



# BUILDING ON STRENGTH

Sustainability is the integration of environmental, economic and social principles in development to ensure that present needs can be met without compromising the needs of future generations.

**Table of Contents**

About Pan American Silver	1
Chairman's Letter	3
President's Letter	4
About our Report	6
Stakeholder Engagement	6
Materiality	7
Goals Scorecard	8
Sustainability Management	10
Year in Review	11
Governance	13
Social Development Strategy	16
Toolkits and Guidance	17
CSR Programs	18
Sustainable Development Projects	19
Corporate Giving Committee	20
Our People	21
Diversity, Inclusion, and Human Rights	22
Health and Safety	23
Environmental Management	25
Financial Management	28



# About Pan American Silver

Pan American Silver Corp. is a Canadian public company based in Vancouver, Canada. We are the second largest primary silver producer in the world, with almost 6,500 employees and contractors at our mine sites and projects in the Americas. Our common shares are listed on the Toronto Stock Exchange and NASDAQ under the symbols PAA and PAAS, respectively.

In 2015, Pan American achieved record silver production of 26.12 million ounces from mines in Mexico, Peru, Bolivia, and Argentina, along with record gold production of 183,700 ounces.

Our strong production performance in 2015 was accompanied by a 15% decrease in cash costs<sup>1</sup> and a 17% decrease in all-in sustaining costs per silver ounce sold, net of by-product credits.<sup>1</sup>

Despite deteriorating metal prices, our combined operations generated net cash flow of \$88.7 million in 2015, sufficient to fully fund annual sustaining capital of \$73.7 million.

Another highlight of 2015 was the progress of expansion programs at the Dolores and La Colorada mines in Mexico. These expansions will ensure the long-term sustainability of the company as other mines move toward the closure and reclamation phases of the mine cycle.

With a strong balance sheet, Pan American is well positioned in the silver industry for future growth and value creation. Our executive team has worked together for more than a decade and has a track record of success in discovery, development, operations, finance, and mergers and acquisitions. We are applying this proven experience to execute a growth strategy designed to create value for our shareholders, communities and employees while maintaining our reputation as a responsible employer, operator and community partner.

## Our Products

Pan American is proud to produce silver and other important metals to create value and provide economic, social and environmental benefits for the global economy and emerging markets.

## Silver

Often described as “the indispensable metal” or “the element of change,” silver has played a role in human civilization for millennia and continues to be essential in the modern world.

Silver has been used in coinage, jewellery and silverware since ancient times because it is rare and valuable and resists corrosion and oxidation. Silver is still highly prized as a storehouse of value and hedge against economic uncertainty, but its primary use today is industrial.

Silver’s malleability and unsurpassed thermal and electrical conductivity among metals makes it ideal for industrial usage. Electrical switches, engine bearings, cell phones and solar panels all benefit from silver’s unique properties. Silver acts as a catalyst to produce plastics and important chemicals, and its photosensitivity has led to uses in non-digital photography, film and x-rays.

Silver has many “green” applications, notably in the fast-growing solar energy industry. Silver paste is the main ingredient of photovoltaic cells used in solar panels to transform sunlight into power. Transparent silver-coated windows and silver-coated polyester sheets used to retrofit windows reflect the sun’s rays and significantly reduce cooling costs and energy usage.

Silver in nanotechnology is another emerging market. Silver added to carpets and other materials acts as a sterilizer and kills harmful bacteria, eliminating the need for harsh chemical treatment. Silver is also used in air and water purifiers because of its anti-bacterial properties.

Silver’s antimicrobial and non-toxic qualities have helped improve health care. Bandages and ointments use silver to prevent bacterial growth, promote the growth of new cells and accelerate healing rates. Many hospitals use silver in small amounts to coat medical equipment and work surfaces to prevent the spread of antibiotic-resistant superbugs. Silver ions are added to water purification systems in hospitals and other facilities to reduce water-borne illnesses.

Research is continuing to find new uses for silver, with an exciting area being the potential to improve water quality in developing nations. Silver truly is a positive element of change.

