

2023 SUSTAINABILITY REPORT



PAN AMERICAN
— SILVER —

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2023 KEY FACTS & FIGURES

ABOUT PAN AMERICAN SILVER

GRI: 2-1

Pan American Silver Corp. is a leading producer of silver and gold in the Americas, operating mines in Canada, Mexico, Peru, Brazil, Bolivia, Chile, and Argentina. We also own the Escobal mine in Guatemala that is currently not operating, and we hold interests in exploration and development projects. We have been operating in the Americas for three decades, earning an industry-leading reputation for sustainability performance, operational excellence, and prudent financial management.

30

Number of years operating
in the Americas

19,939

Employees and
contractors

11

Number of
producing mines

OUR JURISDICTIONS

CANADA, MEXICO, GUATEMALA, PERU, BRAZIL, BOLIVIA, CHILE, & ARGENTINA

2023 OPERATING PERFORMANCE

Ag

20.4 MOZ

CONSOLIDATED PRODUCTION

486.8 MOZ

PROVEN + PROBABLE RESERVES⁽¹⁾

Au

882.9 KOZ

CONSOLIDATED PRODUCTION

7.7 MOZ

PROVEN + PROBABLE RESERVES⁽¹⁾

⁽¹⁾ See the mineral reserves and mineral resources on page 55 of 2023 Annual Financial Report.

ABOUT THIS REPORT

GRI: 2-1, 2-2, 2-3, 2-4, 2-5

PURPOSE

This report articulates Pan American Silver’s vision of sustainability and demonstrates how we address sustainable development in the context of our business. Our aim is to be transparent in documenting our performance and our progress toward our sustainability goals.

Throughout this report, we refer to Pan American Silver Corp. as “Pan American Silver”, “Pan American” or the “Company” and use the terms “we”, “us” and “our” to refer to Pan American Silver Corp. and its subsidiaries.

AUDIENCE

The intended audience for this report is our stakeholders, which we refer to as communities of interest, or COIs.⁽¹⁾ This includes our shareholders, employees and contractors, local communities, industry associations, suppliers, unions, governments, regulatory agencies, and civil society.

CONTENT AND SCOPE

This report includes our 2023 management approach and performance on material topics—namely topics where we have the most significant impacts (actual and potential, positive or negative) on the economy, environment, communities, and people, including impacts on human rights. Detailed information about the management approach for each of our material topics is available on our [website](#).

The [2023 Sustainability Performance Data Book](#), available on our [website](#), includes quantitative and qualitative metrics that illustrate Pan American Silver’s sustainability performance.

This report covers 11 mining operations.

- | | |
|--|---|
| Silver Segment: | Gold Segment: |
| <ul style="list-style-type: none"> • La Colorada, Mexico • Cerro Moro, Argentina • Huaron, Peru • San Vicente, Bolivia | <ul style="list-style-type: none"> • Jacobina, Brazil • El Peñon, Chile • Minera Florida, Chile • Timmins, Canada • Shahuindo, Peru • La Arena, Peru • Dolores, Mexico |

In addition, this report includes certain information on the following mines:

- Escobal in Guatemala, which continues to be on care and maintenance, due to the International Labour Organization Convention No. 169 (“ILO 169”) consultation process required by the Constitutional Court of Guatemala.
- Manantial Espejo in Argentina, which was placed on care and maintenance in January 2023.
- Alamo Dorado in Mexico, which has been in the post-closure phase since 2017.
- Morococha in Peru, which was placed on care and maintenance in 2022 and was subsequently sold in June 2023.

When applicable, we include information regarding our headquarters in Vancouver and our regional

offices. Our development and advanced stage exploration projects are outside the scope of this report, except for certain information on safety, people, social, security, and human rights management.⁽²⁾

⁽¹⁾ We use the Mining Association of Canada (MAC)’s definition of Community of Interest (COI), which includes all individuals and groups who have an interest in or believe they may be affected by decisions regarding the management of our operations.

⁽²⁾ Certain data for the following development and advanced stage exploration projects is included in the report: La Arena II in Peru, the La Colorada Skarn deposit in Mexico, and Navidad in Argentina, which is on care and maintenance.

ADDITIONAL DETAILS

Reporting period	Sustainability Report: January 1 to December 31, 2023 Annual Report: January 1 to December 31, 2023
Reporting Standards and Frameworks	<p>This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards for the period January 1 to December 31, 2023. Information and data relevant to the GRI G4 Mining & Metals Sector Supplement are included in this report. The GRI index can be found in the Reporting Index here.</p> <p>This report was prepared in alignment with the Sustainability Accounting Standards Board (SASB) Metals & Mining Sustainability Accounting Standard. The SASB index can be found in the Reporting Index here.</p> <p>This report also contains information that considers the Taskforce on Climate-related Financial Disclosures (TCFD) reporting framework, which is disclosed in the appendix “Climate, Energy and Greenhouse Gas Emissions Report”. The TCFD index can be found in the Reporting Index here.</p>
Restatements of information	<p>Energy consumption and direct (Scope 1) GHG emissions have been revised for 2022 due to a recalculation of the liquefied petroleum gas (LPG) used at Dolores in 2022. See footnotes on the Energy Consumption and GHG Emissions tables in the 2023 Sustainability Performance Data Book.</p> <p>Water withdrawal for the San Vicente mine and total water withdrawal (and associated metrics) have been revised for 2022. See footnote on the Water Intensity table in the 2023 Sustainability Performance Data Book.</p>
Data and assurance	<p>On March 31, 2023, Pan American Silver completed the acquisition (the “Yamana Acquisition”) of 100% of the issued and outstanding shares of Yamana Gold Inc. (“Yamana”), following the sale by Yamana of its Canadian assets to Agnico Eagle Mines Limited. The Yamana Transaction added four producing mines to Pan American Silver’s portfolio: Jacobina in Brazil, El Peñon and Minera Florida in Chile, and Cerro Moro in Argentina, (together the “Acquired Mines” or “Acquired Sites”).</p> <p>For the purpose of the report, the term “Pan American Silver Total” includes data from both the Acquired Mines and Pan American Silver’s mines prior to the Yamana Acquisition.</p> <p>Other than financial data, which is as of the acquisition date, the report includes data from the Acquired Mines for the complete reporting period of January 1 to December 31, 2023. For certain indicators, trend data have been shown for the Pan American Silver mines prior to the Yamana Acquisition.</p> <p>Data was reviewed internally at both site and corporate levels. Certain economic data was extracted from our 2023 audited annual financial statements.</p> <p>Data is reported in metric system units and US dollar currency.</p>
Contact	Any feedback regarding this report is welcome. Please direct your comments or questions to: esg@panamericansilver.com .



PRESIDENT & CEO'S MESSAGE

The past year was a period of dynamic change for Pan American Silver.

With the completion of our acquisition of Yamana on March 31, 2023, we added four producing mines to our portfolio: the Jacobina mining complex in Brazil, the El Peñon and Minera Florida mines in Chile, and the Cerro Moro mine in Argentina. This strategic move greatly expanded our operations in Latin America and established Pan American Silver as a leading producer of silver and gold in the Americas. The transaction was well aligned with our overarching strategy of creating value through exposure to new growth opportunities, margin improvement, and extending mine life.

As we look ahead, we remain optimistic about the future demand for silver, driven by its essential role in solar panel production, electrification, and the broader energy transition.

Successful Integration of Assets

Integration has been a key focus in 2023, as we welcomed more than 4,500 new employees into the Pan American Silver family. Their dedication has been instrumental in achieving a smooth integration and to fostering a shared vision for our future success. Our teams maintained a focus on the safe, efficient, and environmentally sound operation of our mines. I am especially proud to note our commendable safety record in 2023, marked by zero fatalities and significant improvements in our loss-time injury frequency and severity rates.

In 2023, we produced 20.4 million ounces of silver and a record 882.9 thousand ounces of gold, representing increases of 11% and 60%, respectively, inclusive of the nine-month contribution from the Acquired Mines. The all-in sustaining costs for our silver segment operations of \$18.17⁽³⁾ per ounce were higher than we had guided,⁽⁴⁾ largely due to production shortfalls at La Colorada related to ventilation constraints. We completed the new concrete-lined ventilation shaft for the La Colorada mine on schedule in December 2023. This infrastructure upgrade, coupled with the installation of two large exhaust fans by mid-2024, is expected to significantly enhance ventilation conditions, leading to improved production and costs at the La Colorada mine in the second half of 2024. The all-in costs for our gold segment operations of \$1,371 per ounce was within our guided range.

Pan American achieved record revenue of \$2.3 billion in 2023 and paid out \$130.4 million in dividends. We were well-positioned entering 2024 with cash and short-term investments totaling \$440.9 million and the full \$750.0 million available under our undrawn revolving sustainability-linked credit facility.

ILO 169 Consultation Process

The ILO 169 consultation process for the Escobal mine continued in 2023. Information related to the project was delivered to the representatives of the Xinka Indigenous People, and the Xinka representatives and their advisors made several visits to the Escobal mine to verify the information provided. In addition, several working group meetings

were held. Pan American Silver looks forward to continuing our participation in the ILO 169 consultation process under the new government in Guatemala that took office in January 2024.

30 Years Operating in the Americas

This year, Pan American proudly celebrates 30 years of operating in the Americas. Over the last five years, we have doubled the size of Pan American Silver through two accretive acquisitions, establishing a robust base for continued growth and cash flow generation. We remain focused on safety and operational excellence, and we will continue to evaluate opportunities to optimize our portfolio through the divestment of non-core assets. At the same time, we remain committed to high standards of ESG performance and to implementing sustainability initiatives that contribute to mitigating present and emerging risks.

In closing, I extend my heartfelt thanks to our dedicated employees and the communities we serve for their unwavering support. Together, we embark on the next chapter of Pan American Silver's journey with confidence and enthusiasm.

Michael Steinmann | President & CEO
May 23, 2024

⁽³⁾ Non-GAAP measure; please refer to the "Alternative Performance (non-GAAP) Measures" section on page 120 of Pan American Silver's annual report for further information on these measures.

⁽⁴⁾ As per the news release issued by Pan American on April 27, 2023.

“ Pan American proudly celebrates 30 years of operating in the Americas. Over the last five years, we have doubled the size of the Company through two accretive acquisitions, establishing a robust base for continued growth and cash flow generation.



CHAIR'S MESSAGE

2023 was a transformative year for Pan American Silver, during which we made significant progress in looking after the health and safety of our people, completing the acquisition of Yamana, publishing the Preliminary Economic Assessment (PEA) for the La Colorada Skarn project, and advancing many sustainability initiatives.

This progress supports our goal of long-term sustainable growth to the benefit of our workforce, communities, and shareholders.

A Transformative Year

The Yamana Acquisition, which closed at the end of March 2023, established Pan American Silver as a leading precious metals miner in the Americas. The new mines, located in Brazil, Chile, and Argentina, are operated by strong teams and have contributed to increasing our annual production of both silver and gold and extending our overall mine life. I am very pleased with how well the integration of the Yamana assets has proceeded. We are creating a stronger Pan American Silver by combining the best of both companies, including sustainability practices.

Safety, Culture and Sustainability

The health and safety of our people is Pan American Silver's highest priority. This year we continued to adopt additional safety measures and began to incorporate the "Do Safety Differently" concept within our operations. We expanded training and worked to further develop both the technical and leadership skills of our employees. I am extremely pleased to report that our safety performance in 2023 was significantly better than in the prior two years, including zero fatalities across all operations. While we are heartened by our achievements, we recognize that safety requires a relentless focus, and we are committed to maintaining our efforts to continuously improve.

Attracting and retaining talent in the mining industry is a constant challenge. At Pan American, people are the heart of our Company, and we strive to attract and develop new talent, with an emphasis on local hiring. Last year, we launched our "Future PAAS" internship program in Peru, which is open to all graduates from mining-related engineering programs. Our internships provide technical field training, leadership development, and mentoring, while also supporting the development of English language skills.

In 2023, we incorporated our "Building Respect Together" program into the induction processes across our sites. As this program has developed

over the years, we have strived to create a welcoming, healthy, and respectful workplace while simultaneously improving our diversity and inclusion. We are fortunate to have a culturally diverse workforce; however, the level of participation of women and under-represented minorities remains low. In 2023, we set hiring and retention goals, committing to hire at least 15% women and to retain 85% of female employees. I am delighted that we exceeded both goals—nearly one quarter of all new hires were women, and we retained more than 90% of our female employees. We believe a more diverse and inclusive workplace culture is the foundation for success, and we will maintain a committed effort to foster this at each of our operations.

Respecting local communities is at the core of our values, and we work closely with local stakeholders to build positive, long-term relationships and to support the development of sustainable local economies. In 2023, we continued advancing the social closure plan for Manantial Espejo in Argentina, which is a community-driven economic development program that is being developed by the Gobernador Gregores community and with the participation of the local government. We initiated a similar social closure process at Dolores in Mexico with the local Ejido members and local and regional governments.

We continue our journey of sustainable development practices and addressing the risks and opportunities that climate change presents. In 2023, we joined the World Gold Council and committed to implement the Responsible Gold Mining Principles. We had no significant environmental incidents in 2023 and made material progress in meeting our climate change goals, exceeding our GHG emissions annual reduction target of 19% (or 73,000 t CO₂Eq). This positions us very well to meet our current 2030 goal of reducing our global scope 1 and scope 2 GHG emissions by at least 30% from 2019 baseline emissions. We also continued our biodiversity conservation efforts, surpassing our goal of revegetating 80 hectares across our operations.

I was fortunate to travel to four of our operations this year: namely, Shahuindo, El Peñon, Jacobina and Escobal. Interacting with local management provides an opportunity to better understand the local operating context, consider the challenges and opportunities at each site, and experience our culture first-hand. It was particularly pleasing to see how well the Acquired Mines have been integrated and to see how our teams are making a positive impact in all of the communities where we operate.

Governance

The Board is steadfastly focused on the next chapter of Pan American's future success, enhancing operational performance, advancing growth projects, and upholding our commitment to safe and sustainable mining operations.

Pan American Well Positioned for the Future

I am excited for the future of Pan American Silver. We are well positioned to take advantage of opportunities and navigate the challenges that may arise due to our strong balance sheet and portfolio of operating assets that has significant upside potential. Our extraordinary team, led by Michael Steinmann, has had a very demanding year where everyone has risen to the challenge. On behalf of the Board, I would like to thank all our employees and contractors for their ongoing efforts and commitment, and our communities, suppliers, and shareholders for their continuing support.



Gillian Winckler | Board Chair

May 23, 2024

“

I am excited for the future of Pan American. We are well positioned to take advantage of opportunities and navigate the challenges that may arise due to our strong balance sheet and portfolio of operating assets that has significant upside potential.

TRANSFORMATIVE YEAR

A SUSTAINABILITY PERSPECTIVE

We completed the acquisition and integration of Yamana, expanding our portfolio to include four new mines and two new jurisdictions—Chile and Brazil. Although there were some differences in sustainability strategies, overall, Pan American and Yamana’s Environmental, Social, and Governance (ESG) initiatives and goals were well aligned, thus facilitating a smooth integration of the Acquired Mines. The integration has provided an opportunity for us to assess both Pan American Silver’s and Yamana’s Sustainability Standards and performance and leverage the best practices of both.

Throughout the integration process, we have continued to engage with communities, governments, investors, and other stakeholders to understand their priorities, and to set ESG goals and strategies that align with those priorities. We are getting to better understand the Acquired Mines to determine how we can strategically advance our established ESG goals and develop meaningful, company-wide goals that can help us achieve longer-term ESG objectives, such as our 2030 climate goal.

2023 HIGHLIGHTS

ZERO

| fatalities | significant environmental incidents | new social disputes

23%

| reduction in GHG Emissions compared to the 2023 base case⁽¹⁾

REDUCED OVER
740 TONNES

| in Non-rock Waste compared to the 2023 base case⁽¹⁾

\$14.7 M

| in Community Investments

REDUCED OVER
170,700 M³

| in Water Use compared to 2023 base case⁽¹⁾

REHABILITATED OVER
89 HECTARES

| across our operations

SOCIAL CLOSURE PLAN

| for Manantial Espejo approved by the government of Santa Cruz in Argentina

TRAINED
1,142

| key employees on Anti-Corruption Policy

LTIF:⁽²⁾ 0.69

LTIS:⁽³⁾ 40

100%

| of security employees and contractors trained in human rights

45%

| of our Board Members are women⁽⁴⁾, including our Board Chair

24%

| hiring of women for all approved and budgeted vacant positions

(1) The 2023 base case is our projected 2023 water use, GHG emissions and waste generation, as calculated using our life of mine plans adjusted for annual production guidance. The 2023 base case excludes the Acquired Mines.
(2) LTIF: Lost time injury frequency rate.
(3) LTIS: Lost time injury severity rate.
(4) The percentage of women on the Board increased to 56% at our Annual General Meeting on May 8, 2024.

COMPANY INFORMATION

GRI: 2-1, 2-2, 2-6, 2-28

VISION & VALUES

Our vision is to be the world's premier silver mining company, with a reputation for excellence in discovery, engineering, innovation, and sustainable development. Our strategy to achieve this vision is to:

- Generate sustainable profits and superior returns on investments through the safe, efficient, and environmentally sound development and operation of our assets.
- Constantly replace and grow our mineral reserves and mineral resources through targeted near-mine exploration and business development.
- Foster positive long-term relationships with our employees, shareholders, communities and local governments through open and honest communication and ethical and sustainable business practices.
- Continually search for opportunities to upgrade and improve the quality of our assets, both internally and through acquisition.
- Encourage our employees to be innovative, responsive, and entrepreneurial throughout our entire organization.

Our Values



HEALTH & SAFETY

We commit to providing a safe and healthy workplace for all of our employees and contractors.



RESPONSIBLE OPERATIONS

We pledge to operate in a responsible and ethical manner.



HONEST & FAIR

We promise to conduct our business affairs free from favoritism, fear, coercion, discrimination, or harassment.



CLEAR COMMUNICATION

We aim to give full, fair, accurate, timely and understandable disclosure to our stakeholders.

MEMBERSHIP ASSOCIATIONS

We actively support and are members of initiatives that help advance our sustainability performance, as well as industry performance, allowing us to contribute to broader sustainable development. A full list of our memberships can be found in the [2023 Sustainability Performance Data Book](#).



WHERE WE OPERATE

TOTAL COMPANY 9,892 | 10,047

CORPORATE OFFICE
 134 | 12

SHAHUINDO
 664 | 1974

TIMMINS
 686 | 303

LA ARENA
 579 | 1006

DOLORES
 547 | 464

HUARON
 915 | 1630

JACOBINA
 1411 | 1355

LA COLORADA
 847 | 519

SAN VICENTE
 403 | 193

NAVIDAD
 0 | 2

SKARN DEPOSIT
 55 | 42

EL PEÑON
 1446 | 804

CERRO MORO
 791 | 714

ESCOBAL
 154 | 193

MINERA FLORIDA
 876 | 643

MANANTIAL ESPEJO
 24 | 12



OUR PRODUCTS

Our main products are silver and gold doré, as well as silver bearing zinc, lead, and copper concentrates. Silver is an essential and versatile metal that plays a crucial role in the transition from the use of fossil fuels to a low-carbon economy.

We continue to work with the Silver Institute to improve the general understanding of the essential role of silver in solar panel production, electrification, and the broader energy transition. Fuelled by the expanding landscape of green economy initiatives, silver consumption for

industrial applications achieved a record high in 2023, reaching 654.4 million ounces. According to the World Silver Survey 2024 by the Silver Institute, higher-than-expected photovoltaic (PV) capacity additions, combined with a faster adoption of new-generation solar cells, raised electronics and electrical demand by a substantial 20%. At the same time, other green-related applications, including power grid construction and automotive electrification, also contributed to the gains. For more information, visit the Silver Institute [website at silverinstitute.org](https://www.silverinstitute.org).



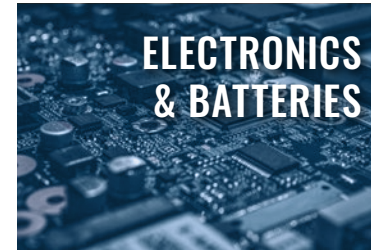
SOLAR PANELS



BARs & COINS



WATER PURIFICATION



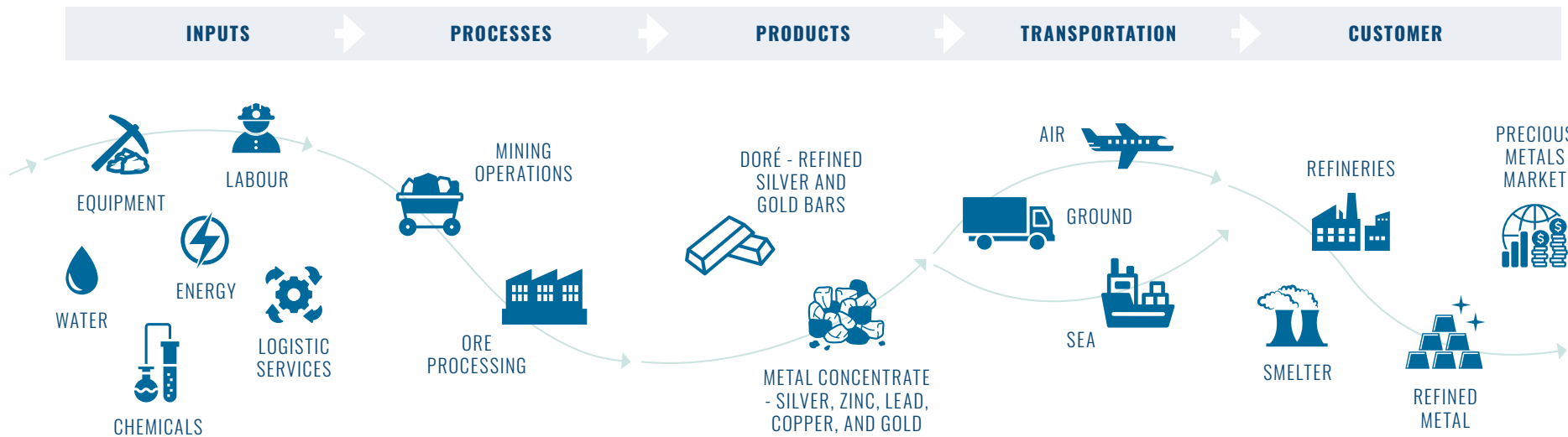
ELECTRONICS & BATTERIES



HEALTH



JEWELLERY



OUR SUPPLY CHAIN

Mining requires a sustainable supply chain and transport logistics for both the supply of materials and the transport of products. Our service providers are primarily locally based companies or local subsidiaries of international service or consulting groups. Our mines process ore to produce doré bars (an alloy composed primarily of silver and gold) or mineral rich concentrates (a mixture primarily composed of base metals and precious metals). We send our doré to refineries, which further refine it to produce silver and gold bullion, which is then sold to various bullion banks, traders, and consumers. We sell our concentrates to traders or smelters, which further process and refine it into marketable products. Additional details on our work done to build a responsible supply chain can be found in the [Risk Management section](#) of this report.

SUSTAINABILITY GOVERNANCE

GRI: 2-9, 2-11, 2-12, 2-13, 2-14, 2-17, 2-18, 2-19, 2-20, 2-23

BOARD OF DIRECTORS

Good governance is critical to our success as a company. Ultimate responsibility for Pan American's corporate governance lies with the Board, which is responsible for approving corporate strategy and policies, assisting in the formulation of corporate objectives, and in assessing and approving key plans, and evaluating the qualifications of executives and senior managers. Two Board committees have primary responsibility for overseeing our sustainability performance: the Communities and Sustainable Development Committee ("CSD Committee") and the Health, Safety, and Environment Committee ("HSE Committee"). Both committees meet, review the Company's performance, and report to the Board on a quarterly basis. However, all Board committees are responsible for one or most aspects of sustainability governance.

Board of Directors Roles and Responsibilities

The ability of the Board to perform its oversight function is dependent on the knowledge and skills of Board members. The Nominating & Governance Committee ("N&G Committee") has developed a skills matrix identifying the various areas of expertise that they consider necessary to provide effective stewardship for Pan American Silver. The N&G Committee reviews the competencies, skills, and experience of board members annually and of nominees as required. We recognize the

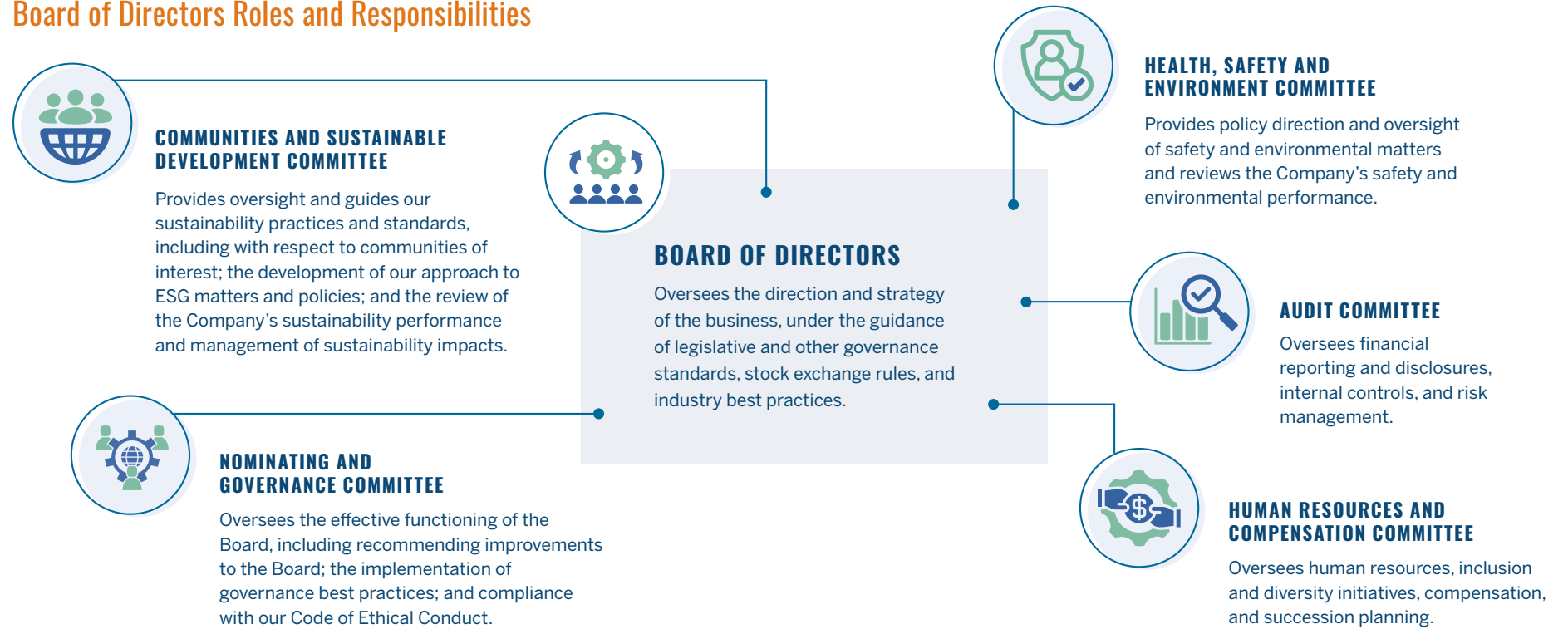
importance of ongoing director education and the need for directors to have a current and detailed understanding of their duties, emerging mining trends and regulatory requirements. In 2023, in addition to receiving regular presentations on sustainability and governance topics, the CSD Committee was provided with specific presentations on topics including human rights, and updates on developments in international and local laws and

regulatory frameworks, including Canada's new modern slavery legislation. In addition, several Board directors completed training sessions and seminars on topics including transitioning to a net zero carbon economy, tailings, climate governance, and ethics. On an annual basis, the Board reviews its performance, each committee conducts a performance review, and Board and committee mandates are reviewed. Additionally, the Human

Resources Compensation Committee annually reviews the Chief Executive Officer (CEO)'s performance.

Details on the Board's mandate, members, committees, processes, and the corporate policies that guide Pan American Silver's governance, are available in our [2024 Management Information Circular](#), and on the corporate governance section of our [website](#).

Board of Directors Roles and Responsibilities



MANAGEMENT TEAM

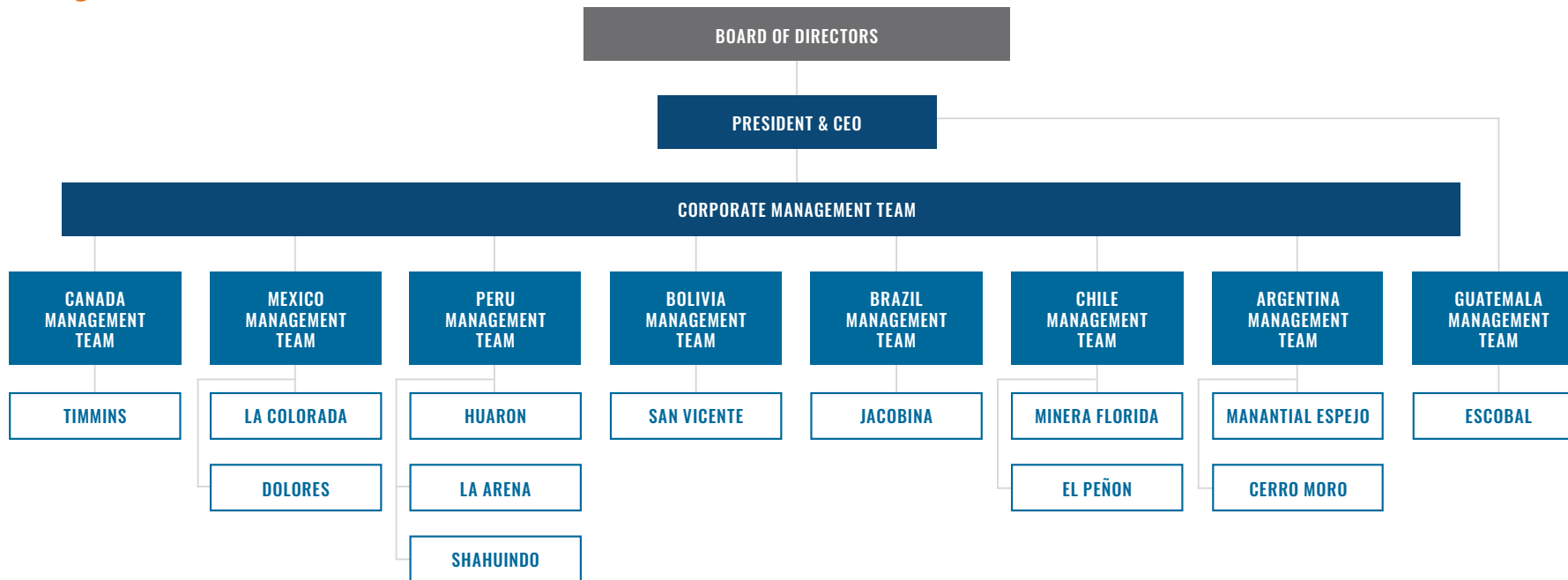
Accountability for sustainability cascades down from the Board to our operations. Country managers are tasked with overseeing and managing sustainability matters in the countries where they operate, while mine managers implement sustainability programs and initiatives.

Under the guidance of the Board, the CEO, the Chief Operating Officer (COO), the Senior Vice President,

Corporate Affairs and Sustainability, and the Chief Legal and Human Resources Officer, General Counsel (CLHRO) direct and oversee strategy, programs, initiatives, and performance related to communities, health and safety, environment, and human capital. They also monitor the performance of ESG indicators monthly. The ESG Management Committee, consisting of cross-departmental senior and executive management representatives, is responsible for guiding Pan American Silver's ESG

strategy and management to improve performance. The ESG Management Committee reports to the CEO, and its central functions include assisting executive management to develop and implement programs and initiatives, and to monitor their effectiveness, as well as assessing Pan American Silver's exposure to ESG risks such as climate change.

Management Structure





POLICIES

Pan American Silver has adopted policies, standards, and guidelines that articulate the way our directors, officers and employees are expected to behave and guide our business. Our [Global Code of Ethical Conduct](#) (the Code of Conduct) provides the foundation for responsible business conduct and defines the key principles for operating ethically and in compliance with the law, for workplace relationships, and for working with COIs. Pan American has several additional board-level policies that guide our ESG approach. These include:

- [Global Human Rights Policy](#)
- [Environmental Policy](#)
- [Health and Safety Policy](#)
- [Social Sustainability Policy](#)
- [Inclusion and Diversity Policy](#)
- [Board and Senior Management Diversity Policy](#)

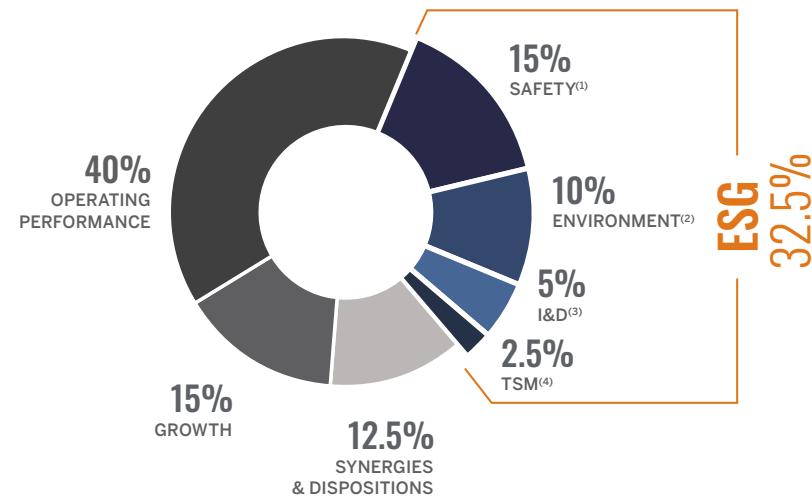
- [Global Anti-Corruption Policy](#)
- [Supplier Code of Conduct](#)

Our policy commitments and standards are based on industry best practices, international norms, and performance standards, and respond to COI expectations. All policies can be found on our [website](#).

COMPENSATION LINKED TO ESG METRICS

The [2024 Management Information Circular](#) details the process for determining remuneration for senior executives. Our 2023 annual incentive plan for senior management—executive officers, vice presidents, country managers, directors, operation, and unit managers—links incentive compensation to the achievement of short-term objectives, both corporate and operation-specific, which are approved by the Board. For 2023, 32.5% of performance-based compensation was tied to ESG metrics.

Senior Management's 2023 Performance-Based Compensation



(1) Lost time injury frequency (LTIF) and lost time injury severity (LTIS) targets.
 (2) Significant Environmental Incidents (SEIs) target.
 (3) Inclusion & Diversity (hiring and retention of women) targets.
 (4) Towards Sustainable Mining (TSM) external verification target.

ESG STRATEGY AND APPROACH

GRI: 2-22, 2-24

Pan American Silver is committed to operating ethically and in line with sustainable business practices throughout the mining lifecycle. Our objective is to create value for our COIs, and we aim to meet or exceed applicable legal requirements and regulations by applying industry best practices and by adhering to recognized international standards for responsible business conduct.

We are members and supporters of industry associations that help us advance our sustainability performance. Our participation provides a forum to learn from and dialogue with our peers, as well as a platform through which we collaborate and contribute to industry best practices. We are a member of the Mining Association of Canada (MAC), and we are implementing the Towards Sustainable Mining (TSM) protocols across all our operations. We have set a corporate goal to achieve level A performance on all TSM protocols at all operations. With the acquisition of Yamana, Pan American Silver joined the World Gold Council (WGC) and committed to implementing the Responsible Gold Mining Principles (RGMP).

We also participate in initiatives that help address key sustainability challenges of relevance to Pan American Silver and our COIs. For example, we are part of the United Nations Global Compact (UNGC), through which we seek to contribute to global sustainable development that meets the United Nations Sustainable Development Goals (SDGs). A full list of our memberships can be found in the [2023 Sustainability Performance Data Book](#).

