li>● Cascabel 1 Rear Enhancement: Dehydrated tailings deposit that is currently in operation under the same co-disposal method as Cascabel Dry Stack. Classified As Low by SRK</li></ul>	<ul style="list-style-type: none"><li>● Bascula- Status: closed- Capacity: 6,666 m³</li></ul>
			<ul style="list-style-type: none"><li>● *Dynami's classification is based on the CDA, Canadian Dam Association, it has not been done for MSHA, however they are comparable, and it is expected that MSHA will also be classified as low.</li></ul> <p>The only deposit that could be interpreted as a reservoir is cascabel, in which the amount of water is less and less. The Cascabel Dyr Stack and Cascabel Alce Trasero tailings deposits are dehydrated tailings deposits, whose behavior is very different from a conventional tailings dam, presenting less severity in the event of deposit failure.</p>	<ul style="list-style-type: none"><li>● Pomarrosa- Status: closed- Capacity: 153,010 m³</li><li>● Shaft (P1, P2 and P3)- State: P1 = closed; P2 = closed; P3 = 20% full)- Capacity: 316,736 m³</li><li>● Bolivia (B1, B2 and B3)- Status: B1 = closed; B2 = closed; B3 = in use)- Capacity: 26,271 m³</li><li>● Chocho stage 1 (1B, 1A and 1C)- State: 1B = closed; 1A = in use; 1C = in use)- Capacity: 1,164,000 m³</li><li>● Chocho stage 2- Status: under construction- Capacity: 1,400,000 m³</li></ul>
Biodiversity Impacts	Description of environmental management policies and practices for active sites	EM-MM-160a.1	Refer to section "A Pact with Nature in Marmato"	Refer to the section "Coexistence with Biodiversity"
	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	EM-MM-160a.2	<div><div>1</div>100%</div> <div><div>2</div>0%</div> <div><div>3</div>0%</div>	<div><div>1</div>25%, This is because one of the four mines has acid drainage, which is due to illegal dumping from adjacent mines, but the pH is corrected before dumping.</div> <div><div>2</div>100% is mitigating/correcting through corrective pH measures.</div> <div><div>3</div>N/A</div>
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	EM-MM-160a.3	0%	0%
Security, Human Rights & Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	EM-MM-210a.1	0%	0%



Topic	Metric Description	SASB Code	Data Marmato	Data Segovia
Security, Human Rights & Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near Indigenous land	EM-MM-210a.2	According to the most recent census in Colombia in 2018, 2,100 people from the Cartama indigenous community reside within the municipality of Marmato, representing almost 24% of the total population of Marmato. The community has been recognized by the Ministry of the Interior and Justice of Colombia through the Directorate of Ethnic Groups, as a dispersed indigenous community (through Resolution No. 046 signed on May 3, 2012). The Embera indigenous community and the Taparal Afro-descendant community in Riosucio are also near the mine.	0%
	Discussion of engagement processes and due diligence practices with respect to human rights, Indigenous rights, and operation in areas of conflict	EM-MM-210a.3	1 Human rights due diligence developed by an outside consultant during 2022	1 Human rights due diligence developed by an outside consultant during 2022
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	EM-MM-210b.1	Refer to section "Our communities"	Refer to section "Our communities"
	Number and duration of non-technical delays	EM-MM-210b.2	0	0
Labor Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	EM-MM-310a.1	80.62%	N/A
	Number and duration of strikes and lockouts	EM-MM-310a.2	0	0
Workforce Health & Safety	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	EM-MM-320a.1	<div><div>1</div>8.89</div> <div><div>2</div>0.05</div> <div><div>3</div>14.88</div> <div><div>4a</div>0.88</div> <div><div>4b</div>1.81</div>	<div><div>1</div>15.2</div> <div><div>2</div>0.02</div> <div><div>3</div>2.3</div> <div><div>4a</div>15.8</div> <div><div>4b</div>11.3</div>
Ética empresarial y transparencia	Description of the management system for prevention of corruption and bribery throughout the value chain	EM-MM-510a.1	Refer to the "Operational Excellence" section	Refer to the "Operational Excellence" section
	"Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index"	EM-MM-510a.2	Refer to the "Operational Excellence" section	Refer to the "Operational Excellence" section



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