(1) Cash costs per payable ounce of silver, net of by-product credits (“cash costs”) and all-in sustaining costs per silver ounce sold, net of by-product credits (“AISCOS”) are non-GAAP measures. Cash costs and AISCOS do not have standardized meanings and Pan American Silver’s method of calculating them may differ from the methods used by other entities. Readers should refer to the “Alternative Performance (non-GAAP) Measures” section of Pan American Silver’s Management’s Discussion & Analysis for the year ended December 31, 2015, for a more detailed discussion of these measure and their calculation.

## Gold and By-Product Metals

Pan American produces significant amounts of gold from its mines in Mexico and South America. This precious metal has been coveted as a tangible, high-quality financial asset throughout human history. Gold's role in currency and the backing of currency continues to this day, along with traditional uses in jewellery, medals, and other symbols of wealth and prestige.

Gold has special properties that make it useful in the modern world. Gold does not tarnish and is a highly efficient and reliable conductor of electricity. Its most important industrial use is in the manufacture of

electronics. Almost every electronic device uses small amounts of gold, notably cell phones and computers. Simply put, gold is as useful as it beautiful.

Pan American also produces by-product copper, zinc and lead from its operating mines.

Copper is highly conductive and is primarily used in electric power generation and electronics. Zinc has strong anticorrosive properties, bonds well with other metals, and is widely used in zinc galvanizing. Zinc is also vital to health as humans require small amounts to grow and function properly, as do animals and plants. The main use of lead is in lead-acid batteries.

## Our Operations and Projects



# Chairman's Letter

ROSS BEATY, *Chairman*

The year 2015 was another year of progress for Pan American Silver, especially in the sustainable development sphere where we demonstrated our commitment to community engagement, health, safety and environmental excellence, and fair-minded, transparent and collaborative management practices.

To me, "sustainable mining" means creating safe and clean working practices, maintaining as healthy a natural environment as possible at and around our operations, and partnering with our employees, contractors, communities and governments to create a strong economic, educational, transportation and healthy environment that will persist long after mining ceases. To achieve this requires a strong mission that sets these objectives at its core, a powerful execution team that can make it happen, and a universal acceptance that achieving sustainable development is simply good business for all. In other words, we believe this is a "win-win" situation for all stakeholders – including our shareholders.

Pan American Silver has grown into a world leading silver mining company. We now work in six countries at fourteen locations (including our administration offices). We employ more than six thousand people including contractors. We provide employment for thousands more who work for our service and material suppliers. And we support communities with tens of thousands who, in some cases, live in impoverished areas with no other regional economic driver.

We "give back" by paying hundreds of millions of dollars in taxes and royalties to local, regional and national governments and this drives investment in health, education and community infrastructure. And we invest millions of dollars each year to directly support local education, health and infrastructure development. We do this because we believe it supports our ability to operate profitably over the long term. It also means that when a mine inevitably reaches the end of its life, we will leave

behind a legacy that really does support sustainable development: a real improvement in the lives of the people in areas where we work – this manifests itself in better trained people living around our operations, better health facilities, better education, better services availability, better road and electricity facilities, and so forth.



A healthy environment, a healthy workplace and a healthy community where we operate all help build Pan American Silver into a better company. Our success in achieving this will make us a more profitable company too – not just in dollar terms, but in human terms and in reputation, something so easy to lose and so hard to achieve. We must remember that our actions speak louder than words, and so we will strive to put into practice the lofty words presented in this report.

The hallmark of a great company is a company that rewards its shareholders because it also looks after its employees, contractors, environment, communities and countries where it works. I am so very proud of our team and our achievements in the spheres of community engagement, sustainable development and worker safety, but we have to continually strive to improve the status quo. If we succeed at this we will maintain our stellar reputation and continue to be a company that new investors will want to buy, new employees will want to work for and people in new locations will welcome us to work in.