ESG MANAGEMENT FRAMEWORK

While each of our operations is responsible for the development and implementation of procedures and programs that comply with our policies and standards, including corporate initiatives such as TSM and the RGMPs, our overarching ESG Management Framework ensures a level of standardization. It creates a mechanism through which we can operationalize our vision, values, and policy commitments across our operations by establishing expectations and providing guidance, while allowing individual operations to maintain flexibility to adjust their processes to meet the distinct socio-economic needs of local communities.

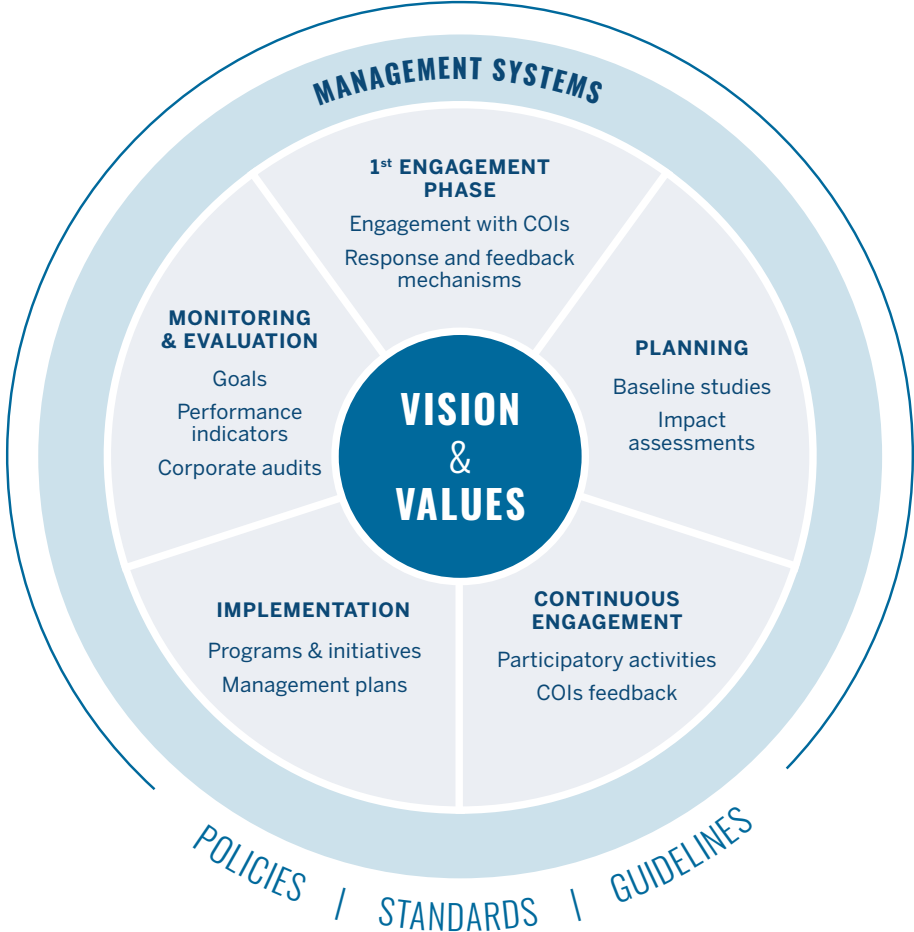
Covering topics where we have identified our greatest potential to impact our COIs or the environment, the ESG Management Framework is designed to help us manage risk, and to identify opportunities to effectively deliver value to COIs. At the same time, it provides opportunities to share best practices across our sites.

Our engage-plan-implement-monitor-evaluate management approach provides a consistent methodology for identifying and managing the actual and potential impacts of our operations on the environment, economy, our workforce, and communities, including impacts on human rights. We proactively seek to understand the priorities and perspectives of our COIs, and many of our processes are participatory. This enables us to better manage

risk, identify COI priorities, and implement programs that contribute to sustainable development in the areas where we operate.

We train our local teams on guidelines and procedures to manage potential impacts and to continuously improve our performance. Our focus during 2023 has been to support the integration of the Acquired Mines. Our corporate team has

been supporting our new sites in aligning with Pan American Silver’s policies, standards, and guidelines. We have also fostered increased communication between all our operations to enable meaningful collaboration. For example, in 2023, we held a conference for sustainability leaders across Pan American Silver, where they were able to meet and share sustainability best practices.



SUSTAINABILITY GOALS AND PERFORMANCE INDICATORS

We measure and monitor our sustainability performance with the objectives of complying with regulatory requirements, identifying and managing potential risks, and continuously improving our approach and performance. Our key performance monitoring components include ESG goals, Sustainability Performance Indicators (SPIs), TSM assessments, and ESG audits.

Our annual corporate sustainability goals are developed in collaboration with our operation teams. Goals are set at both the corporate and site level. Site-based goals roll up into corporate goals. Performance is reviewed by senior management and the Board on a quarterly basis. Further details on our performance against our goals can be found in the [2023 Performance section](#) of this report.

Our standardized SPIs are designed to monitor site-level performance on key social and environmental activities. Most SPIs have associated corporate goals, and we employ the SPIs to track progress towards the achievement of those goals. Senior operation management reviews SPI performance monthly; senior management and the Board receive quarterly performance reports.

In 2023, our SPIs covered:

- Environmental incidents
- Environmental audits
- Water use
- Energy use

- GHG emissions
- Biodiversity conservation
- Waste management
- Health & Safety
- Social risk management
- Community grievance and request management
- Community investment
- Sustainability Audits
- TSM performance

In 2023, our new sites tracked SPI performance. We developed new SPIs to drive performance in key areas, and in 2023, we worked to improve the governance of our community investments by adopting a new community investment SPI at the request of our Board of Directors. As part of this process, we established procedures to track the impact of our community investment projects, so that we can better evaluate project success and reduce risks associated with our community investment activities. Additional details can be found in the [Socio-Economic Contributions section](#) of this report.

Given our decentralized structure, the goals and SPIs are crucial in building a common understanding of our sustainability priorities across the Company, focusing on operation-level priorities, and enabling site teams to contribute to Pan American Silver's overarching sustainability priorities.

Further details on our performance against our goals can be found in the [2023 Performance section](#) of this report.



ENGAGEMENT WITH COMMUNITIES OF INTEREST

GRI: 2-25, 2-26, 2-29, 207-3

OUR APPROACH TO STAKEHOLDER ENGAGEMENT

Our business success is dependent on our ability to maintain trusting positive relationships with a broad range of COIs, including employees and contractors, unions, local communities, governments, suppliers, industry associations, regulatory agencies, civil society, analysts, and investors.

We welcome and promote open, meaningful, and inclusive engagement with all COIs, and strive to learn about the issues that are important to them, and about their perceptions of our impacts. This process enables us to manage these issues more effectively and to better align our priorities and goals with those of our COIs. It is a long-term reciprocal and dynamic process that requires active listening and information sharing. COI engagement helps us:

- Align our business strategy with COIs' expectations.
- Demonstrate accountability and disclosure.
- Understand potential risks and opportunities.
- Identify and respond to external trends and shifts.
- Identify relevant non-financial issues to report on.
- Better allocate resources and direct sustainability investment.
- Create economic opportunities while considering the impacts of climate change.

To effectively engage with our COIs, we employ various processes, tools, and resources to help us understand, respond to, and manage COI expectations. We conduct an annual survey of the COIs identified in our stakeholder mapping to understand their sustainability-related interests and concerns, and to identify any trends or changes. Every year, we take steps to enable the participation of individuals who do not have computers and/or internet access. This involves installing computer terminals at our sites to collect workers' feedback. Additionally, our social teams work directly in communities to gather input from local stakeholders. The COI survey results can be found in the [Materiality section](#) of this report.

We hold an annual ESG Update conference call and webcast, which will be combined with our Investor Day this year, to share details relating to our ESG values, practices, and performance, and to encourage engagement between our stakeholders, including shareholders, and our management team.

Other key COI engagement mechanisms include:

- Ongoing communication with communities and local, regional, and national governments.
- Updated baselines, perception studies and community programming with collaboration from COIs.
- Annual workforce wellbeing survey.⁽⁵⁾
- Occasional ESG investor survey.

- Community and worker response and grievance mechanisms at each operation.
- COI visits to our operations and projects.

Participatory Engagement

Many of our sites engage with local authorities and community groups through participatory committees. These committees create opportunities for dialogue, help us manage our actual and perceived impacts, and help us understand and contribute to community objectives. The emphasis of the participatory committees varies from mine to mine, but is focused mainly on environmental—water, air quality, or vibrations monitoring—and social topics including distribution of benefits, mine closure, archaeology, and other cultural aspects. Participatory committees are either voluntary, or have been established in line with regulatory requirements.

In the case of environmental participatory monitoring, when required, training is provided for participants to help them understand how our operations work and clarify the technical aspects of a monitoring campaign (e.g., how to sample and how to interpret results). The results are shared with the monitoring group and relevant authorities.

Our social teams work with communities and third parties to conduct participatory baselines, cultural studies, and perception assessments. These additional engagement methods help us better understand the social context and potential impacts

of our operations on host communities.

In 2023, we engaged in participatory monitoring initiatives or were involved in participatory monitoring committees at Shahuindo, La Arena, Huaron, Minera Florida, Jacobina, and Cerro Moro.

Timmins continues to work with the Mattagami Region Conservation Authority to develop an Integrated Watershed Management Plan for the community. This project aims to develop and provide a framework for collaboration and sustainable development and implement the plan with input from key communities of interest. The plan will include water conservation and remedial strategies that are actionable in the community.

At Manantial Espejo and Dolores, we engaged with workers, local communities, governments, and other COIs to jointly develop social closure plans. The [Mine Closure section](#) of this report provides additional details.

The [Escobal Mine section](#) of this report provides information on our Escobal mine's participations in a local watershed committee.

⁽⁵⁾ The term workforce includes both employees and contractors.

ENGAGEMENT WITH COMMUNITIES OF INTEREST

The table below lists our key COIs and the full range of engagement methods. Our approach to managing the interests and/or concerns identified through engagement is detailed throughout this report.

Communities of Interest	Types of Engagement			Topics of Importance in 2023
Our Employees	<ul style="list-style-type: none"> Meetings and lineouts Face-to-face interactions Email, chats, and internal communications Lunch and learn sessions 	<ul style="list-style-type: none"> Conferences Training Negotiations with Worker Unions Internal memorandums and communications 	<ul style="list-style-type: none"> Grievance mechanisms Engagement surveys Website Social media 	<ol style="list-style-type: none"> Health and safety Job security Mine's emergency response readiness
Our Contractors	<ul style="list-style-type: none"> Meetings and lineouts Face-to-face interactions Email and internal communications Lunch and learn sessions 	<ul style="list-style-type: none"> Conferences Training Negotiations with Worker Unions Internal memorandums and communications 	<ul style="list-style-type: none"> Grievance mechanisms Engagement surveys Social media 	<ol style="list-style-type: none"> Health and safety Mine's emergency response readiness Water discharge and spills that could impact the water quality
Investors	<ul style="list-style-type: none"> ESG Call events Quarterly Financial Results calls Quarterly and annual financial reporting 	<ul style="list-style-type: none"> Roadshows Conferences Meetings, phone calls and emails 	<ul style="list-style-type: none"> Website Annual shareholder meeting 	<ol style="list-style-type: none"> Engagement with local and Indigenous communities Safety Climate change
Community members and Indigenous groups	<ul style="list-style-type: none"> Community offices Face-to-face meetings Response mechanisms Community roundtables 	<ul style="list-style-type: none"> Engagement surveys Site visits Newsletters Radio and other media 	<ul style="list-style-type: none"> Grievance mechanisms Consultations Website and annual sustainability report Social media 	<ol style="list-style-type: none"> Community access to water Job security Health and safety
Religious groups	<ul style="list-style-type: none"> Community offices Face-to-face meetings Response mechanisms 	<ul style="list-style-type: none"> Community roundtables Engagement surveys 	<ul style="list-style-type: none"> Grievance mechanisms Website and annual sustainability report 	<ol style="list-style-type: none"> Competitive salaries for workers Water consumption by the mining operation Impacts to local biodiversity
Government	<ul style="list-style-type: none"> Community partnership meetings Face-to-face meetings Conferences Public meetings 	<ul style="list-style-type: none"> Newsletters Consultations Negotiations with Worker Unions 	<ul style="list-style-type: none"> Audits and inspections Engagement surveys Website and annual sustainability report 	<ol style="list-style-type: none"> Mine's emergency response readiness Water discharge and spills that could impact the water quality Health and safety
NGOs	<ul style="list-style-type: none"> Public meetings Response Mechanism 	<ul style="list-style-type: none"> Conferences Partnership discussions 	<ul style="list-style-type: none"> Engagement surveys Website 	<ol style="list-style-type: none"> Job security Health and safety Water discharge and spills that could impact the water quality
Human Rights Observers	<ul style="list-style-type: none"> Meetings Face-to-face interactions 	<ul style="list-style-type: none"> Engagement surveys Website 		<ol style="list-style-type: none"> Job security Mine's emergency response readiness Protection measures against all forms of discrimination and harassment

MECHANISMS FOR SEEKING ADVICE AND RAISING CONCERNS

We provide workers, local community members, suppliers, and other stakeholders with mechanisms for raising concerns regarding our operations and any potential impacts resulting from our activities.

The primary mechanism for raising concerns about the ethical behaviour of Pan American Silver is our [Whistleblower Hotline](#). The Hotline allows directors, officers, or employees to report actual or potential breaches of the Code of Conduct, or related policies or guidelines, confidentially and anonymously via phone or web, in English, Spanish and Portuguese. The platform is managed by an independent service provider, and is available 24 hours a day, 365 days a year. Non-employees can submit complaints of an ethical, accounting, or audit nature by email to Compliance@panamericansilver.com, or via mail, marked “private and confidential,” to Pan American Silver’s Chief Legal and Human Resources Officer, General Counsel (CLHRO). Individuals can also submit concerns directly to the Chair of the Audit Committee.

Every report received is reviewed and tracked by the CLHRO and the compliance team. When applicable, an investigation is conducted, and appropriate actions are taken. A summary of ethics-related critical cases raised through these mechanisms and their status is reported quarterly to the Audit Committee of the Board. Pan American Silver does not tolerate acts of reprisal or retaliation against any person for reporting any suspected violations of our Code of Conduct or our Global Anti-Corruption Policy. Additional information is included in the [Business Ethics section](#) of this report.

PAAS Listens is our employee and contractor feedback and grievance mechanism. Through PAAS Listens, our workforce can voice concerns, provide feedback, or raise grievances directly with Human Resources. All feedback is reviewed and categorized, and every grievance receives a response. Employee feedback received through other mechanisms, such as the Whistleblower Hotline, is also entered into the PAAS Listens system unless it concerns ethical conduct. Any complaints received regarding our Code of Conduct or ethical concerns are forwarded to our compliance team.

The Vice President Human Resources oversees PAAS Listens. The Board receives a quarterly summary of cases and their status. We are currently working to deliver PAAS Listens in Portuguese, and to make it available at all our Acquired Mines.

Our community response mechanisms enable community members to engage with our operations to register concerns, either real or perceived, with the aim of resolving challenges before they escalate. Community members can submit questions, requests, concerns, and/or grievances to us in person or via:

- Community offices
- Telephone
- Community mailbox
- Email
- Suggestion boxes

All requests or grievances are registered by our social teams, who provide a response and work with other departments when needed. Our target is to respond to all grievances received within 15 days, and to resolve them within 60 days. If there is an objection or disagreement to the response, the case

escalates to an appeal process that involves mine senior management. The process is overseen by the Vice President Social Sustainability, Diversity, and Inclusion. A report on grievances, including severity and response time, is reported monthly to senior management and quarterly to the Board.

We evaluate the effectiveness of our community grievance mechanism through social audits and regular data checks that are carried out by our social teams and are documented in our stakeholder engagement database. Systematically reviewing these results allows us to identify trends and adjust our systems to ensure time frames are met. Through stakeholder surveys and ongoing face-to-face communication, we also provide opportunities to the users of our Community Response Mechanisms to give us feedback on how the mechanisms operate and on any improvements that can be made.

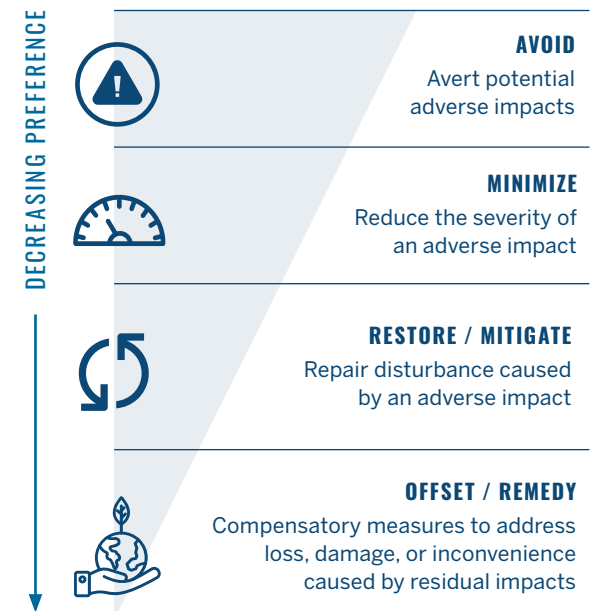
PROCESS TO REMEDIATE NEGATIVE IMPACTS

We seek to avoid or minimize causing or contributing to adverse human rights impacts through our activities, to address such impacts if they occur, and to engage in processes to mitigate those impacts. At each stage of the mine lifecycle, we work to avoid or minimize negative environmental and social impacts. Our [Environmental](#), [Social Sustainability](#), and [Global Human Rights](#) Policies commit us to a precautionary approach, as set out in our environmental and social mitigation hierarchy.

In February 2022, the Canadian National Contact Point (NCP) received a request for review from a law firm representing 42 community members in Chile.

The request for review raised issues concerning the observance of Chapters IV (Human Rights) and Chapter VI (Environment) of the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises by Minera Florida, then owned by Yamana. The NCP facilitated dialogue between both parties. After the Yamana Acquisition, Pan American Silver had a follow-up discussion with the NCP Secretariat, and we remain engaged with local communities. The NCP welcomed Pan American Silver’s update on due diligence activities undertaken at Minera Florida. On October 24, 2023, the NCP published a statement considering the process concluded. Further details on the case are available on the [NCP’s website](#).

Environmental and Social Mitigation Hierarchy



RISK MANAGEMENT

GRI: 308-1, 308-2, 414-1, 414-2

RISK MANAGEMENT PROCESS

The management of sustainability risks continues to gain importance in the mining industry. Pan American Silver has several risk management processes that help us proactively identify, manage, and mitigate operational and non-operational risks.

Understanding that those risks can be driven by external factors, including political and economic instability, market uncertainties, and changing environmental, social, and security contexts, our risk management processes systematically identify, analyze, evaluate, and respond to external non-operational risks across ten categories in all countries in which we operate.⁽⁶⁾

Our quarterly risk management processes help us identify key risks for Pan American Silver. Country-level and operational teams conduct a quarterly risk assessment to identify emerging risks, determine their severity and potential impact on operations, and recommend corrective actions and plans to manage and mitigate these risks. All identified risks are monitored and managed at the operation or country level. Senior management reviews all significant risks quarterly, and the Board receives quarterly risk reports.

In 2023, we expanded our country-level risk assessment processes to all Acquired Mines. In 2023, top risks identified included government regulations, labour relations, political risks, security, and climate change. During 2023, security

risks increased across many of the countries where we operate. We have also taken notice of greater government regulatory risks, with several governments making changes to mining regulations. Further details on sustainability risks related to our material topics are included in the relevant management approach sections of this report. Risks related to our business are detailed in our [2023 Annual Information Form](#).

During the year, we also began to develop an enterprise-level risk management system, which we plan to implement in 2024. This will expand our capacity to manage material risks and will improve communication on risk across the organization.

To manage social sustainability risks, sites employ a social risk matrix to identify risks that could impact our host communities or operations. COI engagement, the results of our baseline assessments, feedback received through our response mechanisms, and findings from our sustainability audits, inform our social risk assessments process. Sites develop action plans to manage and mitigate the identified risks. Progress on action plans is reviewed monthly at the country level. All significant risks are reported to the Board on a quarterly basis.

Environmental risks are identified through environmental impact assessments and are systematically managed. Each site maintains an environmental management system that identifies

activities presenting risks for adverse environmental impacts and establishes controls to manage and mitigate those risks. These systems are aligned with the environmental risk management requirements of the relevant MAC TSM protocols. Our Corporate Environmental Incident Management Standard provides a standardized framework for incident reporting and response. It supports us in the identification and mitigation of environmental risks and impacts related to incidents.

EMERGENCY AND CRISIS MANAGEMENT

As a critical component of our risk management approach, emergency preparedness and crisis management help us identify, prepare for, and manage crises affecting Pan American Silver, our workforce, their families, local communities, and/or the surrounding environment. We classify an emergency as an incident that may result in substantial harm to employees, communities or other stakeholders, the environment, or property. A crisis stems from an internal or external incident that may have strategic or organization-wide impacts. Potential incidents or events that could produce an emergency or crisis include underground fires, spills, security incidents, infrastructure failure, natural disasters, and virus outbreaks.

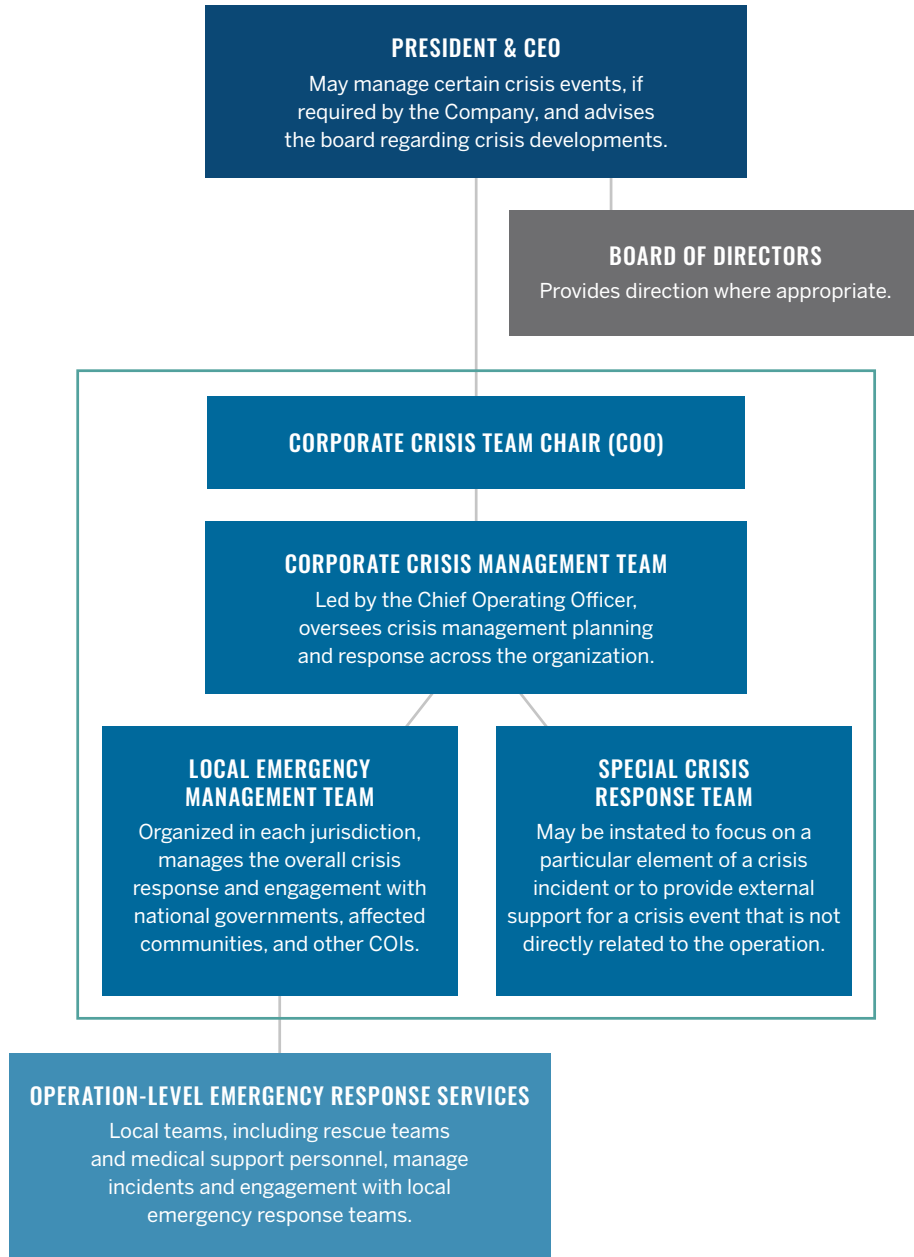
Our Crisis Management Plan sets standardized, minimum requirements and procedures for sites to identify, prepare for, and manage emergencies and crisis. Processes and procedures are documented in our Crisis and Emergency Management System (CEMS). All operations are aligned with the TSM Crisis Management and Communications Planning Protocol. To improve the ability of our teams to efficiently respond to emergencies, we review our crisis plan annually, while also conducting one tabletop and one scenario-based exercise, two communication tests, and an employee alert.

⁽⁶⁾ These categories include health, security, political and regulatory, economic and taxation, legal and judicial, corruption, extractive industry, environmental, social, and labour.

Quarterly Risk Management Process



Crisis Management Structure



Our focus in 2023 was on the integration of our new sites into our crisis and emergency management system, which was facilitated by the fact that Yamana had also aligned with the TSM Crisis Management and Communications Planning Protocol. We also expanded our digital crisis platform, which provides automated advisories and improves the consistency and speed of our communications and response. The platform has been rolled out at our Spanish speaking sites and tested through training simulations. In 2024, we will expand the platform to include Jacobina, our Portuguese-speaking site in Brazil.

SUPPLY CHAIN RISK MANAGEMENT

Guided by our [Supplier Code of Conduct](#) (the Supplier Code), which establishes requirements for our suppliers, we identify and mitigate supply chain-related risks. We strive to incorporate compliance with our Supplier Code as an express term in our supplier contracts and to provide it to new suppliers upon engagement. The Supplier Code is also posted on Pan American’s website and in common areas across our sites, so that it is readily visible to all our suppliers. All suppliers, their contractors, and subcontractors are expected to:

- Comply with applicable laws.
- Comply with Pan American Silver’s [Global Anti-Corruption Policy](#) and [Global Human Rights Policy](#).
- Conduct business in an ethical and environmentally responsible manner.

- Respect the rights, cultural diversity, and customs of local communities and Indigenous Peoples.

We have relied on a third-party supplier due diligence system to help us monitor compliance of both new and existing tier 1 critical suppliers with our Supplier Code, as well as screening for a range of risks, including corruption, health and safety, environment, social, human rights, and associations with organized crime. During the reporting year, we evaluated 198 new critical suppliers (26% of total) through this system.

In 2023, we began the process of enhancing our due diligence approach and are establishing a more comprehensive supply chain due diligence system with input from supply chain-related functions across Pan American Silver. As part of this process, we are developing site-based screening tools to cover topics including human rights, labour and environmental rights, corruption, and child and forced labour. These tools are now being used by our teams to screen new and existing suppliers. The continuation of this work will be an important focus in 2024.

Our [sustainability audit process](#) provides additional screening for human rights risks, including child and forced labour, that could be present in our supply chain through certain contractor and subcontractor relationships.

For additional information on supplier screening, see the Supply Chain Risk Management data table in our [2023 Sustainability Performance Data Book](#).

HUMAN RIGHTS MANAGEMENT

Our operations affect people and ecosystems, and respect for human rights guides our relationships with COIs, including our workforce and local communities.

We comply with laws and regulations, take steps to understand the impact of our activities on both individual and collective human rights (labour and environmental), we progressively implement proper measures to respect human rights, and we conduct ongoing due diligence.

Guided by our [Global Human Rights Policy](#), which establishes our commitment to respect human rights and provides standards of conduct for our directors, officers, and employees, we strive to uphold human rights, to build a positive human rights culture, to respect the traditions and cultures of local communities and of our workers, and to support vulnerable groups. The policy also applies to any third party acting on behalf of or representing Pan American Silver. Our [Social Sustainability Policy](#) explicitly reinforces our human rights commitments, and our key ESG policies and corporate standards establish processes for considering human rights in the development of our social, environmental, and labour-related goals and programs, as well as in how we work to mitigate adverse human rights impacts from our activities. Accountability for human rights matters lies with the CLHRO and our Human Rights Officer and is overseen by the Board CSD Committee.

Human Rights Due Diligence

Our [Global Human Rights Policy](#) commits us to conducting reasonable, ongoing human rights due diligence. Our due diligence processes help us identify, assess, avoid, mitigate, and account for actual and potential human rights risks and impacts. We work to mitigate impacts in instances where we cause or contribute to negative impacts. If we are unable to meet our due diligence requirement for direct consultation with rights holders in such cases, we work with civil society groups to evaluate our practices.

We screen for human rights risks through our risk management systems and processes. This includes:

- Screening for child and forced labour at our operations through our human resources procedures.
- Using our sustainability audits to screen for human rights, particularly for vulnerable groups, arising from our operations and our social programs.
- Identifying and assessing environmental, social/community, and labour risks that present actual or potential impacts to human rights through country-level risk assessments.
- Requiring suppliers to adhere to our Human Rights Policy.
- Conducting an annual security and human rights risk assessment as part of our alignment with the Voluntary Principles on Security and Human Rights (VPSHR).

RESPECTING HUMAN RIGHTS

We are committed to respecting national laws and international human rights conventions and implementing recognized best practices, including:

- United Nations Universal Declaration on Human Rights
- United Nations Guiding Principles (UNGPs) on Business and Human Rights
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises on Responsible Business Conduct
- TSM Indigenous and Community Relationships Protocol⁽¹⁾
- UNICEF Canada's Child Rights and Security Checklist
- UNICEF Convention on the Rights of the Child
- United Nations Global Compact (UNGC) Principles
- United Nations Global Compact Chapter in Guatemala
- Voluntary Principles on Security and Human Rights
- World Gold Council Conflict-Free Gold Standard
- BlackNorth Initiative
- Prosperity Project Canada

(1) For more information on the TSM initiative and how this protocol supports mining companies in respecting human rights, please see *Towards Sustainable Mining: Indigenous and Community Relationships Protocol* at: https://mining.ca/wp-content/uploads/dlm_uploads/2023/04/ICR-Protocol-English-2023.pdf

We are committed to embedding a respect of human rights across our operations, and we continuously work to build a shared understanding of and common language around human rights across Pan American Silver. Our employees are at the forefront of our engagement with communities. Workers who recognize the actual and potential impacts of their roles on the human rights of others are better able to act to uphold and respect those rights.

We incorporate human rights awareness into our employee onboarding and into ongoing employee training. We also provide compulsory training on modern slavery to senior management teams at our operations, and we provide compulsory VPSHR training to all Security and External Affairs teams, and all employees who work with security providers.

In 2023, we implemented a requirement for senior managers across all jurisdictions to attest to our

[Global Human Rights Policy](#). The completion rate was 100%, with 523 employees participating.

With the integration of Yamana, we have begun operating in two new jurisdictions, Chile, and Brazil. Although human rights risks in these jurisdictions are largely similar to risks in our other Latin America operating jurisdictions, a country's socio-political context can be a source of potential risk. For example, in Brazil, there is a higher risk of forced labour. To raise awareness, in 2023, employees at our Brazil operation and offices completed mandatory training on forced and child labour. We also offered the training in Peru.

Since potential human rights issues can differ from operation to operation, ongoing COI engagement helps us identify and assess actual and potential human rights risks and impacts resulting from our activities. Participatory processes, including social baseline studies, our community and employee response mechanisms, collective bargaining, and health and safety risk assessments, help us to better understand perceived or actual impacts of our activities on local communities and our workforce.

In 2023, we conducted human rights due diligence of the Yamana sites prior to acquisition. We also conducted in-depth due diligence assessments of our operations in Bolivia and Chile. We employed the same methodology that we had previously applied at Escobal in 2022, which incorporates the

UNGPs on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. The assessments provided invaluable insight into how cultural traditions differ between our different operating contexts, and how they shape the expectations of local COIs, including local communities, labour, and governments. We have been using these findings to inform how we operate in these jurisdictions. For further details, see our [Respecting Cultural Traditions at San Vicente](#) case study.

Since our last report, Canada has adopted its *Fighting Against Forced Labour and Child Labour in Supply Chain Act*. In compliance, we will be publishing our inaugural [Modern Slavery Report](#) in May 2024. We have also been working to improve our human rights due diligence on both our operations and our supply chain to assure that we are not linked or contributing to child and forced labour. This includes providing mandatory training to our employees on identifying forced or child labour. We provided this training to human resources, social teams, legal teams, supply chain teams, health and safety teams, and mining operations teams. All sites have implemented the TSM Prevention of Child and Forced Labour Protocol. In 2023, we did not identify any instances of child or forced labour in our operations or supply chain. See the [Supply Chain Risk Management section](#) of this report for additional details on our approach.



RESPECTING CULTURAL TRADITIONS AT SAN VICENTE

Guided by our Global Human Rights Policy, Pan American Silver recognizes and respects the values, beliefs, and cultural traditions of the people in communities where we operate and the rights of Indigenous Peoples. In Bolivia, where protecting Indigenous cultural rights is an integral part of labour relations, this has entailed recognition of cultural traditions in our collective bargaining agreements.

In 2023, we conducted a human rights internal review at the San Vicente operation in Bolivia. The assessment recognized several good practices for respecting Indigenous Peoples' identity and local cultural traditions. These include:

- Providing days off for local cultural celebrations.
- Encouraging employees and residents of local communities to use their language to engage in their cultural practices.
- Respecting the cultural practices of local communities.

Open dialogue is also culturally important in Bolivia, and providing a space for open dialogue during both labour bargaining and our broader stakeholder engagement has been a key pillar to the success of our operations at San Vicente.

Programs & Processes Supporting Human Rights

We employ site-specific and company-wide programs and processes to uphold, and support identified salient human rights and to provide a safe and healthy workplace that is free from violence, harassment, intimidation, and discrimination based on race, colour, creed, age, gender, language, national or social origin, marital status, sexual orientation, disability, religious, political, or other opinion, or union affiliation.

Our social teams support local community groups in providing training and education for women, youth, families, and vulnerable people on locally relevant topics such as access to education and career opportunities; domestic violence and alcohol addiction; gender equality; parenting and healthy households; mother and child's health; hygiene and sanitation practices; sexual health and reproductive rights; and discrimination and sexual harassment. Through participation or funding, we also support human rights in our industry and in the countries in which we operate.

Programs and Processes Supporting Human Rights

Category	Salient Right	Examples of our Programs
Labour	<ul style="list-style-type: none"> Equality Non-discrimination 	<p>Specialized training in the prevention of discrimination and harassment in the workplace, including sexual harassment.</p> <p>The Building Respect Together program is helping us build safe, respectful, and inclusive work environments free from discrimination and harassment.</p>
	<ul style="list-style-type: none"> Safe and healthy working conditions 	<p>The Doing Safety Differently program increases safety awareness, and encourages a transparent and constructive conversation on safety.</p> <p>Human resources procedures screen for child and forced labour at our operations and supply chains. We implement the TSM Prevention of Child and Forced Labour Protocol across our operations.</p>
	<ul style="list-style-type: none"> Peaceful assembly and association 	<p>Operation-level engagement programs to promote participation and meaningful dialogue with workers and unions.</p>
Social and Economic	<ul style="list-style-type: none"> Adequate standard of living Transparency in local contracting Open and honest communications 	<p>Socio-economic development programs aim to provide lasting benefits to host communities. Designed in collaboration with local communities and authorities, these programs are focused on education, health, local hiring, and procurement opportunities, taking into account cultural relevance.</p>
	<ul style="list-style-type: none"> Respecting Indigenous Peoples rights 	<p>For information on the ILO 169 Consultation process in Guatemala see the Escobal Mine section.</p> <p>For information on our engagement with Indigenous Peoples in Canada see the Indigenous Rights and Relationships with Indigenous Peoples section.</p>
	<ul style="list-style-type: none"> Private property 	<p>Land acquisition processes to ensure that physical and economic displacement impacts on affected people, if any, are avoided or minimized where possible, and appropriately mitigated when they occur in a manner that fosters trust and mutual respect.</p>
Security	<ul style="list-style-type: none"> Integrity Responsible use of force and armed equipment Anti corruption and transparency 	<p>The Pan American Silver Security and Human Rights Standard helps us implement the Voluntary Principles on Security and Human Rights across our operations and integrate the respect of human rights into our security practices.</p>
Environment	<ul style="list-style-type: none"> Clean water and sanitation 	<p>Operation-level programs and processes aim to reduce our water use. We manage risks related to water availability and quality at the water catchment-scale, considering interactions with other users, COIs, and ecosystems.</p>

2023 PERFORMANCE

We set ESG goals to focus our efforts in key areas and continually improve our performance. The table below consolidates these goals and details our performance.

2023 GOALS⁽¹⁾



ENVIRONMENTAL

PERFORMANCE

COMMENTARY

Achieve zero significant environmental incidents (SEIs).	✓	No SEIs at our operations.
Achieve 90% of environmental audit corrective actions completed on time. ⁽²⁾	✗	The goal was achieved at Dolores and Timmins; however, only 69% of corrective actions were completed on time ⁽²⁾ at San Vicente. The delays did not create significant environmental risks and 95% of corrective actions were complete by year end.
Implement projects and initiatives to reduce water withdrawn for use by 47,000 m ³ , which represents approximately 0.3% of the 2023 base case. ⁽³⁾	✓	Exceeded goal, with projects implemented resulting in a reduction of over 170,700 m ³ , which represents approximately 1% of the 2023 base case.
Implement projects and initiatives to reduce energy use by 116,000 GJ which represents approximately 2% of the 2023 base case. ⁽³⁾	✓	Exceeded goal, with projects implemented resulting in a reduction of over 230,800 GJ, which represents approximately 4% of the 2023 base case.
Implement projects and initiatives to reduce GHG emissions by 73,000 t CO ₂ Eq which represents approximately 19% of the 2023 base case. ⁽³⁾	✓	Exceeded goal, with projects implemented resulting in a reduction of over 85,000 t CO ₂ Eq, which represents approximately 23% of the 2023 base case.
Continue post-closure activities at Alamo Dorado and conduct interim reclamation projects at our active operations.	✓	Post-closure and reclamation activities continued.
Achieve 80 hectares of reforestation or revegetation across all our operations.	✓	Rehabilitated over 89 hectares across our operations.
Implement projects and initiatives to reduce non-recycled and/or non-reused non-rock waste by 450 t, which represents approximately 4% of the 2023 base case. ⁽³⁾	✓	Exceeded goal, with projects implemented resulting in a reduction of over 740 tonnes, which represents approximately 7% of the 2023 base case.

⁽¹⁾ Water, energy, GHG emissions, waste, revegetation, LTIF, LTIS and socio-economic development programs goals do not apply to the Acquired Mines. All other goals apply to all operations, including the Acquired Sites.

⁽²⁾ Corrective actions completed within the agreed timeline in the final corporate environmental audit report.

⁽³⁾ The 2023 base case is our projected 2023 water use, energy use, GHG emissions, and waste generation, as calculated using our life of mine plans adjusted for annual production guidance. The 2023 base case excludes the Acquired Mines.



2023 GOALS



SOCIAL

	PERFORMANCE	COMMENTARY
Achieve zero fatalities.	✓	Zero fatalities.
Maintain an LTIF of 0.90 or less.	✓	LTIF rate of 0.69 per million hours worked.
Maintain an LTIS of 525 or less.	✓	LTIS rate of 40.
Achieve zero new social disputes ⁽⁴⁾ at our operations.	✓	No new social disputes at operations.
Resolve 90% of all medium and high-risk grievances received through our community response mechanisms within the target timeframe. ⁽⁵⁾	✓	Resolved 91% of all medium and high-risk grievances. ⁽⁵⁾
Design socio-economic development programs based on risk analysis and track performance with Key Performance Indicators.	✓	Achieved an execution average of 83% in the three major socio-economic development programs: <ul style="list-style-type: none"> • Llama breeding project at San Vicente (93%) • Avocado project at Shahuindo (75%) • Ranching project at Dolores (81%)
Complete 90% of the action plans to address audit findings (only applicable for Peruvian and Bolivian operations in 2023).	✓	Peruvian sites completed 90% of their action plans to implement necessary corrective actions. Corrective actions identified at San Vicente at the end of the year are in progress within the expected timelines.
Achieve 15% hiring of women for all approved and budgeted vacant positions (plus all new eligible positions) and retain 85% women in the workforce (excluding involuntary terminations).	✓	Hired 24.1% (33 women hired into 137 approved vacant positions) and retained 92.4% of women employees.
Complete the third module “Organizational Climate” of our Building Respect Together program, covering 100% of our workforce.	✓	Completed third module, covering 100% of the workforce.
Train all security contractors in human rights and use of force and all security employees in human rights.	✓	100% of security employees and contractors received human rights training; 100% of security contractors received use of force training.



GOVERNANCE

Train 400 key employees on the Anti-Corruption policy.	✓	Trained 1,142 employees.
Assess 150 critical suppliers using our supplier due diligence system.	✓	Assessed 198 critical suppliers.



ESG

Complete TSM external verification of at least two of our operations.	✓	Completed three external verifications: Shahuindo and La Arena in Peru, and Dolores in Mexico.
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(4) Grievances that cannot be resolved jointly within a reasonable time frame and/or require significant financial resources to resolve.

(5) Target timeframes include acknowledging grievances within 15 days of receipt and resolving grievances within 60 days of receipt.



TOWARDS SUSTAINABLE MINING PERFORMANCE

Pan American Silver annually assesses its performance against TSM, which is a world-class performance management standard.

The TSM protocols are used by sites to develop quality sustainability management systems and to improve their sustainability performance. We provide training to sites to aid them in the implementation of the TSM protocols.

Sites annually self-assess their performance against the TSM protocols. Most protocols assess performance on a Level C to Level AAA scale. The Crisis Management and Communications Planning Protocol and the Preventing Child and Forced Labour Protocol use a different, Yes - No rating system, which simply assesses whether a company has met or not met the requirements. In 2023, our operations achieved level A or higher in 94% of all TSM protocol indicators. Further details on our performance are available on the [MAC website](#).

In 2023, we completed an external verification of TSM performance at three sites: La Arena and Shahuindo in Peru, and Dolores in Mexico. The external verification confirmed level A and above for all TSM protocol indicators, except the Community Impact and Benefit Management indicator of the Indigenous and Community Relationships Protocol at Dolores, where level B was achieved. External verification results are shown in the following table.

TSM 2023 External Verification Results

Protocol	Indicator	Shahuindo	La Arena	Dolores
Biodiversity Conservation Management	1. Corporate biodiversity conservation commitment, accountability, and communications	AA	AA	AA
	2. Biodiversity conservation planning and implementation	A	AAA	AA
	3. Biodiversity conservation reporting	AA	AA	AA
Climate Change	1. Corporate climate change management	A	A	A
	2. Facility climate change management	AA	AA	AA
	3. Facility performance targets and reporting	A	AA	A
Water Stewardship	1. Water governance	AA	AA	AA
	2. Operational water management	A	AA	AA
	3. Watershed-scale planning	AA	AA	A
	4. Water reporting and performance	AA	AA	AA
Indigenous and Community Relationships	1. Community of Interest (COI) identification	A	A	AA
	2. Effective COI engagement and dialogue	A	AA	A
	3. Effective Indigenous engagement and dialogues	N/A	N/A	N/A
	4. Community impact and benefit management	A	A	B
	5. COI response mechanism	A	A	AA
Safety and Health	1. Commitments and accountability	AA	AA	A
	2. Planning and implementation	AA	AA	A
	3. Training, behaviour, and culture	AAA	AA	AAA
	4. Monitoring and reporting	AA	A	A
	5. Performance	A	A	AA
Crisis Management & Communications Planning	1. Crisis management and communications preparedness	YES	NO	YES
	2. Review	YES	NO	YES
	3. Training	YES	NO	YES
Preventing Child and Forced Labour	1. Preventing Forced Labour	YES	YES	YES
	2. Preventing Child Labour	YES	YES	YES

AAA: Excellence and leadership.

AA: Systems and process are integrated into management decisions and business functions.

A: Good practice. Systems and processes are developed and implemented.

B: Procedures exist but are not fully consistent or documented. Systems and processes are planned and being developed.

C: No systems are in place. Activities tend to be reactive. Procedures may exist but are not integrated into policies and management systems.

ESG RATINGS AND RANKINGS

In past years, Pan American Silver has seen a continuous improvement in the majority of our ESG scores and rankings. These rankings and ratings are a component of our credit facility, which aligns ESG performance to its cost of capital. Our \$750 million revolving credit facility includes a pricing component linked to our ESG performance, as assessed by third-party external ESG rating agencies—S&P Global and MSCI.

S&P Global

60

Ranked Top 9th Percentile in the Metals & Mining Industry

Scale 0 (worst) to 100 (best)

MSCI

BBB RATING

Ranked Top 50th Percentile

Scale CCC (worst) to AAA (best)

SUSTAINALYTICS
a Morningstar company

25.7 (MEDIUM RISK)

Ranked Top 27th Percentile in the Precious Metals Mining Sector

Scale 100 (worst) to 0 (best)

ISS ESG

C+ RATING

Ranked Top 15th Percentile

Scale D- (worst) to A+ (best)

Note: Ratings and rankings can fluctuate throughout the year, either based on Pan American Silver performance or relative to the ranking of other companies in our sector, and/or ratings agency scoring methodology changes. Ratings and rankings shown here are effective as of May 23, 2024.



ESG AUDITS AND PERFORMANCE MONITORING

We conduct environmental, sustainability, and safety audits at each of our operations, at a minimum of one every three years, to evaluate our compliance with relevant policies and standards, the effectiveness of our programs, and to promote continuous improvement.

Our audit designs draw on international and industrial best practices as well as industry and Company standards. Audit teams typically consist of internal experts from across Pan American Silver, while we also occasionally employ third party

subject matter experts. This process fosters the integration and sharing of best practices between operations. The audit process commonly uses a hybrid approach of on-site visits, video interviews, and review of documentation, procedures, and management systems.

Once an audit is complete, operations create action plans to address the findings. High-priority findings are reported to the Vice Presidents of relevant departments and executive management. Audit results and status of action plans are reviewed by the Board on a quarterly basis.

Environmental Audits

Our audits assess each operation’s facilities, operating procedures, and control processes to determine whether potential risks are being managed correctly. In 2023, we conducted environmental audits at San Vicente, Dolores, and Timmins. No high-severity non-conformances were identified in any of the audits. The low and moderate-severity non-conformances identified relate primarily to spill prevention/management, biodiversity and reclamation, waste management, and reagent management.

Sustainability Audits

We evaluate and monitor our social performance by reviewing the capacity of our sites’ teams, the effectiveness of our community programs and processes, and the conditions of our mining camps through sustainability audits. Topics covered include labour and human rights, employees’ and contractors’ living conditions at sites, inclusion and diversity practices, relationships with local contractors, community and Indigenous engagement, implementation of the Company’s standards, social impact and risk assessment,

ESG Audit Process



community investment, security and human rights, and social mine closure. We also audit our SPI performance.

The audits are conducted by experienced professionals from across Pan American Silver who have received formal training on our audit systems. Our audit framework is based on the ISO 26000 guidance standard⁽⁷⁾ on social responsibility and incorporates Pan American Silver’s policy commitments, as well as international best practices from:

- ICMM’s Mining Principles
- TSM—Indigenous and Community Relationships Protocol, Crisis Management and Communications Planning Protocol, Mine Closure Framework, and Prevention of Child and Forced Labour Protocol
- UN Guiding Principles on Business and Human Rights
- UNICEF Canada’s Child Rights and Security Checklist
- Voluntary Principles on Security and Human Rights
- International Labour Organization’s Guide for Enterprise Diagnostics

Our Sustainability Audit Manual is aligned with ICMM’s principles and performance standards and relevant TSM protocols, and serves as a critical component of our social risk management.

In 2023, we conducted four sustainability audits at Shahuindo, La Arena, and Huaron in Peru, as well as at San Vicente in Bolivia. Across the Peru sites, we identified both good practices and opportunities for improvement. Critical findings focused on social closure, workers’ accommodation

conditions, and integrated risk assessment. At San Vicente, 20% of findings were of a high severity and centred on workers’ housing conditions, primarily in contractors’ accommodation areas. Since the audit was conducted in November, we are in the process of completing the corrective actions identified.

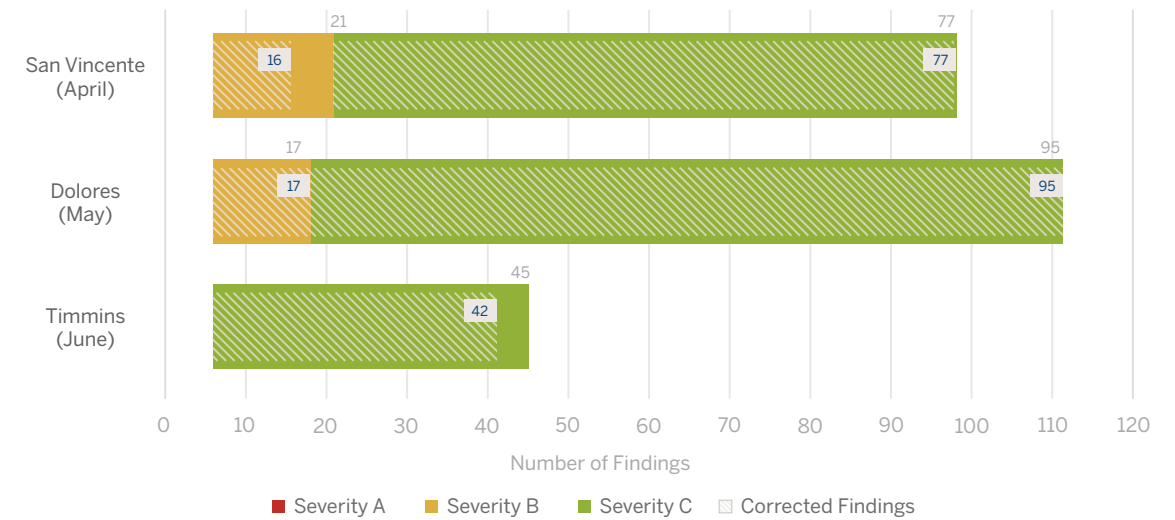
Safety Audits

We conduct audits of the health and safety programs at our operations, and we remediate all identified health and safety concerns. Audits are led by the Senior Director of Safety and Health and conducted by a Corporate Safety Department team consisting of internal safety personnel and internal experts in relevant areas, such as geotechnical or emergency response.

In 2023, we conducted safety pre-audits at all Acquired Mines—El Peñon, Minera Florida, Cerro Moro, and Jacobina—and one safety audit at La Colorada. Findings were generally related to underground fire, underground rock fall and fall from heights risks. By the end of the year, 100% of findings were remediated.

⁽⁷⁾ For more information, please visit <https://www.iso.org/iso-26000-social-responsibility.html>

Environmental Audit Performance 2023

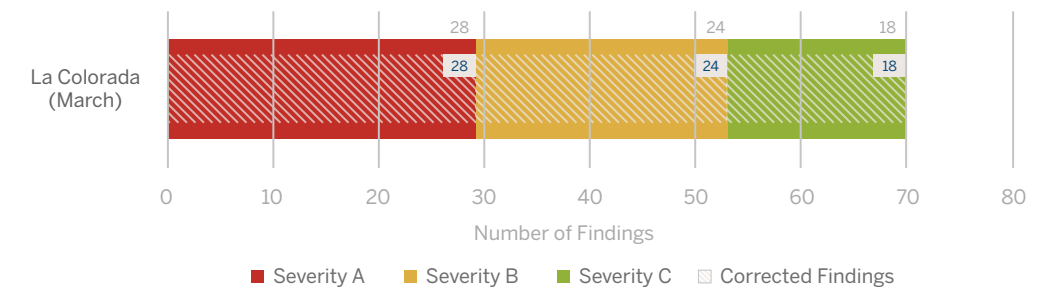


Severity A (high): Applies to non-conformance audit findings that, if not corrected, may have impacts outside the mine site that are real or perceived by local communities and government, or may have a critical impact on the Company’s reputation.

Severity B (moderate): Applies to non-conformance audit findings that may not comply with local regulations and practices and/or have negative impacts that can be mitigated or remediated.

Severity C (low): Applies to non-conformance audit findings that may not comply with internal procedures and policies and/or have minor negative impacts that can be mitigated or remediated.

Safety Audit Performance 2023



Severity A: High risk findings with the potential, if not corrected, to cause a serious or fatal accident.

Severity B: Medium risk findings with the potential, if not corrected, to cause a moderate accident. Repetitive B findings are re-categorized as A findings.

Severity C: Low risk findings include moderate hazards or deficiencies that require correction but might not pose an imminent danger to workers.

2024 ESG GOALS



ENVIRONMENTAL

GOAL

Achieve zero significant environmental incidents (SEIs) or Category 4 (C4) incidents

Complete 90% of environmental audit corrective actions on time⁽¹⁾

Implement projects and initiatives to reduce water withdrawn for use by 108,000 m³, which represents approximately 0.7% of the 2024 base case⁽²⁾

Implement projects and initiatives to reduce energy use by 23,000 GJ, which represents approximately 0.3% of the 2024 base case⁽²⁾

Implement projects and initiatives to reduce GHG emissions by 2,000 t CO₂Eq, which represents approximately 0.5% of the 2024 base case⁽²⁾

Complete 44 hectares of cover installation on waste dumps at Alamo Dorado, and conduct interim reclamation projects at our active operations

Achieve 55 hectares of revegetation across all our operations

Implement projects and initiatives to reduce nonrecycled and/or non-reused non-rock waste by 860 t, which represents approximately 6% of the 2024 base case⁽²⁾

MATERIAL TOPIC

All environmental material topics

Water Stewardship

GHG Emissions and Energy Efficiency

Mine Closure and Rehabilitation

Biodiversity and Land Use

Tailing Facilities and Waste management



SOCIAL

GOAL

Achieve zero fatalities

Maintain a frequency of lost time injuries with high fatality potential (LT-HPIF) of 0.31 or better

Maintain a ratio of Lost Work Days [i.e. Severity] to exposure of Non-Fatal Lost Time Injuries (NF-LTIS) of 59 or better

Minimize the possibility of incident reoccurrence by applying Corrective and Preventative Actions (CAPA)

MATERIAL TOPIC

Health & Safety



⁽¹⁾ Corrective actions completed within the agreed timeline in the final corporate environmental audit report.

⁽²⁾ The 2024 base case is our projected 2024 water use, energy use, GHG emissions, and waste generation, as calculated using our life of mine plans adjusted for annual production guidance.





SOCIAL

GOAL

Achieve zero new significant social disputes⁽³⁾ at our operations

Resolve 90% of all medium and high-risk grievances received through our community response mechanisms within the target timeframe⁽⁴⁾

Complete 85% of action plans addressing audit findings by year end (only applicable for Chile and Brazil in 2024)

Achieve 85% of planned social closure activities at Dolores and Manantial Espejo mines in compliance with the Corporate Social Closure Standard

Graduate 100 employees from our Leadership Development Program (# of employees completing two modules)

Hire women for at least 15% of all approved and budgeted vacant positions plus all new eligible positions; and retain 85% of women employees within the PAAS Workforce from January 1, 2024 (excluding involuntary terminations)

Train all security contractors in human rights and use of force, and all security employees in human rights

MATERIAL TOPIC

Relationships with Communities and Indigenous Peoples

Socio-economic Contributions

Human Capital Development

Inclusion and Diversity

Security Practices



GOVERNANCE

GOAL

Train at least 1,000 employees across all PAS operations on compliance issues

Evaluate at least 250 critical suppliers through our due diligence procedure

MATERIAL TOPIC

Business Ethics



ESG

GOAL

Complete TSM external verification of at least two of our operations

MATERIAL TOPIC

All material topics

(3) We define significant social disputes as grievances that cannot be resolved jointly within a reasonable time frame or require significant financial and legal resources to resolve. These disputes are escalated to site-level or country-level senior management to oversee the resolution process.

(4) Grievances should be acknowledged within 15 days of receipt and should be resolved within 60 days of receipt.



MATERIALITY PROCESS

GRI: 3-1

Material topics are those relating to the most significant impacts, both positive and negative, that Pan American Silver has on the economy, environment, communities, and people, including impacts on human rights and those that can create the greatest risks and opportunities for the Company.

Our process to identify and define our material topics is guided by the GRI Standards and the SASB material topics applicable to the mining sector. We engage with stakeholders through our annual COI and senior management surveys to assess the significance of the 20 likely material topics identified as relevant to Pan American Silver. We analyze the survey results and rank issues by the significance of impacts and the levels of risks and opportunities. Finally, we prioritize and compile the highest ranked topics.

In the context of our integration of Yamana, in 2023, we reviewed topics previously identified as material by Yamana and considered these during our assessment.

COI SURVEY

As part of our annual materiality process, we engage with internal and external COIs, which help us identify and assess the actual and potential impacts of our activities. Our annual COI survey results are a key input in our materiality process. As part of the survey process, respondents identify and rank their most important sustainability topics from a list of topics that is based on the GRI Standards. Every year, we adjust our questions and refine the topics to capture relevant and emerging issues. We also include questions on different topics, such as inclusion and diversity and community engagement practices, to better understand context-specific perceptions on key issues in the regions where we operate.

In 2023, we successfully rolled out our COI survey across all our sites. We received 3,806 total responses, including 1,473 responses from our new sites, up from 2,264 in 2022. Respondents represented seven key COI groups (employees, contractors/suppliers, community and Indigenous members, NGOs, government, religious organizations, and human rights observers/affiliate groups).

The priority interests and concerns identified in the 2023 survey include:

- Health and safety
- Mine emergency response readiness
- Job security
- Water discharge and spills that could impact water quality
- Prevention of child and forced labour at the mine or in the supply chain
- Community access to water
- How mine closure will affect employment opportunities
- Health and safety training programs and initiatives
- Community health and safety impacts from mining activities
- Impacts on local biodiversity

Similar to previous years, health and safety remained the top concern; however, mine emergency response readiness replaced job security as the second priority, with job security becoming third. Community access to water, impact of mine closure on employment opportunities, health and safety training programs and initiatives, and community health and safety impacts from mining activities became more important to our communities and entered the top ten.

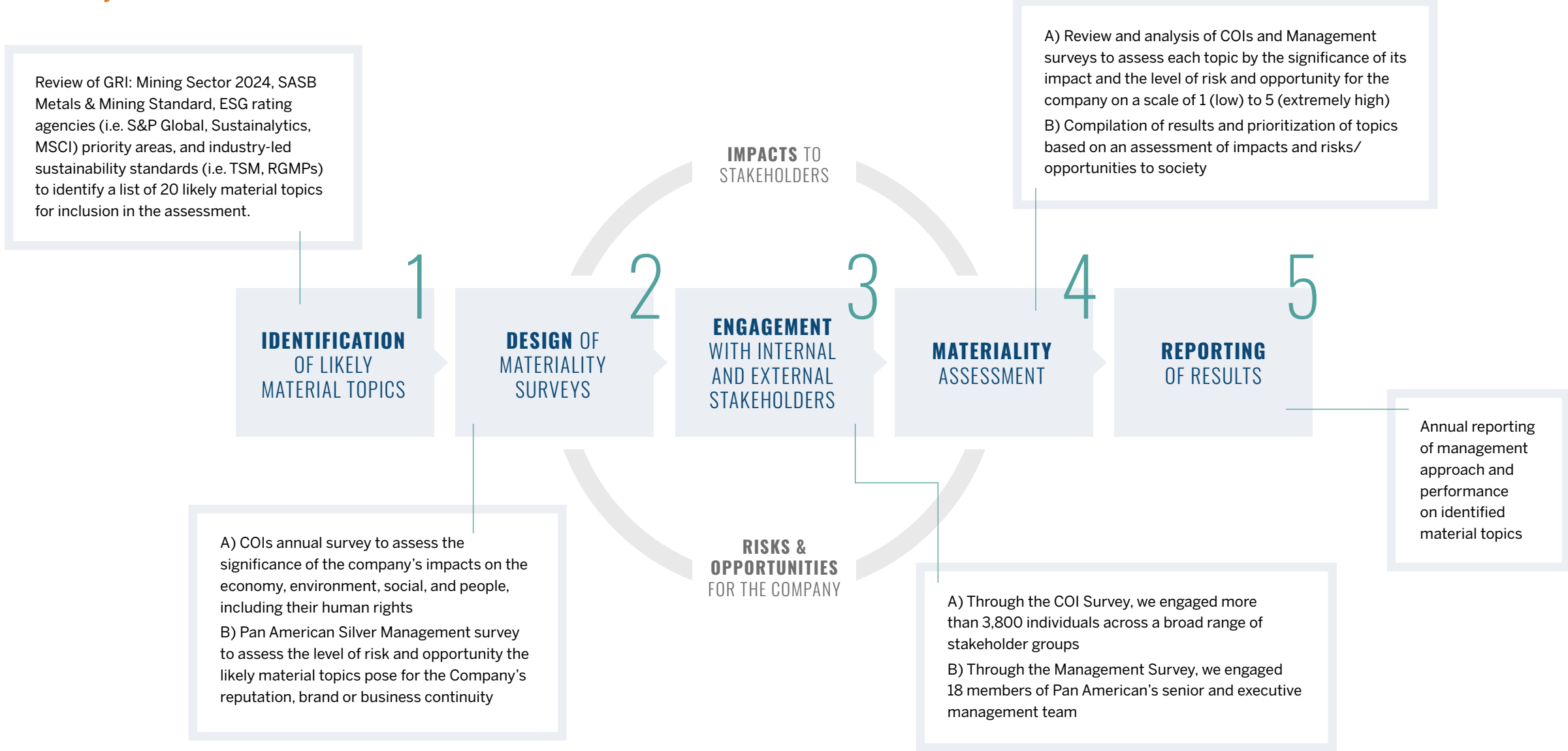
SENIOR MANAGEMENT SURVEY

In past years, our senior management survey has been used to validate and prioritize material topics for reporting. In recognition of the shift towards a double materiality approach, we updated our approach to have Pan American Silver's senior and executive management team assess the level of risk and opportunity that each of the 20 likely material topics pose for Pan American Silver's reputation, brand, or business continuity.

The highest ranked topics from a risk and opportunity perspective were:

- Health and safety
- Tailings and waste management
- Relationships with communities and Indigenous Peoples
- Water management
- Emergency preparedness
- Mine closure and rehabilitation
- Security practices
- Socio-economic contributions
- Energy and greenhouse gas (GHG) emissions
- Human capital development

Materiality Assessment Process



2023 MATERIAL TOPICS

GRI: 3-2, 3-3

Our top material topics remain unchanged from 2022. Recognizing the transversality of human rights, in 2023, we continue to report our overarching management approach to human rights in the [Human Rights Management section](#).

ENVIRONMENTAL



WATER
STEWARSHIP



TAILINGS
FACILITIES
& WASTE
MANAGEMENT



ENERGY &
GHG EMISSIONS



BIODIVERSITY
& LAND USE



MINE
CLOSURE &
REHABILITATION

SOCIAL



HEALTH &
SAFETY



RELATIONSHIPS
WITH COMMUNITIES
& INDIGENOUS
PEOPLES



SOCIO-ECONOMIC
CONTRIBUTIONS



SECURITY
PRACTICES



HUMAN CAPITAL
DEVELOPMENT



INCLUSION &
DIVERSITY

GOVERNANCE



BUSINESS
ETHICS



WATER STEWARDSHIP

Pan American Silver is committed to water stewardship across our operations and to minimizing any detrimental effects of our activities on water availability and quality.

We recognize that water is a finite resource, and as such, we deeply respect and prioritize its significance in the communities around us. Our goal is to optimize water use and prevent potential negative impacts on local water resources, thereby safeguarding local residents. Each mine is responsible for the development and implementation of procedures and programs that comply with corporate policies and initiatives related to water use. We take a catchment-wide approach to managing water usage and we support access to clean, reliable water for communities near our operations. Water management considerations are integrated into mine operation and closure plans, and we engage with COIs within our catchment areas to gain a deeper understanding of operational impacts on water, and to understand how we can best respect and uphold their water rights while improving access to water when possible.

Read more about our management approach to water stewardship on our [website](#), including details on our policies, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

REDUCED OVER

170,700 m³

in water use compared to the 2023 base case⁽¹⁾

(1) The 2023 base case is our projected 2023 water use, as calculated using our life of mine plans adjusted for annual production.

ANALYST CENTRE

GRI indicators: 2-27; 3-3; 303-1; 303-2; 303-3; 303-4; 303-5

SASB indicators: SASB EM-MM-140a.1; SASB EM-MM-140a.2

Potential impacts from mining activities: ground and surface water quality degradation through spills, discharges and storm runoff, competing uses affecting watersheds and other water users, water access for local communities

Potential risks to the Company: more extreme/less predictable weather conditions, new water regulations and permit requirements, reputational damage due to water scarcity or water scarcity perception in the areas where we operate, community conflicts

OUR PERFORMANCE

During 2023, our focus was on the integration of our Acquired Mines, and on understanding the types of water risks that need to be managed at each site. These risks include water availability in the arid climate of El Peñon, and quality of water supply at Cerro Moro due to the natural salinity in the groundwater at that site. We have also adapted to the legal and regulatory requirements in Brazil and Chile which are new jurisdictions for our company. Finally, there are differences in how water balances were calculated at the Acquired Mines. During 2023, we adopted Pan American Silver methodologies.

Since effective water stewardship requires engagement and collaboration with other watershed users, our COI engagement continues to be central to our practices. To this end, we continue to engage in various participatory committees. Further details are available in the [Participatory Engagement section](#) of this report. Our participation in these engagement efforts allows us to maintain an open dialogue between our operations and local communities. At Escobal, we continued participating in the local watershed committee, which is discussed in the [Escobal Mine section](#) of this report

We continue to develop a Water Management Corporate Standard, which will outline water management requirements for all operations and incorporate TSM and RGMP requirements.

In 2023, Shahuindo received the Certificado Azul for the second year in a row. The Peruvian

National Water Authority granted the certificate in recognition of the completion of two projects: the improvement of the Condebamba water collection system, which improved access to water for the inhabitants of five communities, and the optimization of water usage at the operation through the installation of water flow regulators.

Water Quality

We manage discharges in accordance with local regulations. We have processes in place to avoid and manage spills, to prevent impacts on water quality and water management systems, to identify risk, implement controls, and to evaluate our performance.

In 2023, we had no significant environmental incidents and no water-related incidents of non-compliance that resulted in a formal enforcement action. Reportable environmental incidents are included in the [2023 Sustainability Performance Data Book](#).

Throughout 2023, we continued to implement our Corporate Environmental Incident Management Standard, which establishes a framework for incident reporting and response. The Standard is helping us identify and respond to water-related risks and implement timely prevention or mitigation measures.

We continue to invest in improvements to water and wastewater treatment facilities so that we can

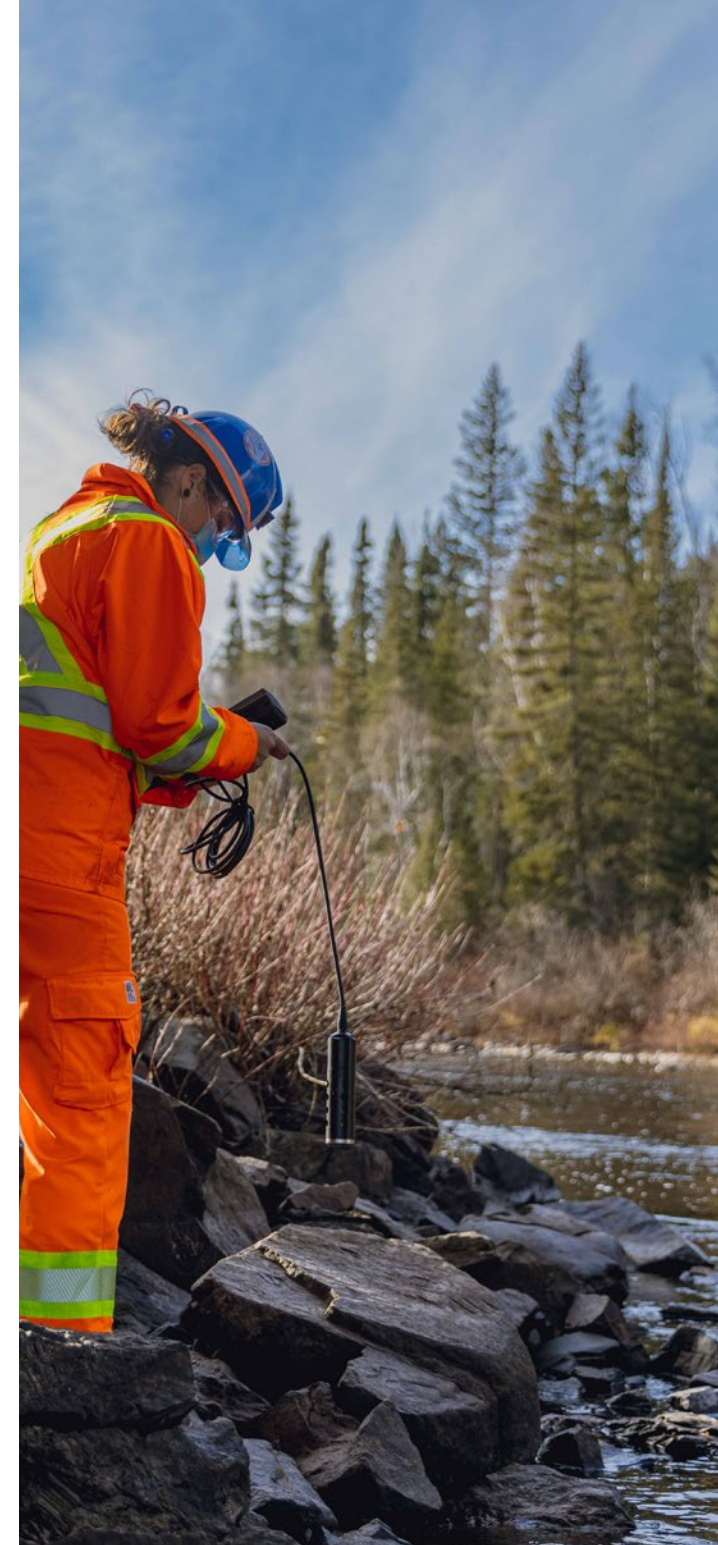
provide additional treatment capacity, increase the use of recycled water in our operations, and improve efficiency. In 2023, we completed the construction of the first phase of the [Merinos Wastewater Treatment Plant at Shahuindo](#).