## \$93.7 M

spent in local communities

# President's Letter

MICHAEL STEINMANN, *President & CEO*

I am honoured to be the third President and CEO in the 21-year history of Pan American Silver and would like to thank our Board of Directors, employees and investors for their votes of confidence. I am pleased to address our stakeholder audience and appreciate their ongoing interest in our sustainability journey.

I joined Pan American Silver in 2004, and I am proud to be part of a team that built one of the world's foremost silver producers and creates long-term value for shareholders, communities and our employees. I am committed to leading our Company on a continued path of sustainable growth and operational excellence while maintaining our reputation as a responsible operator, employer and community partner.

Ensuring the viability of our operations is an important element of our sustainability strategy. In my role at the helm of our Company, I am constantly reminded of the challenges that our industry has faced in recent years and continues to face today. Financial and capital markets for mining companies were depressed in 2015, and while prices for precious metals have stabilized recently, they are still far below the highs of 2011. In response to these challenges, we have worked tirelessly to improve operating efficiencies and maintain positive margins at all of our mines.

We are pleased to report that 2015 was one of the strongest production years in our history, with record silver production of 26.12 million ounces and record gold production of 183,700 ounces. We also made substantial progress in advancing cost-effective expansion programs at two of our most significant assets, the La Colorada and Dolores mines in Mexico.

We continually strive to maximize and improve our performance in every aspect of our business, particularly safety. We had made huge strides in this regard over the past 5 years, consistently reducing our Lost Time

Injuries and Lost Time Injury Frequency to world class levels, but regrettably and in spite of these efforts we had five fatalities at our mines in 2015. This is a sobering reminder of how important safety is and why safety must continue to be everyone's top priority. We responded with intensive training at all of our operations, with extra training planned for the incorporation of the underground mine and pulp agglomeration plant at Dolores. We also are implementing a Serious Accident Reduction Initiative throughout the Company.



We continued our strong commitment to corporate social responsibility (CSR) with a focus on making every single investment count — whether in education, infrastructure or health. We are investing in projects or initiatives that are cost-effective, well managed, and have the support and acceptance of the communities they are intended to benefit.

A CSR highlight in 2015 was receiving the "Business of the Year" award from the Peruvian Canadian Chamber of Commerce for our contributions to the Alpaca de los Andes Workshops, an artisanal weaving project in Peru. We are proud of the progress and achievements of the weavers, and are also pleased to be recognized as experienced CSR leaders in the mining industry.

In addition to our ongoing community programs, we launched several new CSR initiatives in 2015. In Bolivia, we initiated a nutrition program that will continue for three years, where our local CSR teams are building greenhouses and providing education on nutrition to help improve the health of families that live in 11 communities near our San Vicente mine.

We launched a new formalized CSR social review process, involving site visits from CSR team members from across our operations, to ensure efficiency of the programs at each mine. We want to make sure that international best practices are reflected in all of our operations.

On the environmental front, we are ensuring compliance with internal standards and best practices everywhere we operate. We made important advances in environmental management during 2015. Our operations were successful in achieving Zero Significant Environmental Incidents, maintaining our unblemished record from the previous two years.

Our environmental auditing programs showed a clear reduction in overall non-conformances and in the severity of non-conformances over the audit cycles since 2012, which demonstrates continual improvement at our operating mines.

We successfully completed the environmental permitting process for the La Colorada expansion on time and on budget, and received environmental approval for the pulp agglomeration plant at the Dolores mine. These expansions will help offset production declines as our Alamo Dorado mine moves toward the closure stage. We ensured that environmental considerations were taken into account at the design stage and that they form an integral part of the mine expansion plans.

We advanced the construction of a power line to Dolores, which will reduce costs and improve productivity while also providing an overall reduction in greenhouse gas emissions as we are replacing the on-site diesel fuel generators.

We improved wastewater treatment facilities at our San Vicente and Huaron mines and began a major upgrade to mine-water treatment at La Colorada in conjunction with the mine expansion.

We made considerable progress on closure planning and on our progressive closure activities at the Alamo Dorado mine in Mexico, and at Manantial Espejo in Argentina. We have also communicated our plans to local governments and communities so they can also plan appropriately. At our longer life mines and expansion projects, we are working closely with local contractors and communities to generate opportunities and maintain the relationships of trust that have been established over the years.