Water Use

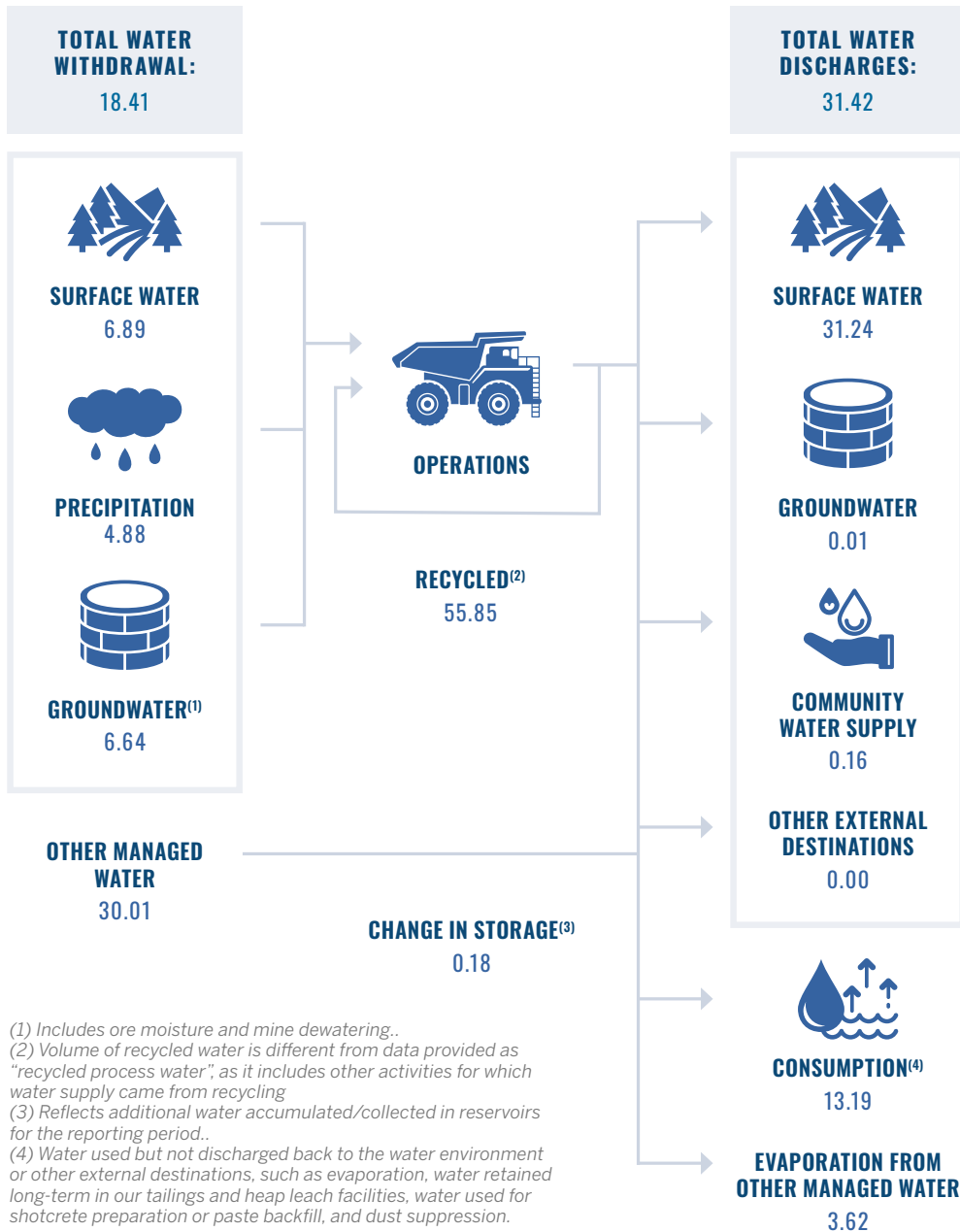
We set annual goals to reduce water use across our operations through site-based projects and initiatives that increase water recycling and reduce water usage. Our 2023 goal, established prior to the Yamana Acquisition, was to reduce water use by 47,000 m³, or 0.3% compared to the 2023 base case.⁽⁸⁾ We were able to exceed our goal, reducing water withdrawal by over 170,700 m³, or 1% of the 2023 base case.

Our success is primarily linked to our efforts to reduce water use at Shahuindo, where we expanded the use of molasses as an additive for dust mitigation in more haul routes than initially planned, allowing us to use less water. At Dolores, we implemented a project to harvest rainfall as an alternative source of water, allowing us to reduce our reliance on other freshwater sources. Huaron reduced its water usage by improving maintenance of the water supply system of its camps and offices. San Vicente reduced its water consumption by using a dust suppressor for road dust mitigation. Timmins continues to use only precipitation from the Bell Creek tailings facility and associated ponds

(8) The 2023 base case is our projected 2023 water use, as calculated using our life of mine plans adjusted for annual production.



Company-wide Water Balance (million m³)



for mineral processing. Our [2023 Sustainability Performance Data Book](#) includes site performance against annual water goals.

Our company-wide water balance shows how much water we withdraw, recycle, and discharge. Our water inputs are groundwater, including from mine dewatering, water from precipitation, and surface water from sources such as lakes or rivers. In 2023, 62% of our inputs were "other managed water", which refers to water managed by our sites without the intent to supply our operations. This water is released to the environment without use and becomes available in the watersheds where we operate. Discharged water can help local communities meet their water needs and can support local agriculture.

We continuously work to increase the use of recycled water for ore processing, supplementing recycled water with new water from mine dewatering or external sources. We recycle water from our process plants, water treatment plants, tailings facilities, and heap leach pads. In 2023, 80% of all water used for ore processing was recycled

water. Any water that is evaporated, retained long term in our tailings and heap leach facilities, or used for shotcrete and paste backfill, is counted as water consumption.

Dolores, located in the Yaqui River catchment in Mexico, and Minera Florida located in the Rapel River catchment, are our only operations in areas of high or extremely high baseline water stress.⁽⁹⁾ Water withdrawal at Dolores constitutes 13.9% of total corporate water withdrawal and 14.1% of total corporate new water use for mineral processing. At Minera Florida, these figures stand at less than 3.4% and 2.6% respectively.

The impact of the Dolores mine on local water availability is negligible as the mine's water usage is less than 0.2% of the natural water recharge of the Yaqui River catchment.⁽¹⁰⁾ A similar situation is observed at the Minera Florida mine, where water usage accounts for less than 0.11% of the natural water recharge in the Rapel River catchment. Nevertheless, we continue to implement initiatives to reduce reliance on water at these mines.

(9) As identified by the World Resources Institute, the Yaqui river catchment where Dolores is located, and the central region of Chile where Minera Florida is located, are both identified as having extremely high baseline water stress.
 (10) Annual average water availability agreement for the 757 water catchments in Mexico published on September 21, 2020, in the Mexican Official Federal Journal.

Water Use Intensity

Our water use intensity measures how much new water is used at our mines in cubic metres of water per tonne of ore processed. In 2023, the combined water use intensity of our operations, excluding Huaron, was 0.24 m³/tonne of ore processed, slightly higher than our 2022 results of 0.20 m³/tonne of ore processed. This value represents our water intensity following the integration of Yamana and includes all our assets, except for Huaron. The increase in water use intensity is driven by the relatively higher water use at the Acquired Mines. Without the Acquired Mines and Huaron, this value is 0.20 m³/tonne of ore processed.

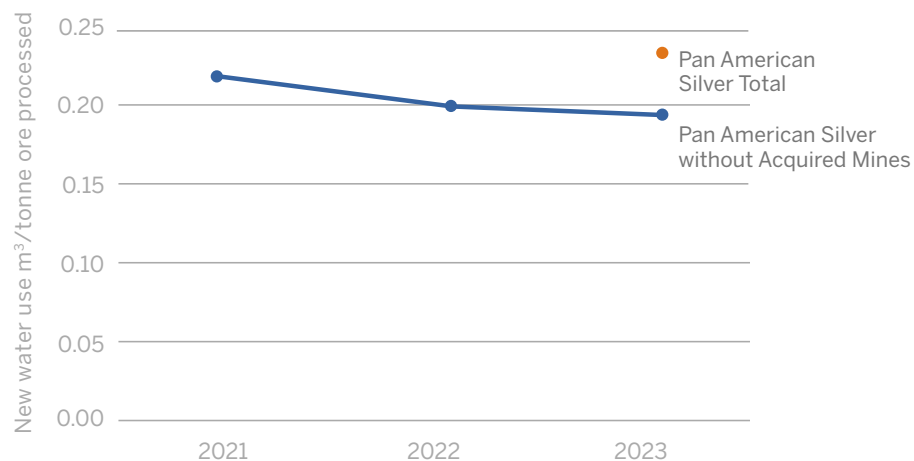
Water intensity calculations do not include Huaron given its unique layout compared to our other operations. Water use intensity at Huaron was 3.71 m³/tonne of ore processed, a slight decrease from 3.79 m³/tonne processed in 2022. Huaron has high calculated water intensity because its design includes gravity-driven water supply systems. In these systems, water flows from large lakes through the mineral processing plant, is treated, and is then discharged downstream. Huaron is located in an area with high precipitation, low evaporation, and abundant surface water, and the gravity-driven technology employed reduces both energy use and greenhouse gas emissions by eliminating pumping for water recycling.



SHAHUINDO WATER TREATMENT PLANT

During 2023, we completed the construction of Phase 1 of the Merinos Wastewater Treatment Plant at Shahuindo. By the end of the year, we commissioned the plant, which treats contact water off the South Waste Dump, nearby roads and other disturbed areas to meet water quality guidelines and to provide water for irrigation to downstream communities. Pan American Silver has invested over US\$12M in the Merinos water treatment system, which constitutes the largest such investment in the Company's history.

Water Use Intensity⁽¹⁾



(1) Excludes Huaron; see text for further explanation.

TAILINGS FACILITIES & WASTE MANAGEMENT

Pan American Silver manages mineral waste by designing, building, operating, maintaining, and closing tailings storage facilities and waste stockpiles in a safe manner that reduces risks to the environment and communities.

Our Tailings Management Framework sets clear accountabilities and responsibilities, and supports safe and efficient planning, implementation, monitoring, and review of critical facilities. Corporate and site-specific tailings management systems and associated processes incorporate the actions necessary to verify that all critical facilities have quality designs, sound dam safety practices, comprehensive risk management, and effective emergency response and preparedness systems, and that we continue to work towards meeting or exceeding current best practices and industry standards. We also follow local regulations and best practices to manage, measure and monitor the generation and disposal of industrial and domestic non-mineral waste, and we adopt site-level operational procedures to reduce waste and lessen impacts on the environment and communities.

Read more about our approach to critical facilities (including tailings and similar infrastructure) and waste management on our [website](#), including details on our policies, standards, programs, monitoring practices, accountability, and third-party reviews.

2023 HIGHLIGHTS

SUCCESSFUL INTEGRATION

between Pan American and Yamana's tailings management systems and standards

ALL TAILINGS & CRITICAL FACILITIES

performed and operated adequately in 2023

REDUCED OVER

740 TONNES

in non-rock waste compared to the 2023 base case⁽¹⁾

(1) The 2023 base case is our projected 2023 waste generation, as calculated using our life of mine plans adjusted for annual production.

ANALYST CENTRE

GRI indicators: 3-3; 306-1; 306-2; 306-3; G4 MM3

SASB indicators: EM-MM-540a.1; EM-MM-540a.2; EM-MM-540a.3; EM-MM-150a.4; EM-MM-150a.5; EM-MM-150a.6; EM-MM-150a.7; EM-MM-150a.8; EM-MM-150a.9; EM-MM-150a.10; SASB EM-MM-160a.2

Potential impacts from mining activities: disruption to worker and community livelihoods, ecosystem health, contamination of water and soil, alteration of natural drainage patterns, damage to property and infrastructure, compromise to physical stability of mine workings

Potential risks to the Company: delayed production, fines, penalties or sanctions, loss of social acceptance

OUR PERFORMANCE

Tailings Facilities Management

We store tailings in specialized, engineered facilities using construction methods that vary according to the context and local conditions of each operation. Our tailings facilities are designed for stability and have the capacity to withstand credible extreme weather, floods, or seismic events.

In 2023, we added six tailings facilities through our integration of Yamana. As of December 2023, Pan American Silver managed nine active tailings facilities, two in care and maintenance, and three closed or in the process of closure.

All our critical facilities are operated with the objective of reducing risk to people and the environment.

Additional information on Pan American Silver’s tailings facilities can be found in the [2023 Sustainability Performance Data Book](#).

During 2023, Pan American Silver worked to continue to standardize our Tailings Management Framework across all operations, including the Acquired Sites. This Framework is set with the intention of incorporating evolving international best practices, responding to new and evolving regulatory requirements, and addressing tailings management activities throughout the mining life cycle. We are also strengthening our tailings management governance by establishing clear accountabilities and responsibilities, at both corporate and site-levels, and increasing senior executive and Board-level oversight.

In 2023, we evaluated the performance, priorities, and risks at all of our operating tailings facilities and developed corresponding action plans. In accordance with MAC and CDA’s guidance to evaluate potential downstream consequences for each facility, we completed dam breach analyses to better define each facility’s risk profile. We also conducted internal TSM Tailings Management Protocol assessments at all operating tailings facilities obtaining consistently high results across all of our operations. Engineers of Record continued to complete annual safety inspections for each tailings facility, and independent reviewers conducted dam safety reviews of our operating and closed tailings facilities at Jacobina and San Vicente. The outcomes of these inspections and assessments confirmed that all facilities are stable, and that our systems and processes are strong. All tailings and critical facilities performed and operated adequately during the year.

We recognize the importance of the Global Industry Standard for Tailings Management (GISTM), which was released in 2020 as an initiative from the International Council on Mining and Metals, the United Nations Environment Programme, and the Principles for Responsible Investment. However, we believe that MAC’s recommended framework, supported by its TSM protocols, allows us to more efficiently implement best tailings management practices while meeting and frequently exceeding GISTM requirements. Pan American Silver continues to assess our standards, which are rooted in MAC’s

Pan American Silver Tailings Storage Facilities (TSF)

#	Facility name	Location	Operational status	Construction method ⁽¹⁾	Consequence classification ⁽²⁾
1	Timmins (Bell Creek)	Canada	Operational	Downstream/ Centerline	Significant to High ⁽³⁾
2	La Colorada (Presa #6)	Mexico	Operational	Downstream/Modified Upstream/Centerline	Very High
3	La Colorada (Presa #7)	Mexico	Operational	Downstream	High
4	Huaron (Presa #5)	Peru	Operational	Centerline	High to Very High ⁽⁴⁾
5	San Vicente	Bolivia	Operational	Centerline	Significant
6	Jacobina (B2 Dam)	Brazil	Operational	Downstream	Extreme
7	Cerro Moro	Argentina	Operational	Downstream	Significant
8	Minera Florida (Tranque Pasta)	Chile	Operational	Centerline	Significant
9	El Peñon	Chile	Operational	Filtered Tailings stack	N/A
10	Escobal	Guatemala	In care & maintenance	Filtered Tailings stack	N/A
11	Manantial Espejo	Argentina	In care & maintenance	Downstream	Significant
12	Minera Florida (Tranque Adosado)	Chile	Closure process	Downstream	Significant
13	Jacobina (B1 Dam)	Brazil	Closed	Centerline modified to Upstream for last raises	Extreme
14	Alamo Dorado	Mexico	Closed	Filtered Tailings stack	N/A

(1) Tailings dams are constructed using upstream, centerline, or downstream methods, or a combination thereof. Typically, a tailings dam begins with a starter dam, which is raised over time as additional tailings are deposited in the storage facility. The construction method depends on the direction in which the embankment crest moves in relation to the original starter dam:

Upstream—the dam is raised with the crest moving upstream over the deposited tailings.

Centerline—the dam is raised vertically from the starter dam.

Downstream—the dam is raised by shifting the crest downstream using structural fill on the downstream face.

(2) Canadian Dam Association (CDA) Dam Consequence Classification system. The consequence classification (extreme, very high, high, significant, or low) identifies the potential for damage and loss in the unlikely event of a dam failure. The analyses leading to a consequence assessment and classification of the dam include characterization of a hypothetical dam breach, flood wave routing, inundation mapping, and evaluation of the impacts.

(3) Significant for fair weather scenario and High for flood induced scenario.

(4) High for fair weather scenario and Very High for flood induced scenario.

Tailings Management Guidelines, TSM Tailings Management Protocol and the CDA Dam Safety Guidelines, against the GISTM and recommended practices. More specifically, through active participation in MAC's Tailings Working Group, we continue to support MAC's efforts to align its tailings management guidelines and protocol more closely with the GISTM.

Tailings Management Framework

Our robust tailings management framework, based on the MAC Tailings Management Guidelines, TSM Tailings Management Protocol and CDA Dam Safety Guidelines, aims to minimize risks to the environment and our host communities. It consists of four phases: planning, implementation, monitoring and surveillance, and reviews. Our designated Accountable Executive Officer (AEO), the corporate Senior Director, and the staff at site level are responsible for the implementation of the tailings management framework. Our strategy includes quality designs, clear accountability and responsibility, sound dam safety practices, comprehensive risk management, and effective emergency response and preparedness systems.

In accordance with the tailings management framework, each of our sites has developed a set of tailings disposal and surveillance procedures and protocols, including measurable performance indicators that govern the daily management of the tailings facility operations. These indicators are the cornerstone of each site's integrated tailings facility management plan, providing a clear performance monitoring framework. This information, in addition to other guidance that supports the safe operation of our tailings facilities, is included in our

Operations, Maintenance and Surveillance (OMS) manuals, which are updated and reviewed annually. OMS manuals and standard operating procedures are in place for all of our tailings facilities.

Timely risk identification, assessment, and communication are a critical part of our tailings and critical facilities management system. All our operations employ a risk assessment process that focuses on proper risk identification and the timely development and implementation of mitigation strategies, helping to reduce the likelihood of a critical failure and any potential negative impacts as much as possible. Regular reports are generated for members of the Company's senior executive management to update them on tailings stability and the operational status of each facility. These reports include updates on key identified risks, critical controls, and mitigation actions being implemented.

Our assurance process for tailings facilities includes completion of regular reviews by independent experts including annual Dam Safety Inspections (DSIs) by the Engineer of Record or Design Engineer, and other third-party expert reviews and audits, including completion of Dam Safety Reviews (DSRs) as recommended by CDA.

Other Critical Facilities

In addition to tailings facilities, we manage heap leach facilities (HLF) designed for gold and silver extraction. HLF and other critical facilities such as water reservoirs are managed through safe design, construction, operations, maintenance, and closure practices. All our heap leach pads have assigned Engineers of Record (EoRs) to support with completion of regular inspections, monitoring,

Tailings Management Framework



and performance review. Although MAC tailings management systems and the TSM protocol do not apply directly to heap leach operations or water reservoirs, we have adopted several of their key principles to support the safe management of our HLFs (i.e. Dolores, Shahuindo and La Arena) and water reservoirs (i.e. Dolores and Jacobina).

Pan American Silver's HLFs have geotechnical instrumentation installed to support with monitoring. In addition, our management systems provide corporate oversight and clear

accountabilities and responsibilities. HLPs are designed and operated following best practices. Each EoR is responsible for conducting annual safety inspections, interpreting periodic geotechnical measurements, and providing technical guidance to our responsible staff at site. The EoR also verifies whether the facilities are being constructed and operated in accordance with the design and set performance objectives and indicators for these structures, as well as applicable guidelines, standards, and regulatory requirements.

Ensuring the safe, long-term management of heap leach pads and other critical facilities remains one of the most important and material aspects of our business.

Technological Innovation

We continue to adopt new technologies to improve the management of our critical facilities. La Colorada, Timmins, Huaron, Dolores, La Arena and Shahuindo, as well as several of our new operations acquired in 2023, employ automatic tools to monitor geotechnical instrumentation and generate real-time data, including Automatic Mechanical Total Station (AMTS), improving our ability to monitor geotechnical stability. The AMTS can generate early warnings and enable us to take action to avoid incidents. In addition, we are constructing a new pressure filtration plant and filtered tailings storage facility at Huaron mine. The new filtered tailings plant and storage facility is intended to come online in 2025.

Emergency Response

Emergency preparedness is an integral component of our tailings management approach. Each site has an emergency response plan (ERP), which details preventative measures, procedures, and actions to be taken in the event of an emergency. These site-specific ERPs are based on dam breach analysis and flood inundation mapping, and are developed to prepare workers, local authorities, emergency service providers, and communities to deal with unlikely worst-case scenarios. For all operational tailings facilities, sites conduct regular emergency simulations and drills, following regulatory requirements regarding drill format and frequency, and stakeholder engagement.

In 2023, country managers reviewed the ERPs for all tailings facilities; sites conducted training and either desktop simulations or drills as required by their ERPs.

Waste Rock Management

Our mining operations generate non-economic waste rock and tailings residue when we extract metal and concentrates from ore. Eight of our eleven operating mines (72%) are predicted to have some rock in waste materials, underground workings, or pit walls that has the potential for acid rock drainage (ARD). We design our facilities to minimize the possibility of ARD, and we employ active or passive water treatment systems to neutralize acid drainage and prevent downstream water impacts.

As part of closure planning at Dolores, we continued testing to characterize and model potential acid generating rock during and post closure. We are currently updating closure designs based on modelling results to minimize the potential for downstream water quality impacts.

We often reuse waste rock as backfill in our underground operations, or as construction material for surface infrastructure, such as tailings storage facilities, roads, and platforms for buildings and for equipment. In 2023, we generated 58.9 million tonnes of waste rock and 9.5 million tonnes of tailings and were able to reuse 30% of the waste rock, mainly backfilling the Dolores open pit, and 7% of tailings for backfill and tailings dam raises mainly at Jacobina.

Non-mineral Waste Management

Mining activities also produce non-mineral waste, including hazardous and non-hazardous industrial waste, that requires end-of-life recycling or disposal.

The main types of hazardous waste generated by our activities include waste oil, lubricants, reagent packaging, and batteries. Non-hazardous waste includes plastic, wood, paper, food waste, and scrap metal. Waste management plans at each site detail measures to reduce waste generation and manage potential waste-related impacts. Operations recycle or reuse these products when possible, and non-recyclable waste is disposed of either on site or at certified disposal facilities in compliance with local regulations. In cases where waste disposal is managed by a third party, we require our contractors to adhere to legal requirements and our Environmental Policy and procedures.

Pan American Silver seeks to contribute to a circular economy, so that fewer materials are used, materials are kept in use longer, and waste is reduced when possible. As part of our commitment, we promote waste reduction at the source and develop recycling programs across our operations.

In 2023, our goal established prior to the Yamana Acquisition was to implement projects and initiatives to reduce non-recycled and/or non-reused non-rock waste by 450 tonnes, which represented approximately 4% of the 2023 base case.⁽¹¹⁾ We achieved this goal, reducing our waste by over 740 tonnes, or 7% of the base case. Our recycling projects, particularly at Shahuindo, enabled us to exceed our goal.

Some of our main activities in 2023 included:

- Shahuindo used a third-party contractor to recycle the residue from grease traps and grease interceptors in the camp's kitchens.

The amount of residue recycled exceeded the projected waste production.

- La Colorada and Huaron promoted the reduction of non-recyclable/reusable waste through awareness campaigns.
- La Arena and San Vicente increased the amount of organic waste composted by adopting new composting methods.

During the year, we also reduced used oil waste. At the end of 2022, we established a laboratory at Dolores to analyze over 30 parameters in oil samples to extend the life of our equipment oil used, reducing the amount of oil waste by 30% in 2023 compared to 2022. Similar efforts to extend the life of oil have been conducted at Cerro Moro for several years.

At several of our operations, including Shahuindo, La Arena, La Colorada, Cerro Moro, and Jacobina, we donate recyclable waste directly to community groups or to non-profit organizations. The waste is sold and the profits benefit communities.

⁽¹¹⁾ The 2023 base case is our projected 2023 waste generation, as calculated using our life of mine plans adjusted for annual production.



ENERGY AND GHG EMISSIONS

Pan American Silver is committed to reducing climate risks through innovative and practical solutions to reduce emissions, transform energy supply, and optimize our resources.

Our Climate Change Policy Statement establishes our commitment to take action to achieve our aspirational objective of net zero carbon dioxide equivalent emissions by 2050. Our operations annually identify risks and opportunities to maximize energy efficiency and to reduce emissions, and set short and long-term targets based on viable projects and initiatives. We understand that mitigating and responding to risks associated with climate change is fundamental to maintaining a positive relationship with our COIs, who increasingly expect us to reduce our carbon footprint.

Our [Climate, Energy and Greenhouse Gas Emissions Report](#), available in the appendix of this Report, incorporates the TCFD reporting recommendations and details our Climate Change Policy Statement, governance, climate change strategy, climate risks and opportunities, initiatives, and performance metrics and targets.

2023 HIGHLIGHTS

23%

reduction in GHG emissions compared to the 2023 base case⁽¹⁾

4%

reduction in energy use compared to the 2023 base case⁽¹⁾

(1) The 2023 base case is our projected 2023 GHG emissions and energy use, as calculated using our life of mine plans adjusted for annual production.

ANALYST CENTRE

GRI indicators: 201-2; 302-1; 305-1; 305-2; 305-3; 305-4; 305-5

SASB indicators: SASB EM-MM-130^a.1; SASB EM-MM-110^a.1; SASB EM-MM-110^a.2

Potential risks to the Company: see [Climate, Energy and Greenhouse Gas Emissions Report](#) for a summary of physical and transition risks

OUR PERFORMANCE

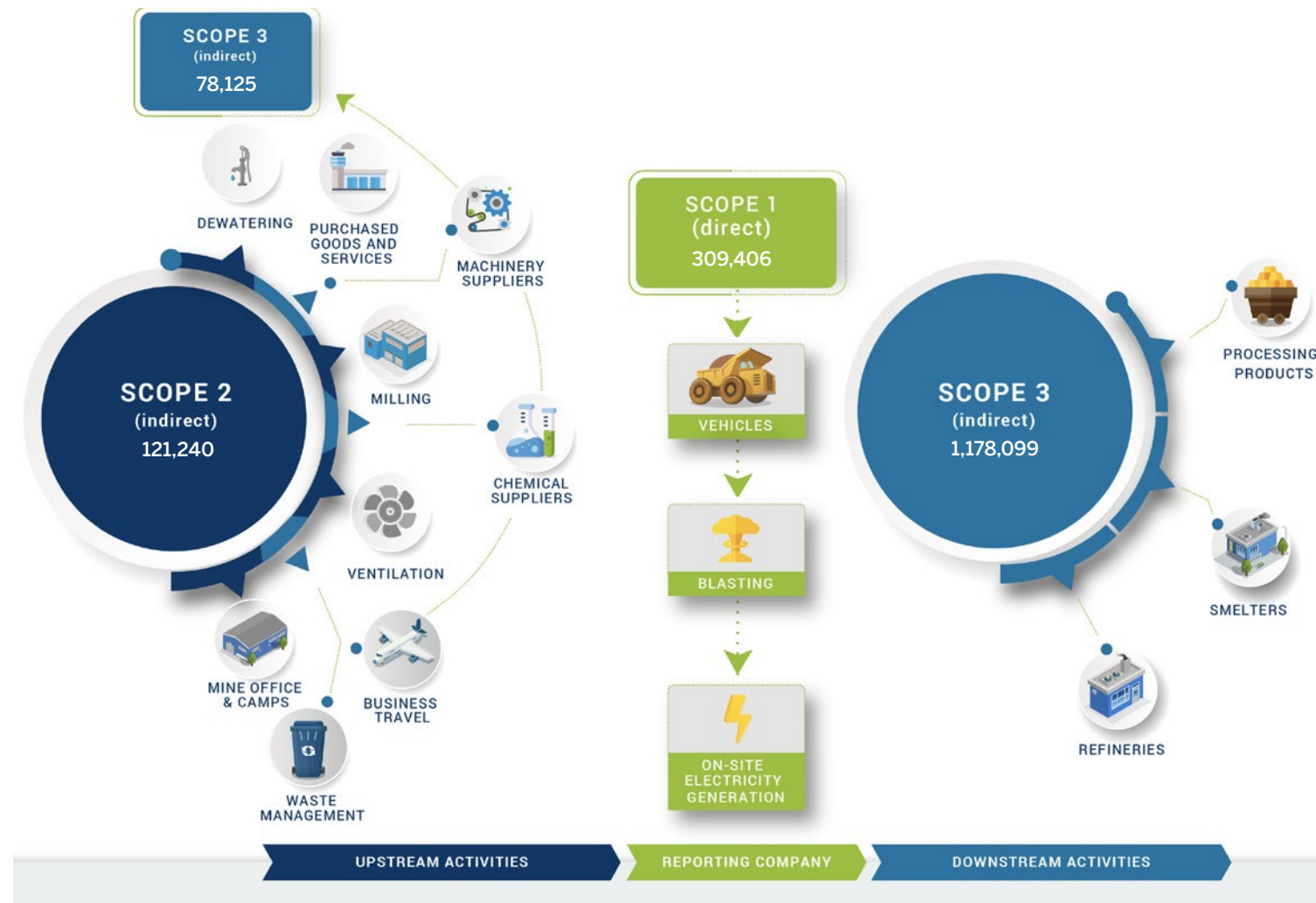
During 2023, we worked to incorporate the Acquired Mines into our life of mine energy profile plans. With the updates to the energy profile, we are confident we can reach our goal to reduce our global GHG emissions by at least 30% by 2030 from the amended 2019 baseline emissions that includes the Acquired Mines and excludes Morococha, which was divested in 2023.

In 2023, we achieved our 2023 energy and emissions goals with a 4% or 230,800 GJ reduction in energy use and 23% or 85,000 t CO₂Eq reduction in GHG emission estimates compared to the 2023 base case, which did not include the Acquired Mines. Our goals were achieved primarily through renewable electricity supply at both our Mexican operations, hauling optimization at Dolores, and by commissioning an ore pass at La Colorada, as well as through other energy and emission reduction projects at all our operations. The [Climate, Energy and Greenhouse Gas Emissions Report](#) provides more information on our energy efficiency and emissions reduction projects.

Excluding the Acquired Mines, our GHG emissions intensity fell from 0.009 CO₂Eq/tonne to 0.007 CO₂Eq/tonne. The Acquired Mines increased the Company's overall GHG intensity to 0.010 CO₂Eq/tonne of ore processed. Our average energy intensity, excluding the Acquired Mines, improved to 0.14 GJ/tonne in 2023, a 14% reduction from 2022 (0.16 GJ/tonne). The Acquired Mines increased the Company's overall energy intensity to 0.19 GJ/tonne of ore processed. In 2023, our company-wide scope 1 and 2 emissions increased by 22% due to the addition of the Acquired Mines.

Scope 1, 2, and 3 Greenhouse Gas Emissions

(CO₂, CH₄, N₂O, HFCs, PFCs, SF₆)





BIODIVERSITY AND LAND USE

Pan American Silver believes that protecting, conserving and restoring natural ecosystems is crucial to our success and to the resilience of host communities.

We undertake efforts to promote biodiversity conservation and rehabilitation in the areas where we operate. Our [Environmental Policy](#) establishes our commitment not to explore or develop mines in internationally designated protected areas.⁽¹²⁾ We design, construct, and operate with the intention of minimizing our impacts on biodiversity throughout the mine lifecycle in order to preserve biodiversity and protect surrounding ecosystems for future generations. We employ a biodiversity conservation system, as part of a site-wide environmental management system, rooted in a mitigation hierarchy framework that first seeks to avoid all potential impacts on biodiversity, and then seeks to minimize, restore, or offset unavoidable impacts.

(12) Defined as areas listed on the UNESCO World Heritage List, the International Union for Conservation of Nature (IUCN) Green List, and/or other officially protected areas.

Read more about our management approach to biodiversity and land use on our [website](#), including details on our policies, standards, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

REHABILITATED OVER

89 HECTARES

| across our operations

ANALYST CENTRE

GRI indicators: 3-3; 304-1; 304-2; 304-3; 304-4; G4 MM1; G4 MM2

SASB indicators: EM-MM-160a.1; EM-MM-160a.3

Potential impacts from mining activities: habitat loss and/or degradation, contamination or degradation of water, soil, and air, alteration of natural landscapes, biodiversity conservation and rehabilitation

Potential risks to the Company: more stringent legal requirements or operating restrictions in eco-sensitive areas, loss of social acceptance, conflicts over scarce resources

OUR PERFORMANCE

We seek to return the land disturbed by our activities as close as possible to its natural state, and to create viable habitats for local native species. Our goal is no net loss of habitat over the full mining cycle, as measured by hectares disturbed and impacted, offset by reclaimed and rehabilitated. With the acquisition of Yamana, we expanded the number of ecosystems in which we operate and worked towards aligning all the Acquired Mines to our corporate standards.

We have not identified significant impacts on biodiversity from our operations. Nevertheless, we have biodiversity management plans and systems in place to manage risks related to biodiversity.

Our sites regularly engage with COIs to communicate their biodiversity management approach and programs, and to better understand local interests and priorities. We also conduct biodiversity training and run biodiversity awareness campaigns for employees and contractors across our operations. Examples of our efforts to engage with communities include:

- At Minera Florida, 300 students from 5 different schools participated in educational workshops, which included topics related to biodiversity, such as forest fire prevention and reforestation with native species.
- El Peñon engaged with the Taltal community by participating in the environmental fair of the community to highlight the importance of

biodiversity management, and by supporting clean-up efforts in local streams and on beaches.

- We continued to maintain the Fundo (or ranch) El Membrillo, a large property that contains over 100 hectares, reforested with native species near our Minera Florida operations.
- We donated tree seedlings to community members at La Colorada.

Our 2023 annual corporate goal, established prior to the Yamana Acquisition, was to achieve 80 hectares of reforestation or revegetation across our operations. We exceeded this goal, rehabilitating 89 hectares, largely from 66 hectares of rehabilitation at Dolores, 49 of which was offsite, with the remainder from efforts at La Arena, Shahuindo, and San Vicente. We also conducted rehabilitation efforts at our Acquired Mines, including rehabilitating over 6 hectares at Jacobina. Overall, we rehabilitated 95 hectares across all our operations.

In 2023, newly disturbed areas included 87 hectares (79 hectares without the Acquired Mines). As a result, we rehabilitated 8 hectares more than we disturbed in 2023. Across our operations, the total accumulated area disturbed and not yet reclaimed is 8,726 hectares, or 2,934 without the Acquired Mines.

Annual land disturbances and rehabilitation vary depending on the stage of the mine cycle. Site performance on annual biodiversity goals can be found in the [2023 Sustainability Performance Data](#)

[Book](#). We discuss additional examples of closure-related rehabilitation work under [Mine Closure and Rehabilitation](#), while biodiversity initiatives at Escobal are discussed in the [Escobal Mine section](#) of this report.

Biodiversity Conservation

None of our mines or mineral reserves are in or near endangered species habitats.⁽¹³⁾ Furthermore, our sites are not located on or near land having protected conservation status.⁽¹⁴⁾ Minera Florida is the only mine in an area designated as having high biodiversity value.⁽¹⁵⁾

Minera Florida is within a region of high biodiversity value called the Cordón de Cantillana, a priority area of 205 thousand hectares for the conservation of biodiversity. The region is characterized by the presence of important ecosystems, with endemic flora and fauna. However, the region is also populated, and includes roads and infrastructure, and ongoing economic activities including agriculture and mining. Our mine operates responsibly within the region according to the conditions of our environmental permits designed to protect this high biodiversity value.

Land owned by Huaron is located adjacent to the Huayllay “Stone Forest” National Sanctuary in Peru, which is a natural geological rock formation. Our nearest infrastructure, a camp and water treatment plant, are located 0.7 km from the Sanctuary, next to the town of Huayllay. However, the mine and mineral reserves are not near the Sanctuary.

We work to identify opportunities to contribute to biodiversity conservation through site-level initiatives, formal partnerships, and collaboration with communities.

Since some of our operations use only a small portion of their land for mining activities, we actively work to protect the remaining land from ranching, grazing, and hunting activities; this leads to a significant increase in the abundance and diversity of flora and fauna in these areas.

As part of our strategy, we are actively seeking partnerships with biodiversity conservation institutions. In 2023, we continued our partnership with Nature Trust BC, as part of our three-year (2021-2023) commitment to support long-term wetland conservation projects, such as the Nicomen Slough Conservation Area on an oxbow of the Fraser River between Mission and Hope in British Columbia.

The Taskforce on Nature-related Financial Disclosures (TNFD) released its final recommendations in September 2023. We are currently assessing the implications of TNFD and how we can apply TNFD disclosure recommendations in our reporting.

(13) Critically endangered or endangered species on the IUCN Red List.
(14) Defined as areas listed on the UNESCO World Heritage List, IUCN Green List, and/or other officially protected areas.
(15) Defined by the GRI Standards Glossary as area not subject to legal protection, but recognized for important biodiversity features by a number of governmental and non-governmental organizations.



MINE CLOSURE AND REHABILITATION

Pan American Silver seeks to leave a positive legacy for local communities by taking a holistic approach to closure planning.

We start planning for closure in the design phase of a new project, and actively engage with and gather input from COIs during the entire mining lifecycle. This approach helps us manage the uncertainties and expectations associated with mine closures through a collaborative process, enabling host communities to reflect on what they would like the future of their community to look like, and the legacy they want our operations to leave behind. Each operation has a closure plan, which is updated throughout the mine lifecycle to incorporate technical, environmental, or social considerations, to meet new regulatory requirements, and to respond to COI engagement. Closure cost estimates are updated annually. In addition to environmental closure plans, Pan American requires that all operations prepare and maintain a social closure plan as part of their site-wide Social Management Systems.