We are executing a long-term growth strategy that goes beyond directing our resources towards completion of our organic expansion projects, so that we can continue to utilize our core competencies and create value for stakeholders. We are looking further into the future by acquiring exploration and development projects with strong geological potential. These are the kinds of deals and investments that built Pan American from a single mine in Peru to the second largest primary silver producer in the world. We have the leadership and experience to prudently execute this growth strategy and work collaboratively with stakeholders to share the social and economic benefits of silver mining.

Finally, our accomplishments would not have been possible without our employees and contractors, who contribute their best efforts to our Company. We count on their continued support to complete our projects and to successfully implement our long-term strategy. Because of them, Pan American is a recognized leader in corporate social responsibility and the best positioned silver producer in the industry to deliver value through efficient operations and organic growth, for the benefit of all stakeholders.



# About Our Report

---

**Sustainability is the integration of environmental, economic and social principles in development to ensure that present needs can be met without compromising the needs of future generations.**

Sustainability has profound meaning for Pan American Silver. It underpins our vision to be the best positioned silver producer in the industry, with experienced leadership and the right mix of assets to create value and drive future growth. It defines our sense of responsibility toward the environment, motivates us to protect the health and safety of our employees and contractors, and inspires us to be a force for positive change in the communities and countries where we operate.

## Sustainability Disclosure

Sustainability has been a guiding influence for Pan American since 1994, before the concept was formalized into internationally recognized guidelines and standards. We understood early that our future success depended on proactively integrating environmental and social values into our business model and corporate culture. Starting from a single mine in Peru, we have evolved into a responsible silver producer with seven mines and an exceptional portfolio of mineral projects in the Americas.

We are proud of the role we play in sharing the economic and social benefits of silver mining with our employees, local communities, shareholders and other stakeholders.

As a Canadian-based public company, we disclose our financial and operating results on a quarterly and annual basis, along with details of exploration and development projects that will sustain our future business. We believe that our disclosure and governance systems meet or exceed requirements established by securities regulators in Canada and the United States.

For the past six years, we have released annual Sustainability Reports to disclose our sustainability strategy and performance to a broad audience of stakeholders. We recognize the need to be transparent about the impacts of our operating activities and the outcomes of our sustainability programs.

This report is prepared in accordance with the Core level of the Global Reporting Initiative Guidelines (GRI, G4), the most widely used sustainability reporting standard in the world. This is our third year of using the GRI G4 framework to guide our data collection and reporting practices. Our reporting also is in accordance with the GRI Mining and Metals Sector Guidance supplement.

We obtained External Assurance for our 2015 Audited Annual Financial Statements, including excerpts used in this report, from our external financial auditors. Financial reporting is in US dollars, unless otherwise noted.

# Stakeholder Engagement

---

Stakeholder consultation is a best practice at Pan American Silver, and has been for more than 20 years. Mining companies consult with stakeholders as a matter of principle before launching work programs and consultations continue throughout the mine life cycle. Every engineering study for a proposed mine must consider the social and environmental impacts on stakeholders in order to gain permits and other regulatory approvals. Our business is in many ways dependent on establishing relationships with governments, local communities and other stakeholders that may be involved in our activities.

We have adopted a decentralized approach to stakeholder engagement as we believe that open and honest dialogue is best achieved by understanding and respecting the values and culture of each group. A 'one size fits all' approach to consultation is rarely meaningful or effective. This is particularly true for Pan American, as our stakeholder groups include 6,500 employees and contractors at mines and projects in Mexico, Peru, Bolivia, Argentina, and the United States, and at our head office in Vancouver, Canada. Other groups include shareholders, local communities near our mines and projects, government agencies and non-governmental organizations (NGOs).



In 2013, we recognized the need to have a stakeholder consultation process that could be applied uniformly to each of the jurisdictions where we operate, with exceptions allowed for cultural reasons, and implemented a company-wide questionnaire in 2014. The new process was not intended to replace personal dialogue, but rather to give us appropriate feedback to identify and quantify stakeholder issues and concerns. We repeated the questionnaire process again in 2015, with a company-wide questionnaire.