Read more about our management approach to mine closure and rehabilitation on our [website](#), including details on our policies, standards, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

Our US team received the Nevada

EXCELLENCE IN MINE RECLAMATION AWARD

for the Austin Gold Venture mine closure project

SOCIAL CLOSURE PLAN

for Manantial Espejo was approved by the provincial government of Santa Cruz in Argentina

ANALYST CENTRE

GRI indicators: 3-3; GRI 304-3; G4 MM10

SASB indicator: EM-MM-160a.1

Potential impacts from mining activities: changes in traditional land use, water-flow patterns, and/or water quality; decreased local economic activity and loss of services; changes to workforce migration patterns, changes to social dynamics of communities caused by job losses, workforce transition and outmigration

Potential risks to the Company: new or unanticipated closure, reclamation, and remediation costs; unanticipated effects of climate change leading to increased costs of remediation; new regulatory requirements, conflict and loss of social acceptance

OUR PERFORMANCE

In 2023, our primary focus was integrating the Acquired Sites. We are now operating in more jurisdictions with differing legal and regulatory requirements. We have acquired additional legacy sites, including two post-closure sites in the United States that require ongoing water management. While the Yamana integration has increased our closure-related liabilities, it has also significantly expanded the closure-related capacity of our team.

Prior to our integration with Yamana, our primary experience with mine closure had been at Alamo Dorado. That process was initially managed by our environmental team in Mexico, but our experience highlighted the value in bringing our construction and engineering expertise into the planning and execution of mine closures. We transitioned some of our construction project management team to lead active mine closure work with our environmental mine closure team in Mexico, creating a cross-functional Corporate and Mexico team that collaborates on environmental mine closure projects.

Physical Closure

We seek to restore closed sites to healthy ecosystems that can support intended post-mining land uses. We begin this process early and advance progressive closure opportunities during operations, reclaiming areas no longer required for mining activities.

We met our 2023 goal of continuing post-closure activities at Alamo Dorado and conducting progressive closure projects at our active operations. Alamo Dorado is in the post-closure monitoring and maintenance stage. This entails ongoing environmental sampling and analysis to evaluate erosion, revegetation survival, habitat recovery, water quality, biodiversity, and geotechnical and geochemical stability. Our work in 2023 included the construction of new diversion channels on the waste rock dumps and the evaluations of facility alternatives.

At Dolores, we continued Phase 1 progressive closure activities, including sloping sections of one of our waste rock dumps, and implementing a pilot revegetation project. We also completed construction of erosion barriers, improvements to existing vegetation, and fencing of approximately 16.6 hectares. We presented a mine environmental impact assessment to the Mexican authorities which includes an updated closure plan.

We also continued progressive closure activities at La Arena in 2023, through a pilot project that intends to characterize and test different materials and material combinations for future closure activities. The tests are being conducted on site parcels and will be assessed based on relevant indicators of physical, chemical, and biological stability. The project is intended to run until 2026. We have entered into an agreement to sell La Arena

and the La Arena II copper/gold development project. Please see our news release dated May 1, 2024 for further information.

Additional physical closure activities in 2023 included:

- Progressive closure at Huaron, which included the rehabilitation of historical mine openings, ventilation shafts and a waste rock dump.
- Progressive closure of a waste rock dump and the inactive Tailings Dam 1 at Jacobina. We began developing a plan to de-characterize Tailings Dam 1, which will require functionally reintegrating the structure into the surrounding environment.
- Reclamation activities are underway at Manantial Espejo, COSE and Joaquin. At Manantial Espejo, we completed physical closure works on the mine dewatering pond and the final section of a waste rock dump. We also completed a geochemical characterization study of the waste rock dumps at COSE and Joaquin.
- Completion of the demolition of mining infrastructure at Morococha in accordance with an agreement with a neighbouring mining company that is expanding its open pit mine. Morococha was placed on care and maintenance in 2022 and was subsequently divested in 2023.

In 2023, our US team won the Nevada Excellence in Mine Reclamation Award for the Austin Gold Venture Mine. Some of the reclamation work at the site included re-contouring, vegetating the area with native species, and the installation of nine sediment basins and four check dams for drainage control. Despite being a pre-regulation reclamation project, the award recognizes that this is one of the few mines in the western U.S. that meets the reclamation goals of the U.S. Forest Service.

Social Closure

Our Social Closure Standard provides practical guidance to support operations in preparing closure plans and delivering on our closure commitments. We require all social closure plans to include a legacy plan incorporating social and economic programs identified by local communities. We aim to enable these programs to become self-sustaining after the mine closes. We use our Community Development Initiatives (CDI) Toolkit to develop indicators to measure each program's success, including participation rates and the program's effects on the local community. Social closure plans also include environmental targets, including reclamation, activities, and timeline.

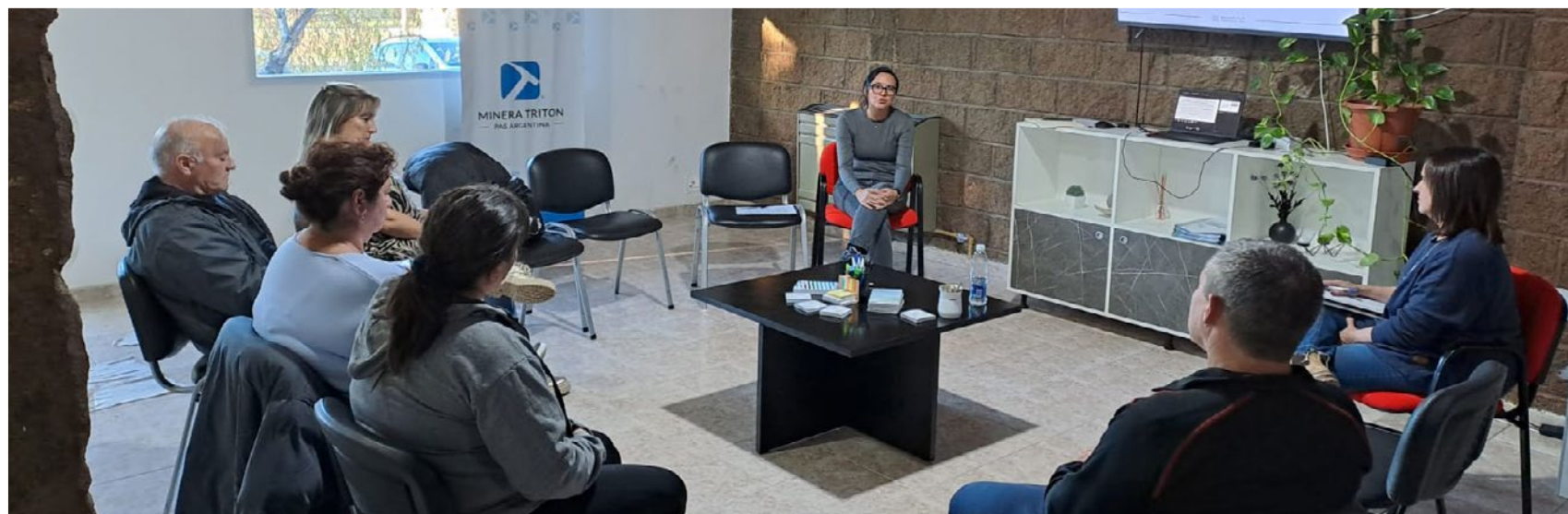
We create and update our social closure plans through engagement with local communities, workers, governments, and other COIs. We also conduct regular social baseline and perception

studies to understand the potential impacts of mine closure on communities, seeking to gauge communities' understanding of closure implications, and the interests of individuals and families remaining in a community after a mine closure.

Following the completion of the first phase of social closure activities at Manantial Espejo in 2022, the Santa Cruz provincial authorities approved our proposed Social Closure Plan for the site in 2023. The Social Closure Plan includes legacy programs, such as programs on micro tourism and trade and entrepreneurship training.

In 2023, we continued the process of developing and preparing for social closure at Dolores, which will be the first social closure in the state of Chihuahua in Mexico. The process included engagement with COIs, which identified ranching as their desired legacy local economic development project. The project supports 50 ranchers from the Ejido Huizopa as well as other ejido members in developing technologies and trade projects related to livestock production.⁽¹⁶⁾

(16) An ejido is an area of communal land registered with the National Agrarian Registry of Mexico and parcelled out to community members for agricultural use.



SOCIAL CLOSURE AT MANANTIAL ESPEJO

In 2022, we completed the first phase of community consultation at Manantial Espejo and began the development of the Social Closure Plan. The three-year plan was developed jointly with the Gobernador Gregores community, located near the mine. Community members participated in defining and developing legacy projects that would shift the focus from a local economy rooted in mining, to activities that will support the community's vision for its future. The plan includes two main projects: the development of a sustainable micro-tourism sector in Gobernador Gregores, and a training and labour integration project to help individuals develop trades and entrepreneurial skills.

Stakeholder engagement has been at the heart of our social closure process. Because mining developments

and operations generate economic benefits and occasionally provide local services in a community, open and honest communication engagement throughout the closure process is essential for managing the many uncertainties and concerns that come with the ending of a mine's operations. At Manantial Espejo, we created meaningful opportunities for all stakeholders to participate in defining the local community's needs and priorities during closure, helping to alleviate uncertainties associated with mine closure.

Manantial Espejo is the first social closure plan to be completed in alignment with and approved by the province of Santa Cruz, and is the first of its kind in Argentina.



HEALTH & SAFETY

Pan American Silver is committed to providing a safe and healthy workplace for all employees and contractors.

Pan American sites are responsible for implementing safety management systems and procedures. We focus on continuously improving our safety systems, training, and processes, and by adopting leading technologies. We track and analyze safety incidents to help us learn and improve the conditions of our workplaces. All our operations meet or exceed local health and safety regulations and have implemented the TSM Safety and Health Protocol.

Read more about our management approach to health and safety on our [website](#), including details on our policies, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

ZERO

| fatalities

LTIF:⁽¹⁾ 0.69

LTIS:⁽²⁾ 40

1,297,531

| hours of safety training

(1) Lost time injury frequency
(2) Lost time injury severity

ANALYST CENTRE

GRI indicators: 3-3; 403-1; 403-2; 403-3; 403-4; 403-5; 403-7; 403-8; 403-9; 403-10

SASB indicator: EM-MM-320.a1

Potential impacts from mining activities: industrial accidents, worker injuries, long-term health impacts, fatal and life-disabling accidents

Potential risks to the Company: delayed production, loss of social acceptance

OUR PERFORMANCE

In line with our commitment to protect the safety of workers, each year we set annual goals and track performance of lost time injuries and injury severity frequencies at each operation. During 2023, we achieved the second lowest lost time injury frequency (LTIF) rate (0.69) and the lowest lost time injury severity (LTIS) rate (40) in the Company's history, surpassing our 2023 goals (an LTIF rate of 0.90 or less, and an LTIS rate of 525 or less). The most common lost time incidents include falls from heights, rock falls, and vehicle impact on a person. We had zero fatalities across our operations in 2023.

Key occupational health risks associated with our operations include pulmonary disease (e.g., cancer and silicosis), metals exposure, hearing loss, and musculoskeletal conditions. To minimize risks to our workforce, our operations have industrial health programs to identify, manage, and minimize workplace exposures. These include monitoring and management programs for noise, dust, and air contaminants.

During 2023, our primary focus was the integration of the Acquired Mines and aligning our health and safety approach. Certain processes at the Acquired Mines, such as application of the TSM Safety and Health Protocol and centralized reporting of high potential incidents (HPIs), facilitated the integration. Notably, Pan American Silver standardized and centralized HPI tracking and reporting at the corporate level.

Over the course of 2023, we provided 1,297,531 training hours to our workforce.

Our operational health and safety management system applies to both employees and contractors, who must receive health and safety induction training before conducting work at our sites.⁽¹⁷⁾ For infrastructure projects, we only grant contracts to companies who can demonstrate high health and safety standards, and our site safety teams communicate, monitor, and verify contractor performance.

Each of our operations continues to proactively explore how technological innovations can help keep workers and workplaces safe and improve our health and safety performance. In 2023, the Timmins operation was awarded the Canadian Institute of Mining, Metallurgy and Petroleum's John T. Ryan Technology Award for developing a "jumbo" drill interlock that employs infrared sensors and stops drill rotation when a worker enters a "no-go zone", preventing potential entanglement. The system is also being introduced at La Colorada. Additionally, the Company continued to develop rock fall reporting and prevention programs and has micro-seismic monitoring and controls in place at Timmins, Minera Florida and Jacobina.

Doing Safety Differently

Pan American believes that the best way to avoid serious incidents is to increase safety awareness and to promote an evolved safety culture. During 2023, we expanded our focus on improving our safety culture through embarking on the development of a "Doing Safety Differently"

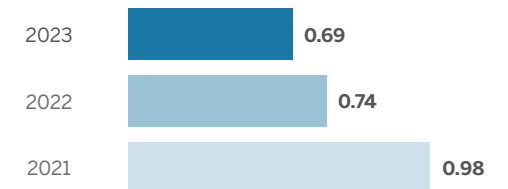
program. We began adopting protocols and implementing training that attempts to avoid focussing on individual blame for safety incidents, and instead to utilize an approach in which workers are part of the solution, communication and continued learning are emphasized, and safety performance is measured through leading indicators. We are in the early stages of this program, and we continue to emphasize transparent and constructive conversations on safety with our workers. We hold monthly calls with operations to review, learn and improve workplace conditions from HPIs events. In 2023, we also conducted an Operational Summit with senior operational leaders across the Company that focused on developing future safety strategies.

We continued to develop our new Critical Risk Management Program. The purpose of the program is to identify hazards that create potential for serious injuries and fatalities and ensure that controls are in place to eliminate or mitigate the risk of each hazard. In 2024, we are planning to introduce critical risk management software at two operations that will facilitate verification of critical controls. Every Pan American Silver employee has the right to refuse unsafe work and all workers can raise their safety-related concerns through our employee feedback mechanism, PAAS Listens.

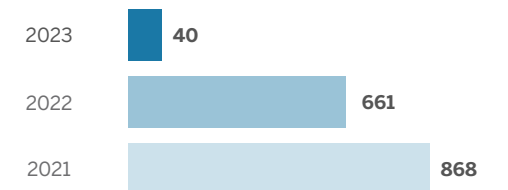
⁽¹⁷⁾ All temporary workers and visitors at a site are made aware of safety procedures and required to undergo appropriate safety training.

Safety Performance⁽¹⁾

LOST TIME INJURY FREQUENCY (LTIF)⁽²⁾



LOST TIME INJURY SEVERITY (LTIS)⁽³⁾



⁽¹⁾ Data includes employees and contractors at operating mines and active development and exploration projects.
⁽²⁾ LTIF is calculated as the number of lost time injuries, including fatalities, in the exposure period multiplied by one million hours and divided by the total number of hours worked in that period.
⁽³⁾ LTIS is calculated as the number of workdays lost due to lost time injuries multiplied by one million and divided by the total exposure hours. We count 6,000 lost workdays in the event of a fatal accident.

Health & Safety Training

Type of Training	Hours
General Safety	883,387
Mining Induction	291,509
Geotechnical	11,049
Formal Safety Meetings	72,101
Mine Rescue	39,485
Total⁽⁴⁾	1,297,531

⁽¹⁾ Includes training of employees and contractors at operating mines and active development and exploration projects.

In line with our continuous efforts to promote safety awareness, several of our operations have implemented behaviour-based safety programs. These include:

- The “Good Catches” program at Timmins, which encourages employees to flag all potential safety issues.
- The Red Card safety system, adopted at La Colorada and Dolores, which empowers workers to raise concerns regarding unsafe conditions, and to refuse unsafe work. As part of the system, workers can give a “Red Card” to their supervisor, without fear of retribution, signalling their concern, and triggering an investigation.
- A behaviour-based program at our Peru operations that encourages workers to take a more active role in their own safety by supporting them to make safe choices. The program focuses on visible leadership, risk management, and safe production, with the goal of contributing to a more safety-conscious workplace.

Mine Rescue and Emergency Response

Pan American Silver is continuously improving its processes for mine rescue emergency response, which was listed as one of the top five most important topics in our COI survey. All Pan American Silver operations have a mine rescue team. Our Mine Rescue Manual, based on Ontario’s industry leading mine rescue requirements, has been rolled out across our Latin American operations. As part of this process, in September 2023, we conducted a mine rescue training event in Guatemala, which included participation from our mine rescue teams from six sites located in Canada, Chile, Guatemala,

and Mexico. Over the course of three days, 58 mine rescue team members shared their knowledge of and strategies for working together to identify best practices, and carrying out several practice exercises. The event covered various mine rescue topics, including gases in mining, usage of breathing equipment, firefighting, and vertical rescue.

During the year, we continued to develop various aspects of our mine rescue and emergency response, including a company-wide review of underground refuge station capacity, while also implementing plans to ensure full coverage. Finally, we increased the number of emergency simulations run at our operations, and reviewed tag in-out procedures.

Cyanide Management

Several of our operations use sodium cyanide for the extraction of precious metals, given its unique selectivity, efficiency, and manageability of risk to health, hygiene, and the environment. Given cyanide’s toxicity, we use the International Cyanide Management Code (ICMC) to help guide our safe supply and use of sodium cyanide, particularly considering facility design, reagent handling systems, and operating practices. Some of the Acquired Mines—Minera Florida, Jacobina and El Peñon—are certified under the ICMC, and Cerro Moro is in the final stage of certification.



TIMMINS WINS REGIONAL MINE RESCUE COMPETITION

Building on its success from 2022, Pan American Silver’s Timmins mine rescue team continued to compete in several mine rescue competitions throughout 2023. The team won the Timmins Regional Mine Rescue Competition and went on to win the Ontario Provincial Mine Rescue Competition, ranking first out of eight teams. The competitions test teams’ skills across a variety of areas including firefighting, first aid response, use of emergency equipment, and decision-making under conditions of stress.



RELATIONSHIPS WITH COMMUNITIES AND INDIGENOUS PEOPLES

Pan American Silver is committed to fostering positive long-term relationships with local communities and Indigenous Peoples in the areas where we operate, recognizing that our business success depends on the strength of those relationships.

We believe that collaborating with host communities through open and honest engagement is the basis for building social acceptance in the countries where we operate. We establish participatory processes and employ social performance tools to identify and manage our actual and perceived impacts, and to evaluate the effectiveness of our performance. Maintaining open dialogue and engagement with local communities and Indigenous Peoples is crucial to proactively manage social risk. By doing so, we can better understand their concerns and interests and effectively address and support them in an open and timely manner. Pan American Silver has established five pillars that are core to our work with communities: Local Economic Development; Health; Education; Investment in Community Services; and Local Employment and Procurement development.

Read more about our management approach to relationships with communities and indigenous peoples on our [website](#), including details on our policies, standards, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

ZERO

| new social disputes

RESOLVED

91%

| of all medium and high-risk grievances within the target timeframe of 60 days

ANALYST CENTRE

GRI indicators: 3-3; 409-1; 411-1; 413-1; 413-2; G4 MM5; G4 MM6; G4 MM7; G4 MM8; G4 MM9

SASB indicators: EM-MM-210b.1; EMM-MM-210a.3; EM-MM-120a.1

Potential impacts from mining activities: local employment and procurement, community development, community services, economic growth, economic dependence, income inequality, population influx, changes to social dynamics, pressures on local infrastructure, housing and services, harm to vulnerable groups

Potential risks to the Company: community opposition and conflict resulting in project or production delays, loss of or failure to obtain permits, loss of social acceptance, political or social instability, new or amended regulations affecting acquisition or use of land

OUR PERFORMANCE

The integration of the Acquired Sites was an important focus in 2023. We began by conducting gap analyses at the Acquired Sites to understand how their COI engagement processes aligned with Pan American Silver’s social policies and procedures. The analysis identified opportunities for increased alignment with Pan American Silver’s broader community socio-economic development approach. We began training and strengthening the capacity of the social sustainability teams across all the Acquired Mines. In addition, we continued to enhance our social management systems and tools to better inform our risk processes and improve our ability to manage emerging and existing issues.

We have key mechanisms and processes for engaging with COIs, identifying issues and concerns, and understanding socio-economic contexts. One of these is our annual COI survey. In 2023, we successfully rolled out our COI survey across all sites, including the Acquired Mines, which helped us to engage with and understand the priorities and concerns of new COIs. Further details on the results of the survey are available under [Materiality—COI Survey](#).

At Cerro Moro in Argentina, we conducted a baseline study that began at the end of 2023. At Manantial Espejo in Argentina, which entered care and maintenance in January 2023, we are actively working with the local community to implement a social closure plan. We continue to be actively involved in early closure planning at Dolores in Mexico, where we are advancing the early phase of participatory social planning and implementing a legacy local economic

development program. Further details on these efforts are included under [Mine Closure](#).

We track our social performance against our Sustainability Performance Indicators (SPIs), and in 2023, we added one new social SPI to better track the performance of our community development projects. Details are discussed under [Socio-Economic Contributions](#). Overall, we track nine social SPIs monthly, quarterly, and annually.

We conduct biennial sustainability audits to assess the effectiveness of our social sustainability systems and programs. These audits help identify opportunities for improvement, and corrective actions and programs are developed to address findings. In 2023, we conducted sustainability audits at Shahuindo, La Arena, Huaron, and San Vicente. Further details about these audits are available under [ESG Audits and Performance Monitoring](#).

We also assess our performance against the TSM Indigenous and Community Relationships Protocol. In 2023, all operations received level A or above for this protocol, except Dolores and La Colorada, where level B was achieved. During the year, we conducted external verifications at three facilities: La Arena, Shahuindo, and Dolores. The remaining sites completed their annual self-assessments. Further details of these verifications are available under [Toward Sustainable Mining Performance](#).

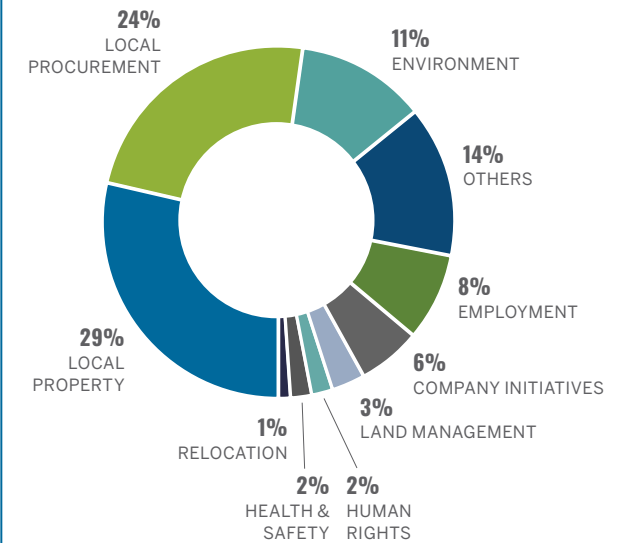
Community Response Mechanisms

Our community response mechanisms enable community members to engage with our operations, and to express any concerns or grievances. These mechanisms are an important source of input for understanding how we perform in our engagement with communities and Indigenous Peoples and help us identify our actual and perceived impacts. Additional details on our community response mechanisms are included under [Mechanisms for Seeking Advice and Raising Concerns](#).

In 2023, we received 199 grievances (out of which 8% were high-risk) and 2,322 requests across all our operations. All significant grievances were resolved on time. Our response mechanisms track requests and grievances. The majority of grievances (29%) received fell into the category of local property. Many of these relate to blasting and dust at the Jacobina mine, which is located near the community. 24% of grievances fell into the category of local procurement, mostly related to a perceived lack of local procurement opportunities.

By the end of 2023, we had closed 91% of high- and medium-risk grievances within the target timeframe of 90 days, meeting our goal of a 90% resolution rate. Our teams continue to work with the relevant individuals and communities to resolve the remaining grievances. In 2023, our average time to resolve grievances was 39 days. At the same time, 80% of all requests and grievances received an acknowledgement of receipt within the target timeframe of 15 days.

Number of Grievances by Category in 2023



Grievances and Requests Categories

Category	Description
Company Initiative	Requests for donations, support, social investment, employment, and business opportunities.
Cultural Heritage	Concerns related to potential damage to traditional and/or sacred areas or objects important to the local population, including Indigenous groups.
Economic Displacement	Allegations of damage to the main economic activities of communities or populations caused by a relocation from their area of origin due to mining activities.
Employment	Concerns related to work environment, contract and any other issue that involves an employee or contractor.
Local Procurement	Allegations of breach of a local employment commitment/contract. Issues related to delay(s) in payment(s) to contractors/suppliers for goods/services provided to the mine (or to a related contractor or supplier).
Environment	Concerns related to water quality and quantity, air quality, noise, gases, and/or solid and liquid waste. Environmental incidents, including spills or releases of liquids, gases, and/or solid waste into water, air or onto land.
Health & Safety	Concerns related to the health and safety of local community members or their assets.
Human Rights	Allegations related to breaches of our Human Rights Policy or Code of Ethical Conduct. Allegations related to discrimination or harassment.
Local Property	Allegations of property damage resulting from the activities of the mine or its contractors.
Land Management	Concerns regarding potential breach of commitments resulting from the purchase or sale of land or commitments not fulfilled with the former owners.
Land Rights	Misuse of land rights (permits) held by the mine.
Relocation	Issues arising from the relocation of communities or populations due to mining activities.
Other	Any matter not related to a specific category.

Social Disputes

We employ social risk tools and prioritize engagement and participatory processes to identify risks early enough so they can be managed before social disputes arise. When disputes arise, our objective is to work with complainants to resolve them peacefully.

Significant social disputes are grievances that cannot be resolved jointly within a reasonable time frame and/or require substantial financial resources to resolve. When significant disputes arise, they are escalated to site-level or country-level senior management to oversee the resolution process. During the year, we had no new significant social disputes, but we continued to address two ongoing disputes at La Colorada in Mexico and Escobal in Guatemala.

In 2023, we recorded 26 community incidents, mostly at Shahuindo and Dolores. These incidents were related to demands for increased local procurement, direct employment, and company initiatives such as infrastructure development. A few incidents relating to local property were reported at other sites. All incidents were resolved collaboratively with the parties involved.

La Colorada Relocation Process

In 2015, we began an expansion at La Colorada that included the building of new camp facilities and re-accommodation of workers and families who occupied substandard housing on Pan American Silver property. A group of families opposed the resettlement, filed a claim with the Mexican Agrarian Court, and engaged with the United Nations Office of the High Commissioner for Human Rights

(OHCHR) in Mexico City. We have been proactively working with the OHCHR since 2020, and in October 2021, we began a relocation negotiation process under the OHCHR's oversight and aligned with international standards and best practices, including the International Finance Corporation (IFC) Performance Standard 5, Land Acquisition and Resettlement. In total, 31 individual families opted to receive either a financial settlement or a physical re-settlement.

As of March 2024, the relocation process was completed, with most families having relocated to residences inside and outside the La Colorada Property's area of influence, including, in some cases, to newly built residences. A number of individuals declined to participate in the relocation process, and they continue to pursue legal avenues for compensation.

Escobal Consultation Process

Prior to our acquisition of Escobal in 2019, the Constitutional Court of Guatemala suspended the Escobal mining license due to the Ministry of Energy and Mines (MEM) omission to conduct the consultation with the Xinka Indigenous People residing in Escobal's area of influence. The Escobal operation remained on care and maintenance throughout 2023, while the government of Guatemala conducted the court-mandated ILO 169 consultation process.⁽¹⁸⁾ Pan American respects Indigenous Peoples' right to consultation, and we are participating in good faith and in full respect of the terms of the Constitutional Court ruling, the ILO 169 consultation process, and our [Global Human Rights Policy](#). Further details on this case are available in the [Escobal Mine section](#) of this report.

From time to time since July 2017, protesters near the town of Casillas have blocked deliveries, primarily related to the mine's care and maintenance, from the highway that connects Guatemala City to San Rafael Las Flores and the Escobal mine. A second roadblock started in 2018 near the town of Mataquescuintla. In 2023, we engaged with community leaders, government agencies, and NGOs to develop a productive dialogue aimed at addressing concerns and resolving this dispute.

Dust Management

Our mining activities generate dust through blasting, crushing, and driving on gravel roadways. Dust remains a key concern for many of our local communities since it can affect air quality and human health when not properly managed. In 2023, dust from transport trucks travelling on gravel roadways continued to be a common grievance for communities.

To manage dust, all our operations employ dust suppression systems and methods to control dust sources from truck transport on gravel roadways. We also engage with affected communities and local authorities to implement and improve mitigation measures, such as paving and other dust suppression measures. Additional information on non-GHG air emissions can be found in the [2023 Sustainability Performance Data Book](#).

⁽¹⁸⁾ ILO 169 includes a mandate for governments to consult with Indigenous Peoples surrounding mining operations prior to granting mining rights, permits, or approvals.



LA COLORADA RELOCATION PROCESS

In 2021, Pan American Silver undertook a relocation process at the La Colorada mine in Mexico. During this process, we continuously engaged with representatives of affected families to better understand their unique concerns and interests. This enabled us to develop compensation packages that could provide affected families with long-term sustainable outcomes.

Physical relocation included the construction of houses and infrastructure for those families who opted for newly built residences. With sustainability in mind, we equipped each new house with a solar water boiler and an underground water tank for climate resilience.

We also developed livelihood restoration programs throughout this process. These programs focused on subsistence agriculture, vocational training, and entrepreneurship, and provide psychological support and scholarships for affected community members.

In 2023, the United Nations Human Rights office invited us to present the relocation processes and outcomes details.

Further details on this case are available in the [Social Disputes section](#) of this report.

Indigenous Rights and Relationships with Indigenous Peoples

Our Timmins operations in Canada and Escobal in Guatemala are located near Indigenous communities. We acknowledge and respect the rights, cultures, heritage, and interests of Indigenous Peoples and we work to build and maintain positive relationships with them. Our [Social Sustainability Policy](#) guides how we recognize and respect the rights, cultural values, beliefs, knowledge, and traditions of Indigenous Peoples present in the areas where we operate. In alignment with MAC's TSM Indigenous and Community Relationships Protocol, and as outlined in our Social Sustainability Policy, we aim to achieve free, prior, and informed consent (FPIC) for impacts on rights of directly affected Indigenous Peoples. In 2023, we had no new incidents involving violations of the rights of Indigenous Peoples.

We continuously engage with our Indigenous partners to identify opportunities to develop positive and mutually beneficial relationships. At Timmins, we engage with Indigenous Peoples through multiple channels, including site tours, job fairs, community visits, and educational events. We also have an Indigenous Coordinator who is selected and employed by the Wabun Tribal Council, a regional chiefs' council, and is responsible for sharing Company information with two of the four Indigenous Peoples Communities near the mine. We have impact benefit agreements (IBA) with the Mattagami, Flying Post, Matachewan, and Wahgoshig First Nations.

The IBAs guide our engagement and efforts to contribute to the socio-economic development of these communities by establishing frameworks for continued consultation on mine operations. They

also include provisions regarding education and training, employment, business and contracting opportunities, environmental care, and economic benefits. We provide ongoing support for our Indigenous partners' community projects.

Further details on our engagement with Indigenous Peoples in Guatemala are available in the [Escobal Mine section](#) of this report.

Artisanal and Small-Scale Mining

Local communities sometimes rely on artisanal or informal mining as a key source of income. In the contexts where such mines operate, local governments often lack the capacity to regulate artisanal mining activities and working conditions. Artisanal, or informal, mining is associated with a number of negative impacts, including environmental degradation, forced labour, human trafficking and funding of conflict. These activities are largely unregulated and work conditions are often unsafe and present health risks to the artisanal miners and local communities. There is also the potential for conflict between Artisanal and Small-Scale Miners (ASM) and anti-mining groups. We are reviewing sites where ASM could be a potential risk and identifying opportunities to address these issues. For instance, informal miners are active on land adjacent to the Shahuindo operation. These miners, represented by the Asociación de Minerales Artesanales San Blas (AMASBA), are in dialogue with the Peruvian government to formalize their operations. We support formalization and are collaborating with the government, local authorities and AMASBA in this regard. At Jacobina, we are in the process of identifying potential risks related to the presence of sporadic ASM.

ESCOBAL MINE

The Escobal mine, located in San Rafael Las Flores, near Guatemala City, has an industrial footprint of less than one square kilometer. The deposit, accessed through the underground mine, can produce silver, zinc, lead, and gold polymetallic concentrates through a selective flotation process. The mine and process were designed to minimize energy, water consumption, waste generation, and environmental disturbance through a paste backfill, filtered tailings, and a filtered tailings storage facility.

The mine operated from 2014 to 2017, prior to our acquisition in 2019. During that time, it substantially contributed to the national and local economy, providing over 1,500 direct jobs and thousands of indirect jobs through spending with local suppliers. It also contributed to Guatemala's economy through tax contributions, and royalties paid to landowners and local and national governments.

Escobal's mining license was suspended in 2017 to address a Constitutional Court ruling that the Guatemalan Ministry of Energy and Mines (MEM) must conduct an ILO 169 consultation with the Xinka Indigenous People within the mine's area of influence, among other requirements. The Escobal operation remained on care and maintenance throughout 2023 while the MEM advanced the consultation process.

Update on the ILO 169 Consultation Process

Pan American Silver is one of the three key participants in the ILO 169 consultation process, which started in May 2021, and has been led by the MEM. Phase I (pre-consultation) successfully concluded in October 2022. Phase II (consultation)

advanced during 2023 when relevant institutions, including Pan American Silver, presented information about the mining operations and impacts from the Escobal mine. According to the MEM, the information sharing process was completed in 2023. All pertinent information was shared by the Ministry of Environment and Natural Resources (MARN), the Ministry of Culture and Sports, the Ministry of Health and Social Assistance, the MEM, the National Coordinator for Disaster Reduction and Pan American Silver.

Nine plenary consultation meetings have been held during Phase II, as well as 19 intermediate meetings between the Xinka Parliament (PAPXIGUA), who represent the Xinka Indigenous People within the mine's area of influence, their advisors, the MEM, Pan American Silver, and other institutions. Phase II also included nine field activities, including five visits to Escobal by representatives of the PAPXIGUA, their advisors, and the Guatemalan government, to verify the information provided and address questions.

During the eighth plenary consultation meeting, relevant ministries and Pan American Silver presented proposals for possible agreements to the PAPXIGUA and their advisors.

We continue participating actively in the ILO 169 consultation process and remain committed to an open, respectful, and inclusive dialogue. We continue our care and maintenance activities, and we comply with our commitments to the Guatemalan government, conducting all our activities in good faith and in full compliance with the terms of the

Constitutional Court ruling. Currently, there is no date for a potential restart of operations at Escobal.

The MEM provides updates on this process through its official [website](#).

2023 HIGHLIGHTS AND PERFORMANCE

Social and Communities

We maintained our community engagement activities defined under our Environmental Management Plan, which was approved by the MARN.

We conducted feedback surveys with over 1,000 employees, contractors, and local community members. Surveys were related to safety leadership, our internal communications program, and general perceptions about Escobal after visiting. The surveys revealed that employment opportunities are perceived to be the most significant benefit of the mine, while the lack of employment for the local population is perceived to be the greatest concern. Feedback from visitors suggests a positive perception of our practices and programs. We also met with key local stakeholders and engaged regularly with national and local institutions.

In line with our other social sustainability commitments and upon request from the San Rafael Las Flores Health Center, we provided support for four medical field visits. Over 200 consultations were offered to men, women, and children from the San Rafael Las Flores communities.

We continued our efforts to strengthen local

economic development through skill training conducted by the Technical Institute for Training and Productivity. We also continued our partnership with FundaSistemas, a private organization focused on business development, to deliver our local business development program. In 2023, the program delivered personalized counseling for 14 local businesses and 12 workshops for 60 participants.

Our mine visits program drew over 3,800 visitors during the year, including middle-school and high-school students, allowing over 290 groups to learn about our facilities, practices, and environmental care activities.

To support and facilitate open dialogue with the communities near Escobal, our Public Attention Office (OAP) continued working in San Rafael Las Flores attending in-person, telephone, and e-mail queries. In 2023, there were 454 interactions recorded at the OAP, including 315 information queries (mostly related to employment opportunities), 130 support requests, and nine grievances. We responded to 89% of the queries, requests, and grievances in under 15 days.

Environment

We have established extensive management measures that include monitoring of air and water quality, noise, biodiversity, and wastewater treatment systems in order to comply with our environmental permits and our over 330 commitments to the MARN. Although not operating, we continued to align with TSM. For the third

consecutive year, Escobal's electricity supply came from 100% clean and renewable sources.

As part of our forest management program, we grew different species for our on-site revegetation efforts in our forest nursery, while also donating over 32,000 native trees to communities around the mine. This donation equals an area of over 29 hectares. Further details are available in the Escobal Forestry Management Program Case Study.

Over 124 hectares, or 44.3% of Escobal's controlled property, serve as habitat for wildlife, and have been continuously monitored since 2009. Through our reforestation activities, preservation of the existing natural forest, and our renewable energy sourcing, Escobal was able to offset its carbon footprint and is currently carbon neutral.

We also continued participating in the technical committee of the Los Esclavos River watershed and Pan American Silver Guatemala signed an agreement with the Foundation for the Improvement of Engineering, to continue our sponsorship on participatory monitoring initiatives in the municipality of San Rafael Las Flores.

Human Rights and Security

Our private security providers completed over 3,300 hours of training as part of our commitment to the VPSHR. In 2023, we did not receive any human rights complaints related to our private security personnel or our security activities.

Inclusion and Diversity

The Ministry of Labor recognized our inclusive labor practices, which include hiring people over 60 years

of age and people with disabilities, and recognized us for the completion of our training program "Awareness of Rights and Labor Inclusion of People with Disabilities."

Other Programs

We continued our partnership with the United Nations Development Program's (UNDP) multi-stakeholder innovation platform for sustainable development in San Rafael Las Flores. As part of implementing this platform, UNDP completed a multidimensional analysis of development in the municipality, as well as participatory dialogue processes. The final document in Spanish was published by UNDP and can be downloaded through this [link](#).

We also continued working with the compliance program of the Guatemalan Chamber of Industry, promoting a culture of compliance and zero tolerance to corruption. In 2023, we obtained [GuateIntegra Anti-Corruption Certification](#), based on the ISO 37001 anti-bribery standard.

With the support of the corporate compliance team, we also conducted training for 95 employees on compliance matters related to Pan American Silver's Global Code of Ethical Conduct, Anti-Corruption Policy, and Gift and Hospitality Guidelines.

Per our commitments to the local chapter of the UNGC initiative, we submitted our second annual [Communication on Progress report](#) demonstrating our commitment to integrating the 10 UNGC Principles – which cover areas of human rights, labor, environment, and anti-corruption – into our business strategy and practices.



ESCOBAL FORESTRY MANAGEMENT PROGRAM

Since 2011, Escobal has dedicated resources to its [forestry management program](#). This program focuses on the recovery of forest areas, contributing to the preservation of local biodiversity, and has included the reforestation of 68 hectares and the donation of over 158,000 trees for planting in neighbouring communities. In 2023, Escobal planted two hectares with native species.

The program focuses on native species, including oak species with local and international protection status. Escobal has also developed a custom process to increase the germination success rate of local oak species, increasing success from 10% in the natural environment to 60% in its nursery. This project won first place in the Guatemalan Chamber of Industry's 2023 Industrial Award in the Environment category. This marked the third consecutive year Escobal was recognized for its environmental initiatives.



SOCIO-ECONOMIC CONTRIBUTIONS

Pan American Silver invests in local communities near our operations with the goal of promoting sustainable development.

We establish participatory processes to identify socio-economic development programs and investments that can provide long-term benefits beyond the life of our mines. Our community investment programs are designed in close partnership with local communities and guided by collaborative processes. These initiatives include comprehensive baseline studies, surveys, and formal consultation processes. Our programs are directed towards the priorities identified by local communities, within the Pan American Silver's pillars and standards. We closely monitor the effectiveness of our programs and provide space for adjustments and improvements based on the needs and priorities of each community. We also create economic benefits in host countries and communities through wages, local procurement, education, training, taxes and royalties paid to governments, and infrastructural improvements.

Read more about our management approach to socio-economic contributions on our [website](#), including details on our policies, standards, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

87%

of the total Economic Value Distributed remains in Host Countries

99.5%

of our employees were local and 42% of goods and services were provided by local or regional suppliers

\$14.7 MILLION

in Community Investments

ANALYST CENTRE

GRI indicators: 3-3; 201-1; 202-2; 203-2; 204-1; 413-1

SASB indicator: EM-MM-210b.1

Potential impacts from mining activities: local employment and procurement, investment in community services, socio-economic development opportunities, taxes and royalties paid to governments, economic dependence, wealth disparity within local communities

Potential risks to the Company: community opposition resulting in project or production delays, loss of or failure to obtain permits, loss of social acceptance

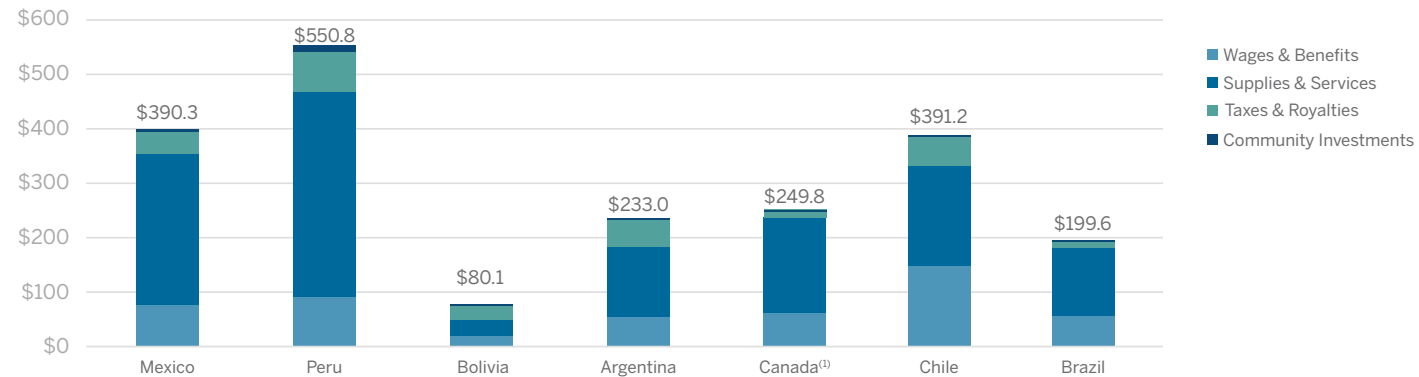
OUR PERFORMANCE

Economic Value Distributed

Through its core business activities, Pan American Silver directly and indirectly generates economic value for COIs at the international, national, regional, and community levels. Our contributions include wages paid to employees, community investments, the procurement of local products and services, and tax and royalty payments to governments. The economic value that the Company retains allows us to make future investments in expansion and growth projects, which also contribute to regional economies.

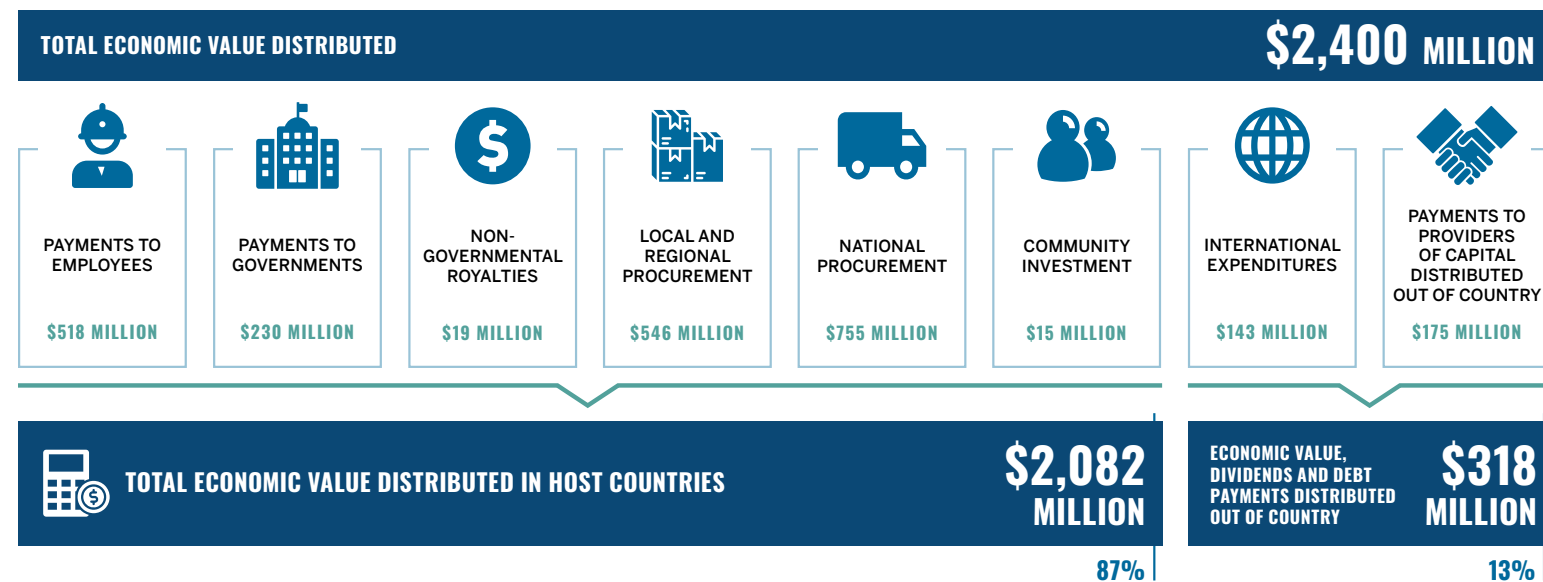
Our community investments provide social and economic benefits to our COIs. We proactively work with communities to develop projects that are sustainable and meet community needs and interests, while also aligning with our business objectives. Through these programs, we seek to support vulnerable groups and make efforts to promote diversity and inclusion. We employ SPIs to track community investment spending at each operation to confirm that allocated funding is reaching the communities within a reasonable time, and budget performance is audited to identify the cause of any delays. In 2023, we proactively began to align the Acquired Sites with Pan American Silver's local economic development approach.

Operating Mines Spending by Country

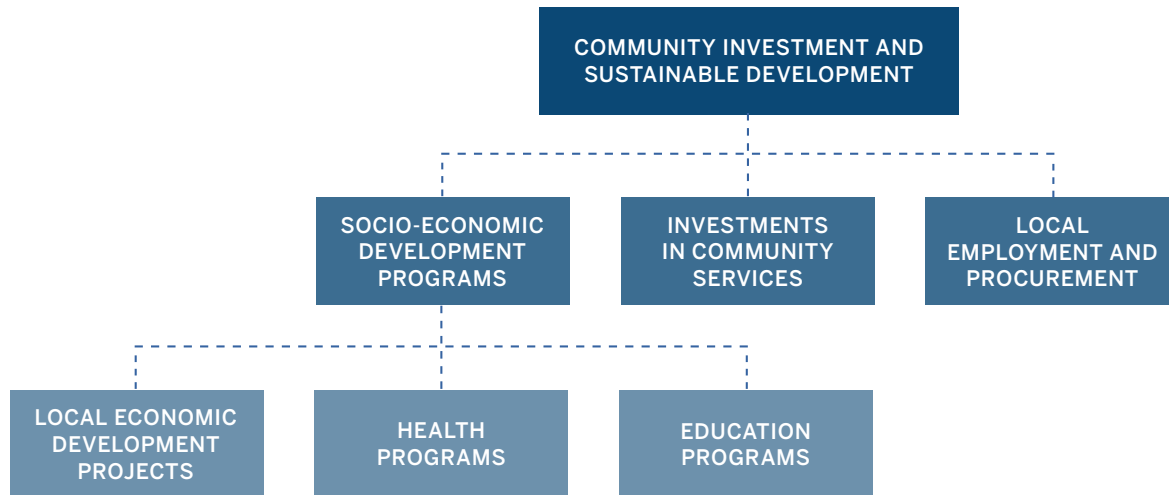


(1) Includes expenditures from the Timmins operations only. Corporate expenditures are not included.

Total Economic Value Distributed



Community Investment and Sustainable Development



Socio-economic development programs

Our socio-economic development programs include local economic development projects, and health and education programs. Through these initiatives we seek to support local communities and vulnerable groups, and make efforts to promote diversity and inclusion.

Our Community Development Initiatives (CDI) Toolkit guides the development and implementation of our socio-economic development programs, which are intended to:

- Address community needs and interests.
- Be developed and implemented with community participation.
- Be appropriate to the local social context.
- Consider mine closure.
- Incorporate key performance indicators.

- Align with our prioritized SDGs.
- Align with our Social Sustainability and Global Human Rights policies.

To better assess the impact of our programs, in 2023, we adopted a new SPI designed to specifically track the performance of our community development programs—the CDI Performance Index.⁽¹⁹⁾ The new SPI is aligned with the objectives of our CDI toolkit.

Local Economic Development Projects

Our economic development projects are designed to create sustainable economic opportunities by supporting local families or groups with alternative incomes to mining, such as animal husbandry, agriculture, tourism, or manufacturing. These initiatives are developed together with community leaders and representatives through comprehensive

baseline studies, surveys, and formal consultation processes. Programs are designed to be self-sustaining beyond our involvement.

Many of our local economic development projects are aimed at developing technical skills to increase local food production and to contribute to the self-sufficiency of small-scale food producers and family farmers. Where possible, we track the impact of key projects against our CDI Performance Index. We met our 2023 goal by achieving a CDI performance in the range of 75% to 93% in three key projects:

- Strengthening the avocado production chain project, Peru—This program aims to promote local profitability and sustainability by strengthening the collective capacity of 500 avocado producers in the Condebamba Valley. In 2023, we enabled the addition of 155 new hectares of avocado production by investing in irrigation methods for optimal growth. We also trained 250 producers, created 200 jobs, and coordinated the export of 42.2 tons of avocados.
- Llama breeding program, Bolivia—This program began in 2016 and aims to improve the livelihoods of families near San Vicente by promoting llama breeding, which is a principal economic activity in the area. In 2023, we built six animal sheds, and secured 45 hectares to grow native grass adapted to local soil and climate conditions.
- Ranching program, Mexico—This skills development program focuses on technical ranching skills and capability building. In 2023, we provided approximately 260 hours of training to 47 beneficiaries.

Health Programs

Our health programs include initiatives and efforts to boost local healthcare services, emphasizing nutrition and vulnerable populations. Overall, our projects aim to broaden the reach and improve the quality of healthcare in the regions near our operations. Some of our 2023 activities included:

- Developing comprehensive health campaigns near Shahuindo focusing on nearby populated centres and benefitting 1,152 people.
- Supporting programs to improve access to health and to reduce anemia in communities near La Arena.
- Running a public health initiative at El Peñon to provide breast cancer screening for the population residing in Taltal, reaching more than 140 women.
- Carrying out awareness campaigns for breast cancer, diabetes, addiction prevention, and suicide prevention in communities near Cerro Moro.

Education Programs

Education helps prepare individuals for life and is key to professional success. Our programs are designed to facilitate access to and the quality of education for members of local communities. For example, through our “EducAction that Transforms” program in Peru, our sites—Shahuindo, La Arena, and Huaron—make direct investments that

(19) The CDI Performance Index is a tool for monitoring and evaluating the effectiveness of economic development projects. The index is measured from 0 to 100% and includes variables such as budget execution, progress of key performance indicators, and beneficiary participation.



SOCIO-ECONOMIC DEVELOPMENT PROGRAMS AT MINERA FLORIDA AND JACOBINA

Throughout 2023, we continued to implement projects that contribute to the sustainable development of communities near our operations by promoting economic activities not linked to mining. Examples include Minera Florida's Alhué Tourism Sector Strengthening Program and Jacobina mine's composting plant.

The objective of our Alhué Tourism Sector Strengthening Program is to diversify the economic sector of Alhué, Chile by developing tourism, building the capacity of local beekeepers, and enhancing biodiversity. Delivered through partnerships with local, regional, and national government services and departments, in 2023, the program provided women-focused tourism skills training, benefiting nine tourism entrepreneurs, and supported local tourist events and attractions, including the promotion of local honey.

At Jacobina, in Brazil, we continue to support the Composting Plant project. The plant, which started in 2017 as a partnership between the Jacobina Recycling Cooperative and the mine, recycles food and wood waste to produce organic compost. More than 40 tons of compost have been produced to-date, preventing, on average, 35 tons of organic waste from being discarded every month. The program also generates local employment by supporting 40 jobs in the local community.

contribute to reducing gaps in education. The program focuses on three pillars: capacity building, educational infrastructure and digitalization and education tools. This is an ongoing project, and some of the program's 2023 activities included providing training for 170 teachers near Shahuindo, and 25 teachers near La Arena.

Investments in Community Services

While some of our operations are located near communities with basic infrastructure and public services, others are in more remote, sparsely populated regions with little or aging infrastructure or services. Although states are responsible for providing water and sanitation services, in some of our operations, we support host communities with investments to upgrade local infrastructure and social services to facilitate their access to sufficient, safe, and affordable water for personal and domestic use.

Important 2023 investments included:

- Development of two Emergency Drinking Water Systems in Condebamba and Malcas, near Shahuindo, benefitting over 4,100 inhabitants.
- Building of a Drinking Water System in the town of La Arena, which will supply water to 22 homes in the area.
- Improving access to clean water in Jaboticaba and Itapicuru towns near Jacobina by installing microsystems in residents' homes and constructing small reservoirs to improve water capture. We have also been working with residents' associations to improve water treatment in these communities.

Local Employment and Procurement

We continue to receive requests from community members for more employment opportunities at our operations that provided meaningful employment with improved compensation and benefits. Pan American Silver prioritizes local hiring, and our workforce at each operation is primarily drawn from members of local communities near our operations. In 2023, 99.5% of our employees were local⁽²⁰⁾ as were 91.2% of senior managers.

As we are unable to meet all demands for direct employment at our operations, we also emphasize developing local procurement opportunities, which create indirect employment for community members and local businesses. In 2023, 42% of goods and services (\$558.4 million) were provided by local or regional suppliers. We also encourage our larger contractors and suppliers to hire or use qualified local businesses. Concurrently, we collaborate with local suppliers to help them expand their customer base and ensure long-term business sustainability beyond our mine activities. Our local procurement approach strengthens the relationships between our sites and local suppliers, helping us build a more resilient supply chain, while also creating economic opportunities for individuals and small businesses.

Additionally, we implement programs to support community members in launching and/or sustaining small businesses that can provide our mines with goods and services. Our aim is to assist local businesses in meeting our business standards by providing them with guidance and resources.

(20) Permanent employees who are either born in or have the legal right to reside indefinitely in the same geographic region as the operation.



SECURITY PRACTICES

Pan American Silver is committed to protecting the safety and respecting the human rights of our workforce and local communities.

We work cross-functionally and in close collaboration with contract security providers and other stakeholders to support our daily security operations and incident management approach, in alignment with our policies and procedures relating to human rights. Our approach gives special consideration to vulnerable groups.

Read more about our management approach to security practices on our [website](#), including details on our policies, standards, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

100%

of security employees and contractors trained in human rights

ANALYST CENTRE

GRI indicator: 410-1

SASB indicators: EM-MM-210a.1; EM-MM-210a.3

Potential impacts from mining activities: impacts on human rights, including the rights of children, and civil and labour rights, impacts to vulnerable groups

Potential risks to the Company: loss of social acceptance, risks to assets and personnel, delayed production, corruption

OUR PERFORMANCE

We take our obligation to respect, protect, and promote human rights seriously. The Pan American Silver Security and Human Rights Standard, which is aligned with the VPSHRs and incorporates UNICEF Canada’s Child Rights and Security Checklist, as well as elements of the World Gold Council Conflict-Free Gold Standard, establishes performance requirements for all operations.

In 2023, we continued to formalize our approach to improve our teams’ ability to respond appropriately to incidents which could impact the human rights of those involved. All security incidents must be reported through a structured reporting process. Human rights considerations are part of our security incident reporting requirements, which increases awareness of the potential for security activities to contravene human rights. We also integrated the Acquired Sites within our security management processes, introducing our Security and Human Rights Standard, and translating it into Portuguese. Pan American Silver is a signatory to the VPSHRs, and we currently hold engaged member status. Although Yamana was not a signatory, its operations were broadly aligned with the principles.

We conduct regular training and annual assessments of our security practices against the requirements of our security and Human Rights Standard. In 2023, we completed performance reviews at all sites, including the Acquired Sites. All operations met or exceeded our standard’s requirements. In 2023, we worked with the Acquired Sites to implement the standard’s requirements, and

in 2024, we expect all our sites to be fully compliant with the standard. Also in 2024, we are planning an external VPSHR audit at Jacobina.

As part of ongoing risk assessment, we regularly consider our exposure to risk at all operations. In 2023, we noted an overall increase in security risks across the majority of the countries where we operate. In response, we have continued to reassess our security approach and to strengthen our processes. This has entailed expanding the scope of training to include a broader range of employees, including those located outside of operations, updating procedures, increasing physical and electronic security measures, and adopting new security technologies. On October 5, 2023, we experienced a mineral concentrate robbery at La Colorada. We temporarily suspended operations to protect the safety of our workforce and no personnel were injured during the event. Further details on the incident are available on our [website](#).

Pan American Silver applies aspects of the World Gold Council Conflict-Free Gold Standard at all operations and fully complies with the standard at operations located in conflict-affected regions. Both Dolores in Mexico and Jacobina in Brazil are identified as located in conflict-affected regions due to high levels of organized crime.⁽²¹⁾ The standard helps us identify and minimize the risk that our precious metals production could cause,

(21) As evaluated by the Heidelberg Conflict Barometer and our own quarterly Country Risk Reports.

contribute to, or support unlawful armed conflicts. We conducted external assurance of Dolores’ conformance with the Conflict-Free Gold Standard in 2023, and in 2024, we plan to conduct external assurance at both Dolores and Jacobina.

Stakeholder-Security Engagement

We engage with a range of stakeholders on issues related to security and human rights. Our security teams work with our social teams to help local communities understand how we manage our security activities, including our management of security providers.

Security and Human Rights Standard

RISK ASSESSMENT AND REGISTER

A standardized approach to identifying, evaluating, and mitigating risks and adverse impacts on human rights.

STAKEHOLDER ENGAGEMENT

Guidance on identifying and engaging with stakeholders on issues related to security and human rights.

SECURITY PROVIDER OVERSIGHT

Requirements for the selection, management, and compliance monitoring of security providers.

PUBLIC SECURITY ENGAGEMENT

Requirements for engaging and managing relationships with public security groups, with focus on managing potential human rights risks.

Formal engagement with communities is required as part of our compliance with the VPSHR and Company representatives meet both formally and informally with local authorities on a more regular basis. We also engage with host governments and industry through human rights working groups. In 2023, we did not receive any human rights complaints related to our private security personnel or our security activities.

We have limited engagement with public security forces, and any such engagement is led by Pan American Silver employees. We have an ongoing agreement with the Peruvian police, who have a dedicated presence at two sites. Our agreement with these police groups includes the requirement to respect human rights during any interaction. We also have a public police presence at Cerro Moro in Argentina.

Training of Security Contractors

We contract with private security providers to protect our operations. When interacting with community members at our sites, our dual priority is the safety and rights of community members and our employees.

Security providers must abide by Pan American Silver's codes and standards, which mandate that security personnel must receive human rights training before they are allowed on our sites. This training is delivered by contract security providers

and is repeated every four months. We regularly review training content for alignment with our security standard and our Global Human Rights Policy. In 2023, 100% of private security personnel and Pan American Silver security employees received human rights training. Additionally, 100% of our private security personnel received use of force training.

We also conduct due diligence on security contractor training. Every month, we review a sample of training records from security personnel, and every four months, we carry out a review to confirm that security providers continue to meet VPSHR requirements. We identify any instances of non-compliance, report these to the contractor, and provide a timeframe within which the issue must be rectified.

In addition to meeting VPSHR requirements, we are working towards requiring all security providers at Latin American operations to be members of the International Code of Conduct Association (ICoCA) for Security Providers. We have developed processes to support security providers in understanding the ICoCA membership requirements. Currently, security providers in Guatemala are ICoCA certified, and at the Dolores site in Mexico, they are registered members. Other security providers in Mexico, Bolivia, Peru, and Brazil are undergoing the application process.





HUMAN CAPITAL DEVELOPMENT

Pan American Silver strives to be a leading employer and to attract and retain the best talent by creating a collaborative work environment rooted in fairness and respect.

We focus on attracting and retaining qualified employees who will help us achieve our business objectives. We invest in our employees through talent management, training, and development, and support their well-being through wellness programs. We seek to foster work environments in which our employees can flourish, enabling them to collaboratively and optimally contribute to our success as a company. We want our employees to feel valued, take pride in our Company, embody the Pan American Silver values, and share our success.

Read more about our management approach to human capital development on our [website](#), including details on our policies, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

SUCCESSFUL INTEGRATION

of new workforce

RECIPIENT OF THE

“GOOD EMPLOYER CERTIFICATION”

granted by the American Chamber of Commerce in Peru to all our Peruvian sites and Lima office.

ANALYST CENTRE

GRI indicators: 2-7; 2-8; 2-23; 2-28; 2-30; 202-2; 401-1; 401-2; 401-3; G4 MM4

SASB indicators: EM-MM-000.B; EM-MM-310a.1; EM-MM-310a.2

Potential impacts from mining activities: well-paid work, training opportunities, health and safety benefits, challenging work conditions, job insecurity due to closures, high levels of worker fatigue

Potential risks to the Company: skills shortages, labour disruptions, work stoppages, low productivity, inability to attract talent

OUR PERFORMANCE

The acquisition of Yamana Gold essentially doubled our workforce, and our primary focus during 2023 was to welcome and integrate our new employees into Pan American Silver. We are now operating as well in Brazil and Chile, two new jurisdictions, and in one additional language (Portuguese). Following the Yamana Acquisition, as of December 31, 2023, our workforce included 19,939 individuals, just over 50% of whom are contract workers.

Talent Management

Training and development are core to our talent management approach. Each operation provides training to its employees based on the needs and requirements of that mine. This enables employees to hone their skills, and to advance in their careers. Our human capital development management processes help us ascertain the strengths and needs of our leadership teams and individuals in professional roles, identify future leaders, and prepare succession plans. We have several company-wide programs that are designed to develop internal talent.

In 2023, we restarted our Leadership Development Program (LDP), which had been paused during the COVID-19 pandemic. The program allows us to develop skills, abilities and confidence of leaders and managers from diverse backgrounds who are in positions that influence business outcomes. The LDP helps these individuals deepen their understanding of the mining industry, our business, and our operations, enhancing their management skills and leadership capabilities, and reinforcing

both Pan American Silver's leadership competencies and its corporate values. The program had 33 participants in 2023, and we aim to have 100 participants in 2024.

In 2022, we developed a Mining Training Centre at Morococha in Peru to provide both safety and technical training for machine operators and technical employees from our Latin American operations. However, Morococha was sold in 2023. To maintain the program, we relocated our 17 certified trainers, all former mine operators, to other sites throughout Latin America.

Finally, we continued our Future PAAS internship program, which was launched in 2022 in Peru. Future PAAS aims to provide young graduates from mining-related disciplines with both formal training and exposure to our operations, along with mentorship and coaching. The program is merit-based and is open to all graduates from engineering programs related to mining. It is also available in Brazil and Chile, in addition to Peru. The program's intent is to offer high-performing interns the opportunity to continue their career development with Pan American Silver through a trainee program, Trainee PAAS, which prepares participants for their professional development inside the Company. In 2023, from the 30 participants, 17 were hired by the Company. In addition, operations in Timmins, Peru, Chile, and Brazil have apprentice programs designed to develop technical workers and trades people, such as underground operators.

Worker Wellness

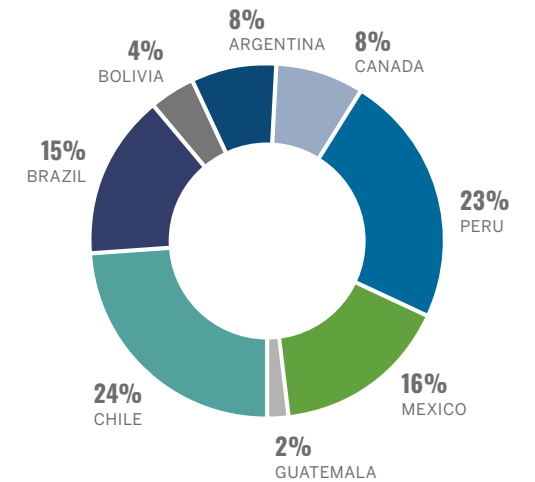
We support employee health and wellness with on-site gyms and recreation facilities, and through mental wellbeing programs, including access to a trained psychologist at each of our sites.

Worker Engagement

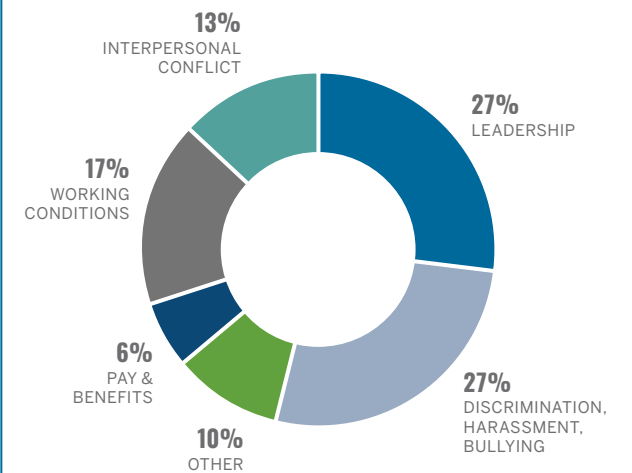
We create a positive work environment by actively listening to our workforce. Worker feedback helps us understand and address issues, such as improving camp conditions and services or implementing additional leadership training. In 2020, during the COVID-19 pandemic, we launched a worker engagement survey, which we continue to use, to understand our workers' perspectives on issues in three core areas—wellness, respect, and safety. Each site develops action plans to address issues and improve performance. In 2023, 84% of our employees responded to our survey; 88% felt positive about their jobs with Pan American Silver.

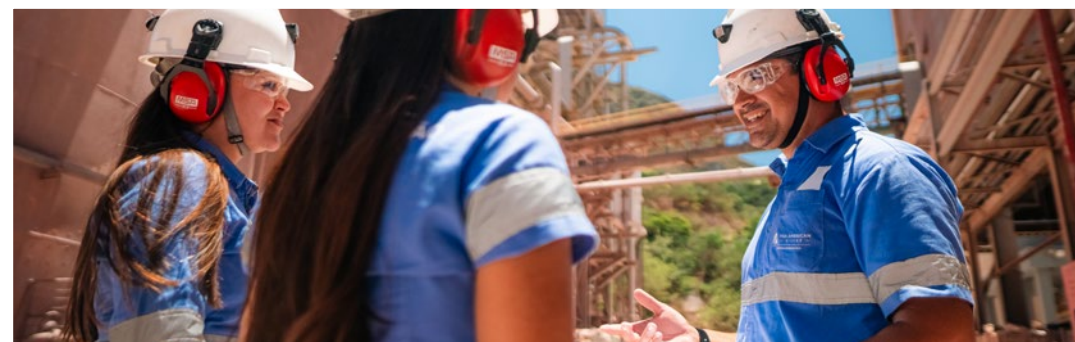
PAAS Listens, our employee feedback and grievance mechanism, is another means through which workers can communicate directly with our human resource teams. Additional details on PAAS Listens are discussed under [Mechanisms for Seeking Advice and Raising Concerns](#). In 2023, we received 30 employee grievances/concerns, of which 27 (90%) have been resolved. Most of the grievances/concerns fell into the categories of Leadership (27%), and Discrimination, Harassment, and Bullying (27%). The third highest number of grievances/concerns was related to Working Conditions (17%).

Employees by Country



PAAS Listens: Issues/Concerns/Grievances by Category in 2023





SUCCESSFUL INTEGRATION OF YAMANA

During the integration process of Yamana, we took a people-first approach, focusing on retention of employees from both the former Yamana operations and Pan American Silver. We successfully integrated operations in two new jurisdictions—Brazil and Chile—and have added Portuguese as an additional operating language in the Company. This has added to the cultural and linguistic complexity and richness of our workforce.

We want our employees to feel valued, take pride in our Company, embody the Pan American Silver values, and share our success. In 2023, we worked hard to instill the Company’s values throughout our new operations, with our corporate management teams travelling to the Acquired Mines to help them align with the Company’s values and practices. We also conducted a human resource management summit in Lima, where we brought together managers from across the Company to share best practices. At the summit, we developed six task forces to standardize and optimize human resource management at our operations, as we continue to work to promote the safety and wellbeing of our workforce across the Company.

Turnover

We track our turnover as a means of reviewing our market competitiveness, assessing the effectiveness of our hiring practices, and evaluating our performance as an employer. In 2023, as we integrated Yamana within Pan American Silver, we restructured country operations within our new operating jurisdictions. Unfortunately, this necessitated the downsizing of our workforce in some jurisdictions. Our total turnover rate⁽²²⁾ was 17.6% in 2023, almost the same as in 2022 (17.2%). When downsizing, we follow all legal requirements. Where possible, we always consider opportunities to relocate employees to other operations.

Across the Company, our overall voluntary turnover rate⁽²³⁾ in 2023 was approximately 4.6%, compared to 7.9% in 2022. Voluntary turnover reflects local labour market competition and industry trends and tends to be higher for operations located in

competitive labour environments. Consequently, voluntary turnover rates at Timmins in Canada continue to exceed those at other operations, given the highly competitive environment for qualified mining personnel.

Labour Relations

Pan American Silver respects the right of our employees to unionize, and our commitment to respect freedom of association and collective bargaining is set out in our [Global Human Rights Policy](#). All our operations, except Timmins, have collective bargaining agreements with one or more unions, and 64.1% of our employees are union members. We work collaboratively with our unions to maintain positive relationships and to avoid any labour strikes and work stoppages that could potentially disrupt operations. During 2023, there were no work stoppages exceeding seven days at any of our operations.

(22) Proportion of employees who leave an organization over a set period, expressed as a percentage of the total employees. The total employee turnover rate number is the sum of the voluntary employee turnover and the involuntary employee turnover rate.

(23) Proportion of employees who choose to leave an organization (such as through resignation, retirement, early retirement, etc.) over a set period, expressed as a percentage of the total employees.



INCLUSION AND DIVERSITY

Pan American Silver aims to provide equal opportunities for all employees and promote the hiring of groups traditionally underrepresented in the mining industry, including women and Indigenous Peoples.

We have a workforce with a wide array of backgrounds, cultures, and experiences, and we foster a respectful work culture, recognizing that our diversity can become one of our greatest assets. Our human capital and social sustainability departments work together to create programs to hire and retain local talent. Operation-level inclusion and diversity sub-committees develop and implement inclusion programs that address context-specific perceived barriers to hiring and retaining diverse talent, enabling us to foster greater inclusion and diversity across our operations.

Read more about our management approach to inclusion and diversity on our [website](#), including details on our policies, programs, monitoring practices, and accountability.

2023 HIGHLIGHTS

24%

hiring of women for all approved and budgeted vacant positions

RETAINED

92%

women employees

45%

of our Board Members⁽¹⁾ were Women, including our Board Chair

(1) This percentage increased to 56% at our Annual General Meeting held on May 8, 2024.

ANALYST CENTRE

GRI indicators: 3-3; 202-2; 401-1; 405-1; 406-1

Potential impacts from mining activities: discrimination, harassment, lack of equal opportunity, economic security, empowerment of women and historically marginalized groups, local social and economic development, cultural tolerance

Potential risks to the Company: talent shortages, attrition, low worker productivity and efficiency, loss of social acceptance

OUR PERFORMANCE

Pan American Silver’s objective is to build inclusive work environments that are free of harassment, where everyone is treated fairly and respectfully, and has equal access to resources and opportunities. We define diversity to include gender, ethnicity, age, race, religion, disability, cultural and socio-economic background, nationality, sexual orientation, language, educational background, and expertise

The integration of Yamana expanded the Company’s cultural and linguistic diversity, especially through the introduction of Portuguese as one of our main operating languages (in addition to Spanish and English).

Diversity

Attracting and retaining women—both employees and contractors—has been a long-standing objective for our Company. However, mining continues to be a male-dominated industry, which along with other factors, including the location of mining operations, lack of childcare on site, and certain cultural contexts in which we operate, challenges our efforts to recruit and retain women. Additionally, there are currently high unemployment rates throughout Latin America, and local communities sometimes express frustrations at recruitment efforts that focus solely on women.

In 2023, 8.6% of our employees were women. This figure increases to 10.8% when we also include on-site contractors. Our executive team, comprising C-level executives and senior vice presidents,

includes one woman (out of a total of 11 or 9.1%), and three of our 11 vice presidents are women (27.3%).

At the corporate level, the Board and Senior Management Diversity Policy emphasizes gender diversity as a key consideration when recruiting, hiring, and promoting individuals at the Board and senior management levels. As of December 31, 2023, we had five women Board members, including the Board Chair, and women represented 45.5% of the Board, exceeding our minimum target of 30%.

In 2023, we established targets for hiring women (15% of all approved and budgeted vacant positions) and retaining women (an 85% retention rate, excluding involuntary terminations). We exceeded both targets, with women accounting for 24.1% of new hires. We also retained 92.4% of all women employees across our operations.

Despite exceeding our goals, we continue working to understand and reduce barriers to the employment and retention of women. To advance women within the Company, and to improve retention, we work to provide career growth and development opportunities. Of all employees promoted in 2023, 11.1% were women.

We also provide social supports to enable women’s continued participation in the mining workforce. Our company maternity leave program has significantly increased maternity support in all of our operating jurisdictions. For example, our Timmins’ Parental

Leave Policy provides both pregnancy and parental leave salary top-ups. We also provide social services hotlines to allow workers to seek support for issues such as mental health or family concerns.

We want women to see mining as a potential career and Pan American as an employer of choice. To this end, we promote the career development of women through our talent development programs. In 2023, 40% of individuals hired into our Future PAAS internship program were women.

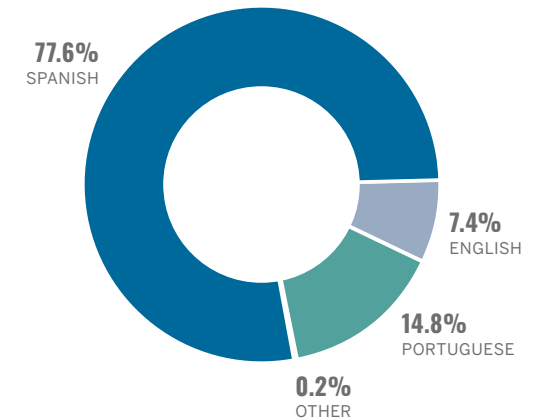
In 2023, El Peñon developed a training program for women from local communities. The program was designed to help women develop a range of different skills and provided them with a completion diploma from a local technical institution. The program, delivered in partnership with the Chilean government, contributes to promoting local employment opportunities for women.

Local Hiring

Members of local communities near our operations form the majority of our workforce. We also seek to primarily hire local managers, since they understand local culture and can help Pan American Silver instill our corporate values and policies into site-appropriate practices. In 2023, 99.5% of our employees were local⁽²⁴⁾ as were 91.2% of senior managers.

(24) Permanent employees who are either born in or have the legal right to reside indefinitely in the same geographic region as the operation.

Languages Spoken



Women in the Workforce

Type of Worker	Percentage of Women
Employees	8.6%
Contractors	12.9%
Total Workforce	10.8%

Equity and Inclusion

Respect is the foundation for building an inclusive organizational culture. At Pan American Silver, we work to instill a culture where individuals are safe, are treated fairly, and feel valued. We also strive to give all our employees equal opportunity to develop and advance.

In 2021, we launched our Building Respect Together (BRT) program, which is the foundation of our approach to creating a respectful and inclusive workplace culture. The program includes three modules: Respect, Awareness, and Organizational Climate. In 2023, we evolved the BRT program into video format, available in English, Spanish, and Portuguese, which consolidates its key concepts. In 2024, we plan to complete the roll out of the third module by incorporating it into our onboarding processes and training programs for all new employees and contractors. Further details on the BRT program are available in our [2022 Sustainability Report](#).

We oppose any form of discrimination or harassment against our workforce, service providers, or community members. Allegations of discrimination can be raised through our [employee and community feedback mechanisms](#) and our [Whistleblower Hotline](#). In 2023, there were 8 allegations of workplace discriminations and harassment. We investigated and resolved all allegations in a timely manner.

We also delivered supervisor training on harassment for approximately 200 employees, at supervisor levels and above, across our operations. In 2024, we are developing a campaign to train our workforce to report instances of harassment, including sexual harassment.

Self-identification

We continue to engage in conversations on self-identification with the objective of gaining a better understanding of the diversity of our workforce and local communities. Understanding this diversity enables us to support potentially vulnerable populations, to act in non-discriminatory ways, and to provide equal opportunities for employment and advancement within the Company.

In 2023, 6.2% of employees who responded to our annual [Communities of Interest survey](#) self-identified as Indigenous, compared to 7.7% in 2022. At our Timmins operation, which is located near Indigenous Peoples' communities, we have a Traditional Indigenous Practices Leave program for all Indigenous employees, which provides up to five days of unpaid leave for participation in traditional Indigenous practices including hunting, gathering, fishing, and harvesting.

External initiatives

We support several external initiatives that promote inclusion and diversity across our industry and in the countries where we operate, including Special Olympics British Columbia, University of British Columbia Equity and Inclusion Scholarship in the Faculty of Science, Women in Mining Canada, and BlackNorth Initiative. Further details on these external initiatives are available in our [2022 Sustainability Report](#).

In 2023, we began supporting Women in Mining Central America, a non-profit organization representing the interests of women in the mining industry in Central America.





BUSINESS ETHICS

Pan American Silver seeks to conduct business ethically, responsibly, and in compliance with the legal requirements of the jurisdictions where we operate.

Pan American Silver's Code of Conduct, Global Anti-Corruption Policy, and Supplier Code guide our ethical business practices, set corporate expectations for ourselves and our business partners, and lay the path for operational consistency in terms of responsibility and compliance with applicable laws, rules, and regulations. They provide guidance on core aspects of ethical business conduct, and are guided by international best practice, including the UNGC Principles. Our policies and standards are also aligned with the legal and regulatory requirements of the countries where we operate. Good governance enables us to manage governance risks, to meet the expectations of our stakeholders, and is central to the continuous improvement of our accountability and sustainability performance.

Read more about our management approach to business ethics on our [website](#), including details on our policies, standards, programs, compliance, and accountability.

2023 HIGHLIGHTS

ZERO

critical concern incidents

TRAINED

1,142

key employees on our Global Anti-Corruption Policy

ANALYST CENTRE

GRI indicators: 205-1; 205-2; 205-3; 207-1; 207-2; 207-3

SASB indicator: EM-MM-510a.2

Potential impacts from mining activities: fiscal revenues, economic development, misallocation of resource revenues

Potential risks to the Company: fines, penalties, and sanctions for noncompliance, unanticipated changes to laws or regulations, corruption inside our business or by third parties, reputational damage from actual or perceived impropriety, cybersecurity attacks, IT security breaches, operational disruption

OUR PERFORMANCE

Business Ethics

Pan American Silver is committed to high standards of corporate governance, ethics, and transparency in the conduct of our business. The Code of Conduct and Global Anti-Corruption Policy⁽²⁵⁾ provide the fundamental tenets of ethical business practices. Our Board, senior management and employees in certain functions are required to annually certify compliance with our Code of Conduct and our Global Anti-Corruption Policy.⁽²⁶⁾ During the year, 523 individuals certified compliance, and beginning in 2024, all employees with a Pan American Silver email will be required to annually review and confirm compliance with our Code of Conduct and our Global Anti-Corruption Policy.

We regularly assess operations for risks related to fraud and corruption. As part of the Yamana Acquisition, we also assessed risks at our Acquired Sites. Our most significant potential corruption-related risks across our operations include fraud perpetrated by (or in collusion with) third-party contractors or suppliers, and raw materials or supply inventory theft from operations or during transit. In the operating jurisdictions where the risk of corruption is higher, we implement additional controls measures to manage these risks.⁽²⁷⁾

In 2023, our focus was on integrating our Acquired Mines and aligning compliance systems across the Company. To strengthen our anti-corruption and compliance program and processes, we assigned roles in each jurisdiction to our staff responsible

for compliance matters and worked to improve coordination and standardization of reporting across jurisdictions, while also introducing new controls. We additionally worked with teams in our new jurisdictions to develop a shared understanding of Pan American Silver's Code of Conduct and Global Anti-Corruption Policy requirements.

Training is a central component of our ethics approach. In 2023, we provided anti-corruption training to 1,142 employees, including 500 employees from our Acquired Mines in Brazil, Chile, and Argentina. Every year, Pan American delivers training on using our Whistleblower Hotline to emphasize the importance of reporting actual and potential breaches of ethical conduct, and to increase our workforce's comfort in using the Whistleblower Hotline mechanism.

In 2023, we received a total of 95 reports of alleged violations—82 made through the Whistleblower Hotline and 13 made through the former Yamana whistleblower mechanism in place at our Acquired Mines, before the transition to Pan American Silver's Whistleblower Hotline was complete. The significant increase in the number of reports made through the system—from 30 reports in 2022 to 95 in 2023—demonstrates increased understanding of and trust in the system. We investigated each case and adopted corrective measures where relevant. Out of the 95 cases, 71 were closed by the end of 2023. The areas for which we received the greatest number of allegations were harassment, conflict of interests, and labour retaliation.

Our operations are subject to extensive laws and regulations in the jurisdictions where we operate. In 2023, the Company had no critical concern incidents.⁽²⁸⁾ We also had no confirmed instances of incidents of fraud or corruption.

Tax Transparency

Aligned with the principles outlined in the Code of Conduct, Pan American Silver's [Global Guidelines Regarding Tax Matters](#) sets our approach to tax matters, tax planning, intercompany transactions and tax transparency.

Cybersecurity

The secure processing, maintenance, and transmission of information and data is a critical component of our business continuity.

In 2023, we focused on assessing cybersecurity programs and controls at our Acquired Mines. The integration gave us an opportunity to assess cybersecurity solutions at all our operations, and to select the best solutions for meeting the Company's needs moving forward. By 2023-year end, we had successfully migrated the entire Company to the chosen solutions, and we also updated our cybersecurity roadmap to include our Acquired Mines. In 2023, we had no material cybersecurity incidents.

During the year, we performed company-wide technical risk assessments and penetration tests. We also increased the number of phishing tests and instituted mandatory yearly cybersecurity training

with the goal of improving employee awareness of cybersecurity threats. These initiatives improved employees' ability to recognize phishing emails and reduced the number of clicks on phishing emails. We also expanded our cybersecurity controls and systems to our Acquired Sites.

Further details on cybersecurity risks and our approach are available in our [2023 Annual Information Form](#) and in our [2024 Management Information Circular](#).

(25) The scope of our Global Anti-Corruption Policy seeks to prevent, control, and manage corruption or fraud cases in the interaction of Pan American Silver and its employees with governmental officers and with all third parties with whom any business is conducted. Thus, any references made in this report to fraud, corruption and the alike should be understood to cover, as indicated by the context, either or both interactions (i.e., governmental, and commercial).

(26) Certification entails acknowledging receipt of the Global Code of Ethical Conduct, Global Anti-Corruption Policy, and the Global Human Rights Policy, acknowledging their content, and confirming familiarity with our policies.

(27) Guatemala, Bolivia, Mexico, Peru, Brazil, and Argentina are identified in Transparency International's 2023 Corruption Perception Index as being at high risk for corruption.

(28) Critical concerns entail those with the potential to cause, in the opinion of the CLHRO or the Compliance Officer, a significant impact to the Company (reputationally, financially, environmentally, etc.).

APPENDIX



CLIMATE, ENERGY AND GREENHOUSE GAS EMISSIONS REPORT

The impact of global warming is an issue that affects society, the environment, and economic development.

We recognize that climate change is a potential threat to our business and many of our COIs, and we are committed to taking action to reduce climate risks through innovative and practical solutions to reduce emissions, transform energy supply, and optimize our resources.

Mining is an energy-intensive industry, using energy for extraction, processing, and transportation of products. Energy use, particularly through fuel combustion and electricity use, causes direct (Scope 1) and indirect (Scope 2) GHG emissions, which contribute to climate change. COI expectations around climate action in the mining industry include reducing the carbon footprint and responding to potential climate-related risks. For Pan American Silver, reducing emissions and energy use provides us with cost savings and environmental benefits beyond our operating boundaries, and contributes to the global response to climate change.

We have been gradually improving our climate-related disclosure since our Scope 1 and Scope

2 emissions were first publicly reported in 2010. We believe that the adoption of the climate-related recommendations of the Financial Stability Board is an efficient way to gauge our business strategy relating to climate change and to respond to our stakeholders' expectations. In 2023, we strengthened our climate-related disclosure by incorporating the latest findings from the Intergovernmental Panel on Climate Change (IPCC) AR6 report into our physical risk assessment. The outcomes of this assessment were finalized in early 2024. Our corporate and local teams will collaboratively review strategies to implement adaptation pathways over the course of 2024, where necessary. In 2022, we set our first long-term GHG emissions reduction target of at least 30% by 2030 from our 2019 baseline emissions. This year, we have updated our energy profile and provided an update in this report. Based on the work completed for this year's report, we re-affirm our goal to reduce emissions by at least 30% by 2030 including the Acquired Mines. We continue to incorporate the Task Force on Climate-related Financial Disclosure's (TCFD) reporting recommendations in our 2023 Sustainability Report with an aim to progressively improve the quality and transparency of our climate-related disclosures.



CLIMATE CHANGE POLICY STATEMENT

Pan American Silver recognizes that climate change caused by anthropogenic greenhouse gas emissions (GHG) is a threat to the global environment, society, our stakeholders, and our business, and that globally coordinated actions are required to address this threat.

We believe Pan American Silver has a responsibility to help address this global challenge, and we are committed to taking actions that will help us achieve our aspirational objective of net zero carbon dioxide equivalent emissions by 2050.

Pan American Silver is one of the largest primary silver producers in the world. The silver we produce, together with by-product base metal production, plays an important role in mitigating the climate change threat because these metals are key materials in solar energy technology and other carbon-efficient energy solutions. We expect the transition to renewable energy will result in significant growth in demand for silver and base metal bearing products in the coming years.

We are committed to taking actions that will reduce our GHG emissions. During 2023, we worked to incorporate the Acquired Mines (Jacobina, El Peñon, Cerro Moro and Minera Florida) into our life of mine energy profile plans. We released a preliminary economic assessment of our La Colorada Skarn project. With the updates to the energy profile, we are confident we can reach our goal to reduce our global GHG emissions by at least 30% by 2030 from the amended 2019 baseline emissions that includes

the Acquired Mines and excludes Morococha which was divested in 2023. Achieving this objective will likely require further investments in electrification and electric equipment technologies, depend on the expansion of renewable energy generation of the local electricity grids we use and potentially require using carbon offsets to balance emissions we can't zero out by 2050.

Our senior management team, together with our Board of Directors, are assessing climate-related risks and opportunities in order to develop, implement, monitor, and revise our climate action strategies. The primary objectives of our strategy are:

- Reducing GHG emissions;
- Improving our climate-change readiness; and
- Enhancing our timely and transparent climate-related public disclosures.

Our senior corporate and operations management teams are responsible for executing this strategy and achieving our objectives by:

- Integrating climate-related risks and opportunities, including physical and transition risks, into our strategic long-term plans and projects;
- Striving to meet targeted emissions reductions objectives and developing additional targets to further reduce our current long-term energy consumption estimates;

- Incorporating the TCFD framework by adopting TCFD's approach within our climate-related public disclosures;
- Continuing to report on our emission estimates, reduction targets, climate risks, climate-change scenario analysis and climate action in our annual Sustainability Reports;
- Increasing our use of renewable energy and supporting climate action near our operations;
- Continuing to adapt our climate-change strategy appropriately and effectively according to best practices and understandings; and
- Adhering to this Climate Change Policy Statement.



Michael Steinmann | Chief Executive Officer

May 23, 2024

“ We expect the transition to renewable energy will result in significant growth in demand for silver and base metal bearing products in the coming years. ”

GOVERNANCE

Board Level

The structure of our Board of Directors and Board committees is described in the [Sustainability Governance section](#) of this report. Our Board of Directors is advised on climate-related matters quarterly, primarily by its Health, Safety, and Environment (HSE) Committee, its Communities and Sustainable Development (CSD) Committee, and directly by management. The Board of Directors is accountable for directing the Company's strategies and reviews and, where applicable, may consider climate-related issues when evaluating major capital expenditures, acquisitions, or divestitures. The Board of Directors, including through its Committees, oversees and monitors and, if applicable, provides guidance with respect to the development of Pan American Silver's goals, annual targets, policies and programs as they relate to climate change and GHG emissions, among others. In addition, the Board considers the main risks and opportunities to the Company related to climate change that have been identified by management and where appropriate, provides recommendations with respect to the allocation of resources by management to address these risks and opportunities.

Management Level

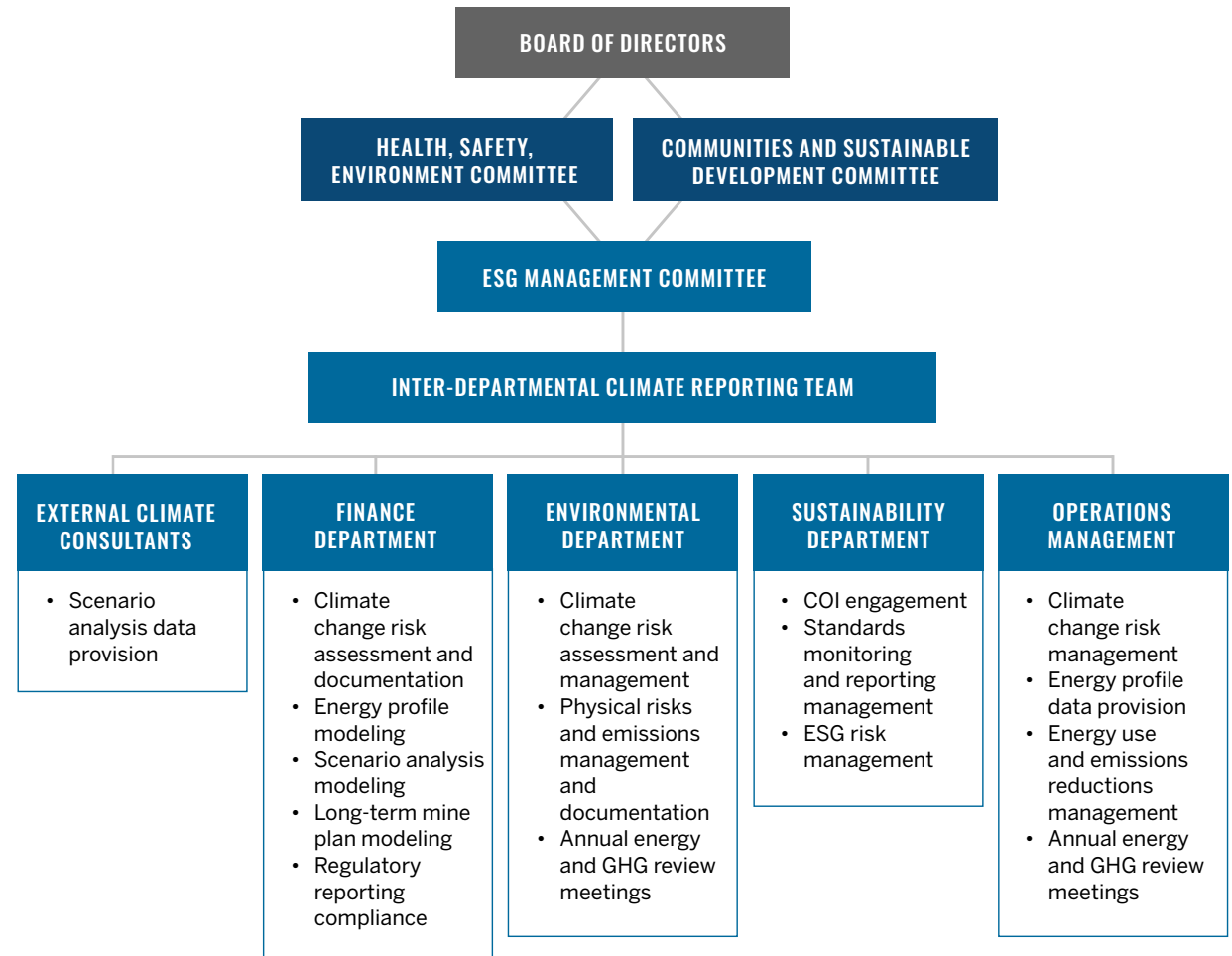
The senior management ESG Committee considers and, where appropriate, recommends proposed changes to our climate change policy. Our Board, primarily through its committees, ultimately

determines the Company's climate change policy, and also reviews the results of our current performance, evaluates overall climate-related risks and strategies, and decides on reporting metrics and targets. The ESG Committee is comprised of interdepartmental senior management as further described in the [Sustainability Governance section](#) of this report.

We conduct annual energy and GHG review meetings for each operation to identify risks and opportunities to maximize energy efficiency and emissions reduction, and set short and long-term targets based on viable projects and initiatives. These reviews, conducted in accordance with our Corporate Environmental Standard on Energy, Emissions and Climate Change, involve the site energy and GHG management committee, energy and operations managers, and the corporate environmental team.

Our approach encourages involvement from several areas of the organization and looks for ways to improve energy efficiency at our operations and development projects. Interactions between our corporate head office team and the respective country and operations leadership teams at each site help identify and define climate related risks and opportunities such as priority projects to maximize energy efficiency and reduce GHG emissions. Projects and initiatives are evaluated through our annual budget preparation process or capital allocation framework and are reviewed by senior management, the ESG Committee or the Board and CSD and HSE Committees.

Pan American Silver Climate-Related Governance Structure



Affiliations and Memberships

We strive to align our climate strategies with globally recognized frameworks and associations with other companies in our sector. Our governance around climate issues is guided through the following affiliations and memberships:

- Supporter of TCFD
- Member of UN Global Compact
- Member of Mining Association of Canada
- Participant in Peru Carbon Footprint program
- Member of World Gold Council

CLIMATE CHANGE STRATEGY

We believe that the mining sector can have an important role in helping society achieve the global GHG emission reduction goals by supplying the raw materials necessary for the energy transition. Our approach to climate change is to analyze potential transitional impacts to our long-term business plans and to embed carbon dioxide equivalent (CO₂Eq) emission reduction initiatives into our governance and operational decision-making process to establish informed and realistic targets that are aligned with climate science and commitments by the countries where we operate. Our approach will be achieved by:

- **Integrating** CO₂Eq emission reduction strategies into our operational risk and opportunities assessments and strategic planning.
- **Planning** that ensures our long-term plans, corporate development strategies, and capital and operational budgets are aligned with our goals, including those related to CO₂Eq emissions reductions.
- **Developing** informed decision making to ensure meaningful contributions to a low carbon future.
- **Adapting** our operating and non-operating mines to align with global efforts to reduce CO₂Eq emissions and mitigate or prepare for the potential physical risks of climate change.
- **Informing** stakeholders in a timely and transparent manner regarding our CO₂Eq emission reduction strategies and results as well as the potential transitional impacts to our long-term business plans.

Over the past year, we have continued to integrate climate change into our business objectives and decision-making through our planning and budgeting processes and our emissions reductions initiatives further described below.

Pan American Silver Energy Profiles

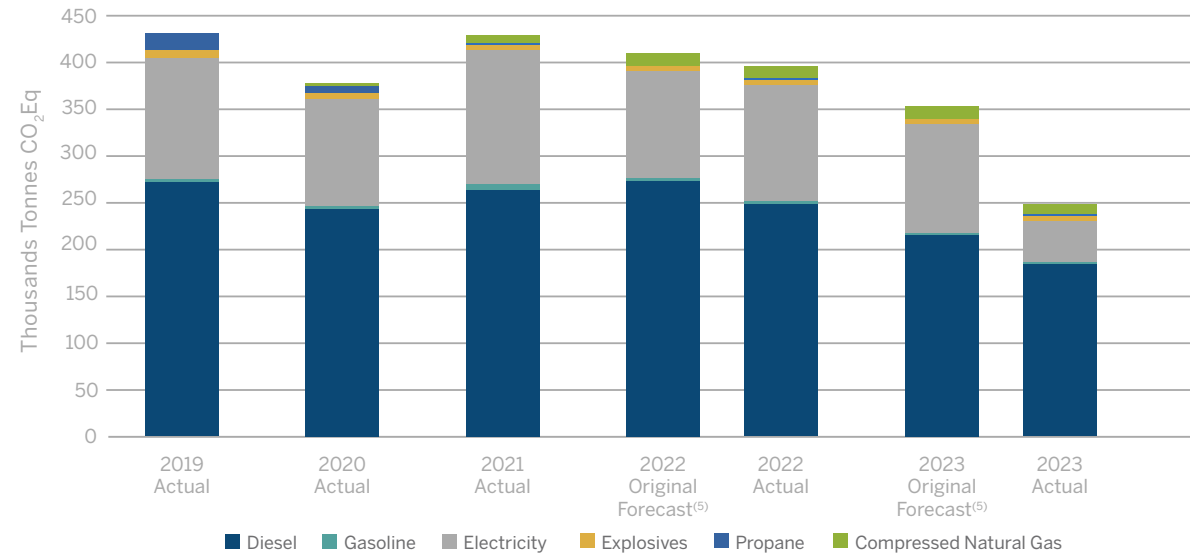
In 2021, we completed the first estimated short-and medium-term energy demand and CO₂Eq emissions estimates for all our original Pan American Silver operations based on current life of mine plans. These profiles provided a forecast of our future annual energy use, including diesel consumption, in a base case scenario, which assumed no benefits obtained from further efforts to reduce emissions than those already in place. In 2023, we updated our short and medium-term energy demand and CO₂Eq emissions profiles for all Pan American Silver operations, including developing profiles for the Acquired Mines.

Our 2022-2023 base case forecast, excluding the Acquired Sites, is presented in the graph on the right in comparison to our 2022 and 2023 actual CO₂Eq emissions.

Relative to our 2021 Carbon Emissions Forecast, our 2023 actual CO₂Eq emissions are lower, largely due to the procurement of renewable electricity supply contracts in Mexico in late May 2022. In addition, our diesel consumption at Shahuindo was lower than projected in 2023 due to the replacement of diesel power generators with a direct connection to the national electricity grid.

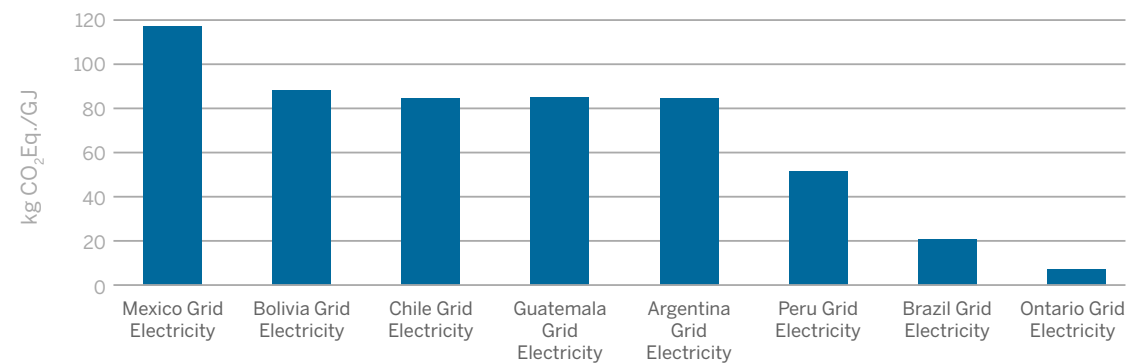
The chart on the right shows the different electricity grid emissions factors for 2023 for each of the places where we operate, and how

Pan American Silver's Scope 1 and 2 Carbon Emissions Actuals Compared to Original Forecasts⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾



- (1) 2022-2023 base case forecasts were based on current mine life expectations (excluding Acquired Sites and Morococha), along with planned and approved development projects and excluded emissions that may result from extensions of mine life due to successful exploration, emissions related to our major growth and development projects beyond 2022 and assumed continued care and maintenance activities at our Escobal project.
- (2) Pan American Silver used National Inventory Report Canada to calculate Direct (Scope 1) GHG emissions.
- (3) 2021 Forecast Emissions from purchased electricity calculated according to GHG protocol using the International Energy Agency (IEA) 2021 tool for all the mines except Timmins. 2023 Actual from purchased electricity calculated according to GHG protocol using the IEA 2022 tool for all the mines except Timmins.
- (4) Emission factor for Timmins provided by the Independent Electricity System Operator (IESO) in Ontario.
- (5) Original Forecast is as published in the Company's 2021 carbon emissions base forecast in the 2021 TCFD report.

Grid Emissions⁽¹⁾ Factor by Jurisdiction



- (1) Emissions from purchased electricity were assessed in compliance with the GHG protocol, utilizing the IEA 2023 tool for all mines except Minera Florida, El Peñon, Jacobina, and Timmins. For Minera Florida, El Peñon, and Jacobina, calculations were based on the IEA 2022 tool. Additionally, the emission factor for Timmins was sourced from the IESO in Ontario.

they vary depending on the amount of CO₂Eq emissions produced per gigajoule of electricity consumed. These values depend on how reliant the national electricity grids for each country are on fossil fuels for electricity. These are national or provincial averages and do not represent Pan American Silver's ability to choose clean energy contracts directly from renewable power providers. We understand that decreasing fossil fuel-based electricity generation across national transmission grids will require time and collaboration among individuals, industries, and governments. We aim to make informed decisions when it comes to direct renewable electricity supply contracts and try to avoid situations that result in no net benefit for

regional electricity transmission networks. We hope to achieve this by engaging with local commercial groups and transmission network stakeholders.

Following the Yamana Acquisition, we have developed a new energy and CO₂Eq emissions profile reflecting the addition of the new assets in Chile, Brazil, and Argentina. The new forecast is presented in the graph that follows, which shows an expected reduction in CO₂Eq emissions given the anticipated mine closures at Dolores, La Arena and Cerro Moro in the years between 2024 and 2027 as per the current mineral reserve lives of these assets. The anticipated mine life for Cerro Moro and La Arena could be extended subject to exploration

success at these assets in identifying new reserves or converting resources to reserves. This new energy profile will enable us to continue monitoring our medium-term CO₂Eq emissions reduction goal and continue incorporating and evaluating the financial impact to our business of different climate change scenarios.

Relative to the combined 2023 Carbon Emissions, our 2024 to 2027 Forecast CO₂Eq emissions are lower, largely due to the forecast end of mining operations in Dolores (2024), Cerro Moro (2026) and La Arena (2026).

Climate Scenario Analysis

In 2021, with support and analysis from Vivid Economics, we selected three potential scenarios from the Network for Greening the Financial System (NGFS) to analyze potential transitional impacts to our long-term business plan. The scenarios were developed to understand the possible impact on (i) metal demand and outlook; (ii) carbon pricing schemes; and, (iii) direct cost impacts from changes in global demand for fossil fuels. As presented in the 2021 TCFD report, the results demonstrate the anticipated resilience of the business under the different policy and emissions reduction paths analyzed.

Since 2021, the Company has acquired four assets under the Yamana Acquisition that are largely leveraged to gold. As described in the scenario analysis presented in the 2021 TCFD report, we don't anticipate a material impact on gold.

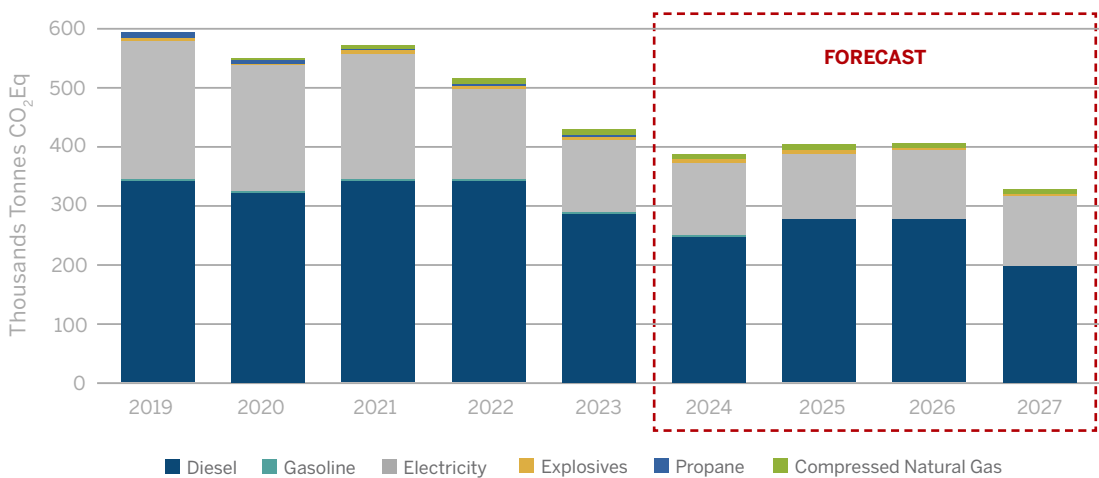
Additionally, the Company has also advanced on the La Colorada Skarn project, better defining the resource and releasing a preliminary economic

assessment (PEA) dated effective December 18, 2023. The estimated average annual silver, zinc and lead production would be 17.2 million ounces, 427 thousand tonnes and 218 thousand tonnes, respectively, during the first 10 years of an estimated 17-year mine life. Given that exposure to silver and zinc make up close to 80% of total expected project revenues, the economics of the project should benefit under the transition scenarios analyzed and reported under in the 2021 TCFD report, all the scenarios for transition benefitting zinc and silver demand. The PEA is preliminary in nature and there is no certainty that the preliminary economic assessment will be realized. We are also evaluating energy efficient ways to reduce dependence on diesel energy including the use of electrified materials handling systems.

CLIMATE RISKS AND OPPORTUNITIES

Pan American Silver's approach to risk management is with a view that each manager in the organization, whether at the operations or corporate office, is a risk manager. This approach has served us well over the years, empowering our employees and providing broad and diverse analysis of the various risks our business faces. We establish clear lines of communication whereby risks and opportunities are identified and properly reported through the organization and are brought to the attention of our Board of Directors depending on the magnitude and likelihood of the risk. Climate-related risks are analyzed and summarized by the management's ESG Committee, which present material risks to the Board of Directors.

Combined Pan American Silver and Yamana's 2019-2023 Scope 1 and 2 Carbon Emissions, and Pan American Silver's 2024-2027 Forecast⁽¹⁾⁽²⁾⁽³⁾



(1) Includes Pan American Silver assets with the Acquired Mines but excludes Escobal.
 (2) Pan American Silver used National Inventory Report Canada to calculate Direct (Scope 1) GHG emissions.
 (3) Emissions from purchased electricity were assessed in compliance with the GHG protocol, utilizing the IEA 2023 Edition for all mines. Additionally, the emission factor for Timmins was sourced from the IESO in Ontario.

We assess our framework annually to identify, quantify, and manage risks and opportunities, as well as to determine mitigation strategies to improve our ability to sustain the business over the long-term with each of our sites that face potential climate change related impacts. This assessment includes physical and transitional risks and opportunities with their associated potential impacts on the financial results of our business.

Physical Risks and Opportunities

We have completed our 2023 physical climate change risk assessment at each operation according to indicators of extreme heat, extreme precipitation, drought, wildfire, and others. The assessment follows the TCFD scenario analysis recommendations and the TSM Guide on Climate Change Adaptation. The study considers a range of scenarios aligned with the Paris Agreement for each of our operations and projects.

The physical risk from climate change assessment incorporates scenarios from the IPCC AR6, specifically SSP1 (2.6), SSP2 (4.5), and SSP5 (8.5), ensuring a thorough evaluation of risks. SSP1 and SSP5 were selected to maintain alignment with the RCP 2.6 and RCP 8.5 scenarios first published in our 2020 Sustainability Report. These scenarios also align with the Company's transitional climate risk assessment completed in 2022. SSP2 was added in this year's assessment to offer insights into a middle range scenario and to more broadly assess potential precipitation impacts given the generally high sensitivity of our operations to extreme precipitation events. The time horizons chosen for this study were 2030, 2050 and 2100, since they generally align the main milestones in most climate assessment

models even though our typical mine operations' life cycle is considerably less.

Risk rankings were determined by combining likelihood and consequence scores, graded on a scale ranging from insignificant to extreme risk levels. Climate interactions categorized as insignificant to low risk exhibit a low to moderate frequency or a low to moderate severity throughout the time horizons. Medium or high-risk interactions are anticipated to occur more frequently and could have more significant impacts on the sites. Extreme risk interactions are those that have catastrophic consequences and high likelihood.

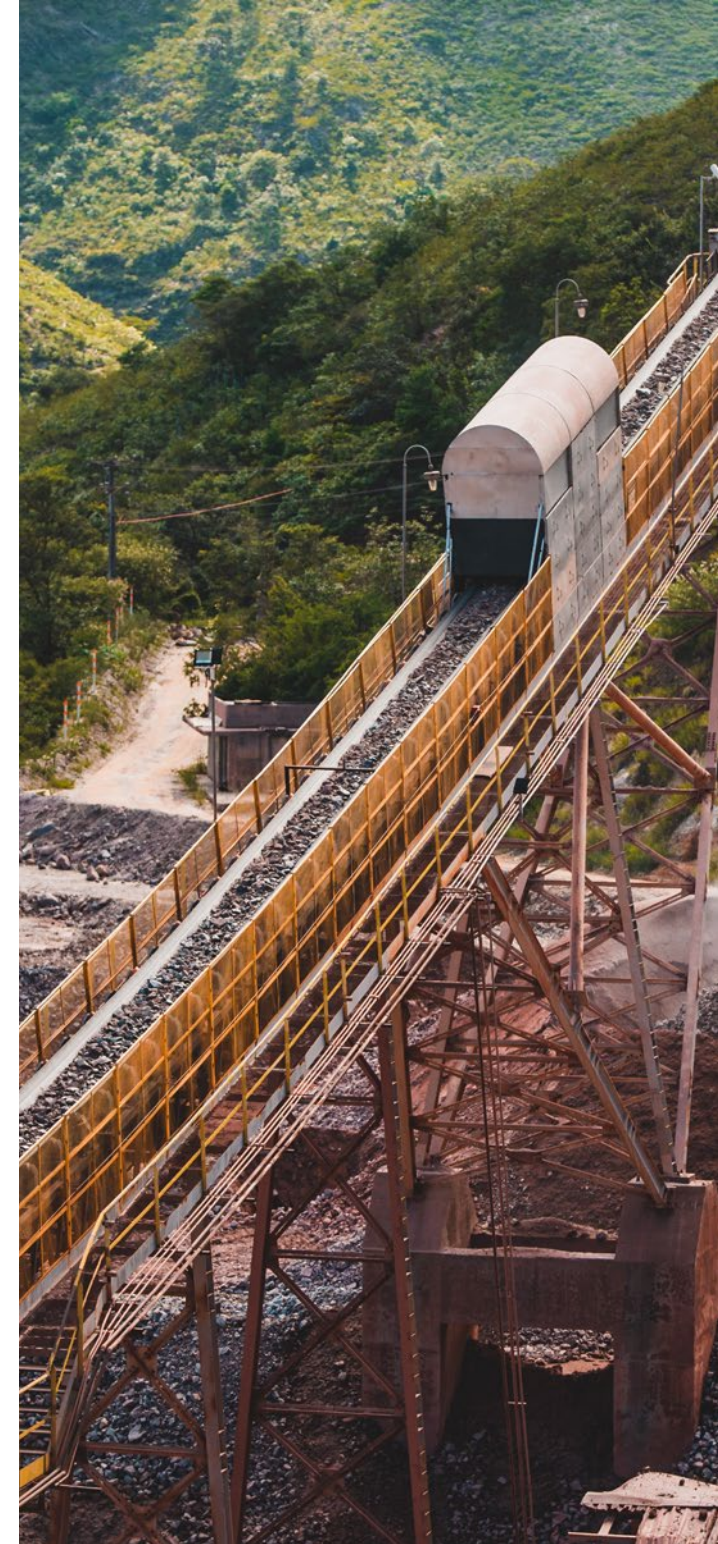
The Pan American physical risk assessment from climate change has determined that climate-related risk rankings ranging from insignificant to high exist at our operations. No extreme risks were identified at any of the Pan American operations. The assessment specifically highlights extreme heat, mean annual temperature, precipitation and wildfires as being the risks rated medium to high at some of our sites. Moreover, these risks consistently drive high-risk assessment scores across the different scenarios and timeframes evaluated.

The scenarios concluded that extreme heat is identified on average as a medium risk for most of our operations across all time horizons and scenarios. Except for El Peñon, the risk ranking of increasing extreme heat days remains the same across the various climate scenarios and generally does not increase with time due to the expected mines closing before the 2050 and 2100 time periods. Whereas El Peñon's risk ranking identified increases from negligible to low or medium from 2030 to 2100. Except for Manantial Espejo and La

Colorada, annual mean temperature risk assessed at our operations registered a maximum ranking of Medium across all time-horizons, scenarios, and operations. Manantial Espejo and La Colorada risks ranked to a maximum of low. Wildfire ranked at a maximum of High across most of the time-horizons and all scenarios for Jacobina, Alamo Dorado, Dolores, La Arena, Shahuindo, Timmins, and Escobal. This High score is driven by high consequence scores and in many cases, increasing likelihoods. Extreme precipitation risks ranked a maximum of High across most time-horizons scenarios at Huaron, La Arena, Shahuindo, and Timmins.

Extreme precipitation events are a potentially growing risk in many of the countries where we operate, and we continue to incorporate sensitivity analysis into planning at all our operations with a focus on those nearer to closure including Dolores and La Arena. The performance of surface water management structures and the site water balance will be evaluated and updated for the mines vulnerable to extreme precipitation events throughout the operating, closure, and post-closure period, utilizing the lessons learned from our impacted operations to adapt to these extreme events.

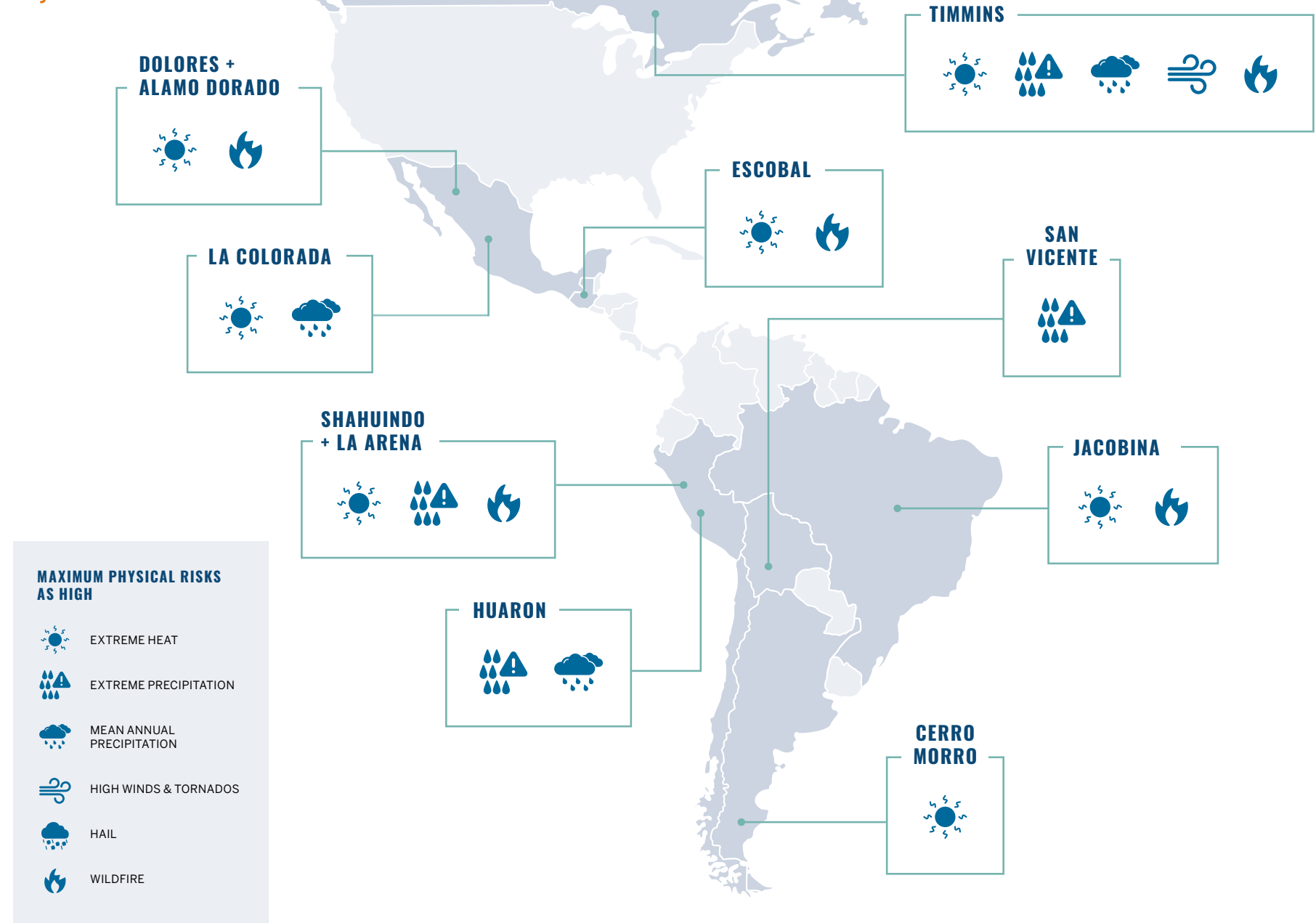
In March 2023, the Yaku cyclone affected our Northern Peruvian operations. At La Arena, operations remained stable in part due to actions implemented from the lessons learned during an extreme precipitation event in 2022 (reported in our 2022 Sustainability Report). At Shahuindo, the cyclone brought an extreme precipitation event over 5 days that caused damage and erosion in channels and ponds on the waste dumps. Process



infrastructure was not directly affected; however, mine operations were temporarily suspended as a precaution given the significant intensity of precipitation. An action plan was developed and completed to reinforce surface water management infrastructure. A longer-term strategy is being implemented to prepare the site better for similar or worsening future extreme precipitation events. In August 2023, the Minera Florida mine temporarily suspended operations due to an extreme precipitation event that affected the access road between the mine and process plant. Minera Florida is currently completing a permitting process to upgrade the river crossing on the access road to better adapt to future extreme rainfall events.

The Physical Risks infographic outlines the primary risks identified for each operation. For climate-related indicators ranked as high risks, particularly those associated with extreme weather events and wildfires, we have established specific emergency response plans to prepare our sites on the appropriate response to these potential incidents. In locations like Jacobina, specific wildfire response plans are in place. We actively monitor water availability and explore opportunities for improving water use reduction and recycling, particularly in areas prone to droughts. To prepare for potential future scenarios, we will continue to conduct sensitivity analyses and typically apply a 10 to 20% factor of safety to our design flood magnitudes for mine closure planning. Additionally, new critical infrastructure will be designed with consideration of climate change conditions. For risks categorized as medium and higher, we will undertake comprehensive analyses to determine the most appropriate adaptation measure.

Physical Risks



Transition Risks, Exposures and Opportunities

As defined by the TCFD, transitional risks and opportunities arise from policy, regulatory, legal, technological, reputational, and market changes to address mitigation and adaptation requirements to transition to a reduced GHG emission economy. These may pose varying levels of financial and reputational risks to Pan American Silver and are summarized in the following table:

CATEGORY	RISKS	EXPOSURE	OPPORTUNITIES
Regulatory	<ul style="list-style-type: none"> Regulatory change that results in increased costs and/or constrains our operating activities. Climate-related legal claims against us or our COIs. Difficulty obtaining required permitting and licenses as regulations and/or COI expectations around extractive industries become more onerous. Changes in regulations that impact past and future closure and reclamation activities. Resource nationalization as host countries move to appropriate resources for strategic purposes. 	<ul style="list-style-type: none"> Increasing costs due to the introduction of carbon pricing, changes to existing exemptions to pricing regimes, or other climate or carbon related taxes, duties or charges. Greater restrictions or limitations of our exploration and development stage properties. Increased closure and decommissioning liabilities. Host countries could make it more difficult to acquire and maintain concessions for critical metals. Asset expropriation. 	<ul style="list-style-type: none"> As the world transitions away from carbon intensive energy sources, metals used in green technologies may draw more favorable regulatory and permitting conditions, as well as improved funding for growth and development projects in these critical commodities. Our diversified portfolio and decentralized organizational structure enable us to make well-informed decisions and efficiently manage legal and policy risks.
Market	<ul style="list-style-type: none"> Ability to procure renewable energy due to competition, allotments and availability. Reduced access to finance investment, and insurance services. Access to supply of labour from changing demographics related to climate conditions. Supply chain challenges due to physical impacts on transportation infrastructure and downstream smelting and refining facilities. Marketability of concentrate products as demand for concentrate with certain deleterious and/or product mixes changes with demand for different metals included in concentrate as well as environmental restrictions arise for the content of certain elements. 	<ul style="list-style-type: none"> Changes to the supply and demand for goods and services that the Company depends on for its production processes, as well as for the commodities that we produce, which may have material impacts to: <ul style="list-style-type: none"> The Company's cost structure. Procurement of financing and insurance. Labour supply. Renewable power supply access. The value or recoverability of its Reserves. Revenue potential. 	<ul style="list-style-type: none"> Increased prices for the metals that the Company produces that are used in low-carbon technologies and the energy transition including silver, zinc, and copper.
Reputational	<ul style="list-style-type: none"> Negative COIs opinions of the mining industry and/or Pan American Silver as a result of perceived underperformance in: <ul style="list-style-type: none"> Contributing to a low carbon economy. Climate-change risk management. Timely and transparent related disclosures Negative perceptions of mining, could result in difficulties in obtaining and maintaining the support of our COIs at existing sites or in developing new projects, as well as reduced talent pool from which to recruit. 	<ul style="list-style-type: none"> Reputational harm could result in Pan American Silver having difficulty: <ul style="list-style-type: none"> Obtaining capital at favorable prices. Obtaining and maintaining support from COIs for operations or projects. Ability to attract and retain top-talent. Maintaining and improving investor confidence. 	<ul style="list-style-type: none"> Increasing investment demand if mining companies involved in critical metals become favored. COIs perceiving Pan American as a responsible mining company with reduced risk due to exemplary performance in climate-change management and related disclosures.
Technological	<ul style="list-style-type: none"> Competitive demand for advanced technology products. Current technology rendered operationally inefficient, cost ineffective, or unacceptable to COIs. Technological advancements could affect the demand for our products, as technologies using silver, zinc, lead and copper, become more efficient, or are replaced. 	<ul style="list-style-type: none"> Asset write-offs or impairment, equipment inavailability or increased procurement costs. 	<ul style="list-style-type: none"> Demand for our products could increase if existing transition technologies continue to grow or new technologies utilize our products. Energy is one of our most significant input costs, so improvements in renewable energy generation and storage could drive lower input costs long-term. Also, investments to reduce energy consumption have historically also shown to be cost-efficient.

INITIATIVES

We have estimated our energy and carbon footprints under various strategic business scenarios to establish appropriate and realistic medium and long-term climate-related strategic objectives. We will continue to advance and refine the integration of material ESG and climate-related risks into our business planning to facilitate our ability to quantify the longer-term climate change impacts on each of our assets.

Highlights of this integration include incorporating climate-related considerations into our:

- Ongoing **risk assessments** to ensure the Company remains well informed on its physical and transition risks as climate models are updated and refined.
- **Annual budget** target setting of ESG goals into our corporate financial and strategic planning activities including annual targets for energy use and CO₂Eq emissions.
- **Capital allocation** internal approval process to include estimates for the potential short and long-term impacts on energy use and CO₂Eq emissions in 2024.

Climate-related Risk and Opportunity Assessments

We periodically update our physical and transition risk assessments as new climate models become available.

We have developed the following initiatives based on our assessments of physical and transition related risks:

- Regulatory strategic initiatives: set periodic goals to reduce CO₂Eq, invest in connections

with the grid to reduce direct fuel consumption, drive the transition to renewable energy sources.

- Market strategic initiatives: monitor global markets and engage with stakeholders, support the development of renewable energy alternatives, work within our supply chain to identify opportunities for reducing emissions, and increasingly incorporate climate-related impacts and opportunities into our capital allocation strategy.
- Reputational strategic initiatives: improve our climate change related disclosure and continue to prioritize dialogue and participation with our COIs on climate.
- Technological and Physical Risk Strategic Initiative: develop projects and initiatives that improve energy efficiency and reduce GHG emissions, evaluate and incorporate low-emissions technologies, particularly in mine developments of new zones, continuously update physical risks assessments, and implement our adaptation plans.

In addition, we strive to incorporate climate change strategies by defining long-term projects and development activities that are aligned with our goals of reducing CO₂Eq emissions and producing some of the valuable metals that are useful for our global GHG reduction initiatives. With the Yamana Acquisition, we added underground mines with relatively low carbon footprints in Chile and Brazil, with a potential opportunity for the Chilean mines to obtain clean energy certification in the future given the rapid local and regional energy infrastructure improvements underway. The Brazilian grid is notably one of the cleanest in Latin America, with a

large amount of its electricity being generated from hydro, wind, and solar power.

We operate mines that over time trend towards expanding depths and extents, requiring longer upgradient haulage distances and increased pumping and ventilation circuitry. We have opportunities at multiple long-term assets where careful consideration and planning in mine designs can further minimize life-of-mine CO₂Eq emissions. Some of the CO₂Eq emission reduction projects we define also target direct cost-savings, since as previously described, energy is one of our most significant input costs.

In addition to our current operations, we are advancing significant long-term development projects that are targeting energy efficiency. In particular, we are conducting assessments on the La Colorada Skarn that will consider optimization for efficient use of energy and use of proven technologies that can minimize CO₂Eq emissions.

OUR PERFORMANCE – METRICS AND TARGETS

We use energy to mine, move, and process ore and waste rock as well as for infrastructure, ancillary facilities, logistics, mine ventilation, heating, and dewatering. The type and quantity of emissions from our operations are determined by the energy source, the nature of the mineralization we exploit and the manner in which we mine and process ores, which is largely dependent on the geology and geometry of our deposits. The energy used at our sites comes primarily from diesel fuel for powering heavy equipment and on-site electrical power generation at some limited remote sites or purchased

electricity from regional or national power supply transmission grids. The electricity transmission grid energy we use is trending towards being less carbon intensive as the jurisdictions where we operate are increasing their renewable energy generation mix. Grid electricity has a lower carbon footprint than the remote sites using onsite diesel-powered electricity generation.

2023 Highlights

- Achieved our 2023 energy and emissions goals with over 4% or 230,800 GJ reduction in energy use and 23% or 85,000 t CO₂Eq reduction in GHG emission estimates compared to the 2023 base case.
- Our goals were achieved primarily through securing renewable electricity supply at both our Mexican operations, hauling optimization at Dolores, commissioning an energy efficient ore pass at La Colorada as well as other energy and emission reduction projects across our operations, including:
 - Reduced 186,000 GJ of diesel use due to open pit waste rock haulage optimizations at Dolores.
 - Reduced 36,400 and 33,700 t CO₂Eq of GHG emissions in Dolores and La Colorada, respectively, from securing renewable electricity supply agreements that came into effect in May 2022.
 - Achieved 28,000GJ reduction in energy use and 476 t CO₂Eq in GHG emissions in Timmins through successful ventilation and compressor automation projects.
 - 14,400 GJ and 996 t CO₂Eq reductions through various energy efficiency projects at our Peruvian operations, including haulage

optimizations, precipitation diversions on leach pads, and the conversion to less carbon intensive sources of energy by extending grid connections and installing solar-powered lights in select locations.

- Less than 30% of our consolidated 2023 purchased electricity supply was from fossil fuel generation company wide.

Excluding the Acquired Mines, our energy consumption in 2023 decreased relative to 2022, driven mainly by the end of mining and processing at Manantial Espejo and the increased energy efficiency of our mines mentioned previously. This resulted in an improved average energy intensity of 0.14 GJ/t in 2023, a 14% reduction from 2022 (0.16 GJ/t). The Acquired Mines increased the Company's overall energy intensity to 0.19 GJ/tonne of ore processed, reflecting the relatively higher energy intensities of these mines.

We track GHG emissions intensity at our sites as a useful metric to assess ongoing performance. The more ore we mine and process, the more energy we use. Also, as our mines become deeper and more spatially extended, more energy is needed for mine ventilation, heating and dewatering, and more fuel is required to haul ore and waste rock over greater vertical lifts and horizontal distances. We measure GHG emissions intensity (tonnes of Scope 1 and 2 CO₂Eq per tonne of ore processed) to help us understand the energy efficiencies of our methods and processes and the effects of using less carbon intensive grid energy.

In 2023, our company-wide scope 1 and 2 emissions increased by 22% due to the addition of the Acquired Mines. Excluding the Acquired Mines,

our scope 1 and 2 emissions decreased by 27%, reflecting the greater supply of certified renewable electricity at Dolores and La Colorada, the closure of Manantial Espejo, and increased efficiency at our mines during the operating period. Excluding the Acquired Mines, our GHG emissions intensity fell from 0.009 CO₂Eq/tonne to 0.007 CO₂Eq/tonne. The Acquired Mines increased the Company's overall GHG intensity to 0.010 CO₂Eq/tonne of ore processed, reflecting their relatively higher emission intensities.

We completed our estimate of Scope 3-Value Chain emissions on an expenditure basis using environmental input-output datasets such as the World Input-Output Database (WIOD), following the methodology set out by the Quantis Scope 3 Evaluator tool. For downstream processing of mineral concentrates, we obtained direct emissions data from the smelters in Peru and Mexico that smelt and refine the zinc and lead concentrates from our mines. This data provides direct accurate downstream GHG emissions data for the processing of our mineral concentrates, which is incorporated in our overall Scope 3 estimate (1,256,224 tonnes CO₂Eq for 2023). The emission factor used for the refining of gold and silver doré is that reported by the WGC.

2024 Targets

Our targets for 2024 were developed through our annual budget development process and have set two specific 2024 targets:

- Implement projects and initiatives to reduce water withdrawn for use by 108,000 m³ which represents approximately 0.7% of the 2024 base case.

GHG Emissions (2021-2023)

GHG Emissions ⁽¹⁾⁽²⁾⁽³⁾ (Tonnes CO ₂ Eq)	2023 Total	2023 without Acquired Mines	2022	2021
Scope 1 – Direct ⁽⁴⁾	309,406	203,814	274,298	294,799
Scope 2 – Electricity ⁽⁵⁾⁽⁶⁾	121,240	50,679	77,133	107,255
Total Scope 1 and 2	430,647	254,493	351,431	402,054
Scope 3 - Value Chain ⁽⁷⁾	1,256,224	703,553	768,897	716,253

(1) Gases included in this calculation are CO₂, CH₄ and N₂O. However, HFCs, PFCs, SF₆, and NF₃ are not considered as they represent an immaterial amount in our GHG inventory.

(2) The consolidation approach is operational control.

(3) Biogenic emissions have been determined to be immaterial in our GHG inventory based on its magnitude.

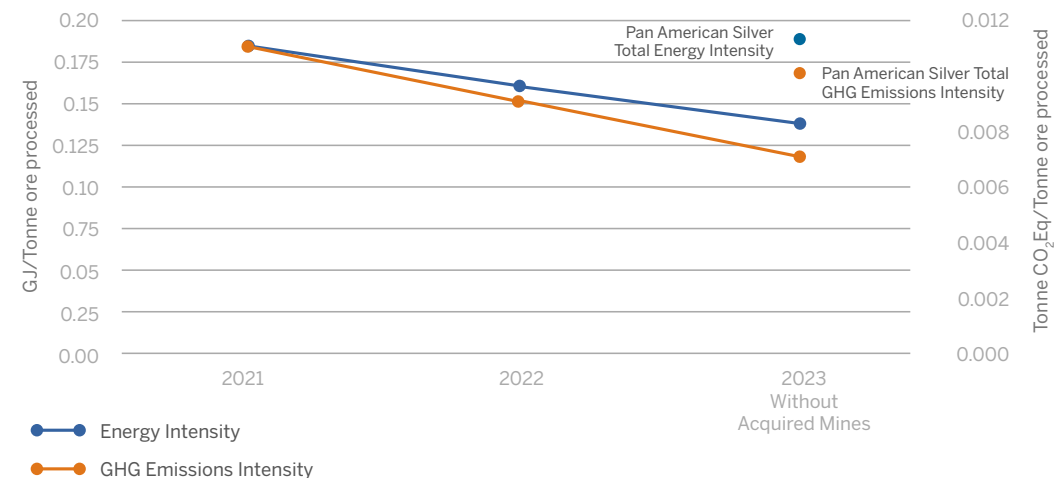
(4) Pan American Silver used National Inventory Report Canada to calculate Direct (Scope 1) GHG emissions. The global warming potential (GWP) is based on the information provided by the Government of Canada. The GHG protocol and B.C. Methodological Guidance for Quantifying Greenhouse Gas Emissions are used as reference.

(5) Emission factors were updated this year for fuel combustion based on the information in the National Inventory Report Canada.

(6) Emissions from purchased electricity are calculated using a market-based approach aligned with the GHG protocol. The latest available data from the IEA (2023) Emission Factors is used for sites where there are no renewable electricity contracts, and supplier specific factors are not available. The location-based Scope 2 emissions for 2023 are estimated at 196,485 t CO₂Eq and 120,097 t CO₂Eq for 2022; however, these estimates are included to comply with GRI only and are not considered representative of our actual performance.

(7) We obtained emissions factors for calculating upstream Scope 3 emissions from the World Input-Output Database (WIOD), accessible through the Quantis Scope 3 evaluator tool. For downstream Scope 3 emissions, we extracted emissions factors from the 'Gold and Climate Change: Current and Future Impacts' report issued by the WGC.

Energy⁽¹⁾ and GHG Emissions⁽²⁾ Intensity



(1) All fuel, electricity, and explosives energy sources used within the organization are included in the intensity calculation.

(2) Gases included in this calculation are CO₂, CH₄ and N₂O, and includes Scope 1 and 2 emissions.

- Implement projects and initiatives to reduce energy use by 23,000 GJ which represents approximately 0.3% of the 2024 base case, and to reduce GHG emissions by 2,000 t CO₂Eq which represents approximately 0.5% of the 2024 base case.

2030 Target

We are committed to reducing our global scope 1 and scope 2 GHG emission estimates by at least 30% by 2030 (from a 2019 baseline) through the following initiatives:

- **25%-40% reduction** from closing down operations which have reached the end of their mine lives and transitioning to lower emission intensity operations.
- **5%-15% reduction** through the transition of energy supply to renewable sources where appropriate and available.

- **5%-10% reduction** through the electrification of fossil fuel driven equipment and processes, and energy efficiency projects.

The updated 2019 Baseline reflects the inclusion of the Acquired Mines as well as the disposal of Morococha in 2023.

All of our operations are committed to identifying projects aimed at energy efficiency and greenhouse gas emission reductions. Since establishing our 2030 goal and base year, we have been actively engaged in various projects targeting GHG reduction, including:

- Sourcing additional certified renewable electricity at our operations in Mexico, resulting in a reduction of more than 70,000 t CO₂Eq.
- Further optimizations of haul truck routes and pit backfilling at Dolores accounting for more than 20,000 t CO₂Eq reduction.

- Switching from propane to CNG as the main heating source at Timmins resulting in a reduction in emissions of approximately 1,800 t CO₂Eq
- Improving efficiency of sludge handling at water treatment plants at La Arena, resulting in a reduction of approximately 1,500 t CO₂Eq/year.
- Fan automation at Bell Creek mine resulting in a reduction of around 200 t CO₂Eq/year.
- Installation of photovoltaic electricity generation in various areas of the El Peñon, resulting in a reduction of 190 t CO₂Eq/year.

- Evaluation the use of electric or hybrid vehicles and the utilization of cleaner fuels.
- Expand the purchase of renewable grid electricity through Power Purchase Agreements or certifications from renewable electricity suppliers.
- Improve overall energy efficiency.

- Update our scenario analysis and financial impact sensitivity analytics based on the full consolidated company energy profile inclusive of the 2023 acquired mines and the monitoring of changes to transition risks over time.

- Perform comprehensive jurisdictional and operation specific climate change vulnerability and risk assessments, to inform our continuously improving mitigation strategies.

- Strive to include climate-related performance metrics into future financing arrangements and in our key COI agreements.

- Continue to monitor our scope 1, 2 and 3 emission estimates and improve on our short-term target setting.

- Continue social project initiatives that address climate change, which have been incorporated throughout our operations. These projects include planting native grasses and water capture in communities surrounding our San Vicente mine, installing geotanks and drip irrigation systems in the communities surrounding our Shahuindo mine, and rangeland management education and solar-powered irrigation installations in the communities near our Dolores mine.

NEXT STEPS

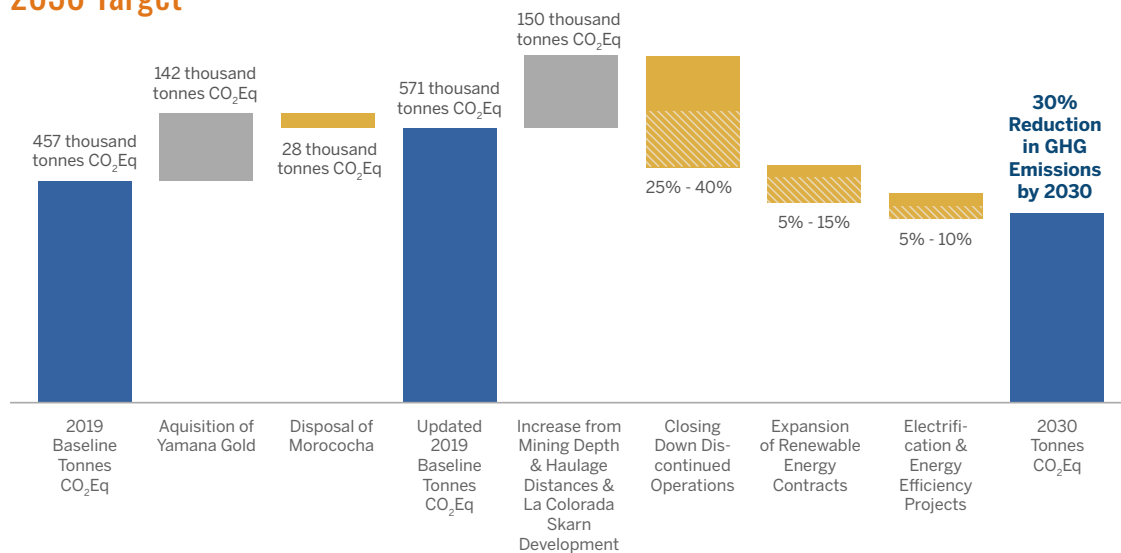
We strive to inform our stakeholders and to incorporate their feedback when developing our strategies and goals. We are focused on achieving our 2030 goal of reducing GHG emissions by at least 30% relative to our 2019 baseline with the intention of reaching net zero emissions in 2050 or earlier, as permitted by the continued improvement in mining equipment technology, carbon capture use and storage or use of carbon offsetting.

We will continue our efforts to ensure climate-related issues receive the appropriate attention from our Board and management so that an effective strategic response can be established and implemented accordingly, and sufficient, transparent, and timely climate-related disclosures can be made to our COIs.

Our key next steps to continually improve how we address climate-change and related disclosures include:

- Pursue medium-term projects and initiatives to achieve our goal of at least a 30% reduction of GHG emissions by 2030 (from a 2019 baseline) including:

2030 Target



FORWARD-LOOKING STATEMENTS

This report contains “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995, and “forward-looking information” within the meaning of applicable Canadian provincial securities laws. All statements, other than statements of historical fact, are forward-looking statements or forward-looking information. Forward-looking statements or information in this report relate to, among other things: whether our approach to sustainability will be successful, and whether we will be able to achieve our goals and objectives related to, among other things, sustainable development, safety, social performance, stakeholder engagement and relationships, human capital development, inclusion and diversity, environmental and tailings facility management, and mitigation of climate change (including with respect to greenhouse gas emissions, energy efficiency, and water management); plans regarding the implementation of an enterprise-level risk management in 2024; expectations regarding the continued adoption of new technologies to improve the management of our critical facilities; plans to introduce critical risk management software at two operations in 2024; expectations regarding future audits; the duration and effect of the license suspensions relating to the Escobal mine, as well as the court-mandated ILO 169 consultation process in Guatemala, and the timing and completion thereof; our future expectations with respect to closure plans; our future expectations with respect to climate and the environment, and the potential future impacts on

our mines and other activities, including as it relates to water availability and usage; and our ability to successfully complete any capital projects, including the timing for the installation of exhaust fans at La Colorada, and the expected economic or operational results derived from those projects.

These forward-looking statements and information reflect the current views of Pan American Silver with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by Pan American Silver, are inherently subject to significant operational, business, economic and regulatory uncertainties and contingencies, and such uncertainty generally increases with longer-term forecasts and outlook. These assumptions include: future changes in the environment and climate that may be unanticipated and the impacts on our business, including with respect to water availability and usage; currency exchange rates remaining as estimated; availability of funds for Pan American Silver’s projects and future cash requirements; capital, decommissioning and reclamation estimates; prices for energy inputs, labour, materials, supplies and services (including transportation); no labour-related disruptions at any of our operations; all necessary permits, licenses and regulatory approvals for our operations are received in a timely manner; our ability to secure and maintain title and ownership to properties and the surface rights necessary for our operations and activities; and our ability to comply with environmental, health and safety, and other laws. The foregoing list of assumptions is not exhaustive.

Forward-looking statements and information involve many known and unknown risks, uncertainties and other factors that could cause actual results or performance to be materially different from the results or performance that are or may be expressed or implied by such forward-looking statements or information, including, but not limited to, factors, such as: metal price fluctuations, fluctuation in the costs of energy, labour, materials and other inputs, fluctuations in currency markets and exchange rates, operational risks and hazards inherent with the business of mining (including environmental accidents and hazards, industrial accidents, and severe weather events); risks relating to the credit worthiness, financial condition or business practices of suppliers, refiners and other parties with whom Pan American Silver does business; inadequate insurance, or inability to obtain insurance, to cover these risks and hazards; employee relationships with, and claims by, local communities and Indigenous Peoples; our ability to obtain all necessary permits, licenses and regulatory approvals in a timely manner; changes in laws, regulations and government practices, as well as other legal or economic developments, in the jurisdictions where we may carry on business, including legal restrictions relating to mining; risks related to taxation, including but not limited to the results of ongoing tax audits in Mexico; risks relating to the court-mandated ILO 169 consultation process in Guatemala; and those factors identified under the heading “Risks Related to Our Business” in Pan American Silver’s most recent Form 40-F and Annual

Information Form filed with the U.S. Securities and Exchange Commission and with Canadian provincial securities regulatory authorities, respectively. Pan American Silver has attempted to identify important factors, but there may be other factors that cause results not to be as anticipated, estimated, intended or described. Investors are cautioned against attributing undue certainty or reliance on forward-looking statements and information. Pan American Silver does not intend, nor assume, any obligation to update or revise forward-looking statements and information except to the extent required by applicable law.



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REPORT FEEDBACK

Any feedback regarding this report is welcome. Please direct your comments or questions to: esg@panamericansilver.com