A total of 206 people responded to our 2015 survey, with the stakeholder type and country of residence shown in the following chart. Our employees represented the majority of respondents at 62%, followed by community members at 24%. The countries where we operate are well represented, with the most responses from Bolivia, Peru and Argentina.

## Materiality

The concept of materiality is the heart of sustainability reporting. Pan American believes that materiality is best determined through open and honest dialogue with our interest groups. To facilitate this consultation process, we sent out a questionnaire to a broad range of stakeholders in Canada, Mexico, Peru, Argentina and Bolivia, to add to direct feedback obtained from our operating, environmental, and CSR teams on the ground.

In accordance with GRI G4 Guidelines, the feedback and responses were incorporated into a "Materiality Assessment", which identified the sustainability subjects or "Aspects" considered most critical to our key stakeholders, including our employees and contractors.

In 2015, the highest ranked Material Aspects generally fell into four categories: Health and Safety; Employment and Labour Practices; Environmental Management; and Community Development. By focusing on these and other identified Aspects, we are better positioned to understand the impacts of our activities, both inside and outside our operating boundaries, and to manage and mitigate these impacts in a safe and responsible manner.

We have also developed other items not specifically included in the GRI framework, which we believe are important in the areas where we operate, such as the rights of children and young people.

Once material aspects are identified, we then analyze whether the impact of each one is internal or external to our Company, meaning does the specific impact occur inside or outside of an operating or administrative boundary. These findings are also disclosed, along with how we intend to manage or mitigate the impacts of our activities in a safe and responsible manner. An integrated approach to analyzing the findings is necessary, as many aspects are interconnected, which can create challenges to balance competing interests. In some cases, the

Aspects or issues may occur both inside and outside of the boundaries of an operation, such as biodiversity.

Materiality assessments help us understand our business and its impacts on stakeholder so we can make informed decisions and set goals and priorities for our sustainability strategy.

This report will describe our management approach to the defined Material Aspects and also review our organizational capabilities and operating performance in a sustainability context.

In addition to Standard Disclosures relating to our sustainability strategy and performance, this report contains a GRI Content section with Specific Disclosures, Appendices and a Glossary.

This year we provide more specific information for stakeholders regarding our sustainability goals. The table below outlines those goals going forward and future reports will give feedback on progress towards achievement.

### Top 10 Material Aspects

1. Occupational Health and Safety
2. Water Extracted, Used, and Recycled
3. Employment
4. Biodiversity
5. Wastewater, Solid Waste, and Spills
6. Competitive Salaries and Local Employment
7. Local Communities
8. Energy Use and Intensity
9. Air Emissions and Greenhouse Gases
10. Training and Education

# Goals Scorecard

This year we are providing more specific information for stakeholders regarding our sustainability goals. The table below outlines those goals going forward and future reports will give feedback on progress towards achievement.

## Sustainability Strategy & Governance

*How we're working towards achieving our goals*

Improve sustainability information available to our stakeholders through sustainability reporting	Work to improve our annual sustainability reports and reporting methods by continuing the implementation of GRI guidelines and developing user-friendly online reports.
Improve our engagement with stakeholders on sustainability issues	Continue to update our stakeholder engagement methodology and increasing the number of stakeholders consulted.

## Health & Safety

Achieve zero fatalities	Implement a detailed Serious Incident Reduction Initiative.
Achieve a lost time injury frequency (LTIF) of 1.60 or less	Continue improving the health and safety standards of all of our mines through technical improvements, training programs, and safety audits.
Achieve a lost time injury severity (LTIS) of 750 or less	

## Labour

Provide training for employees in leadership, safety, and mentoring.	Host leadership workshops for employees across all operations, and encourage skills development and education programs at all levels.
Ensure that the lowest paid Pan American employee is above the livable wage in their region	Evaluate wages at each mine using the "livable wage" criteria and continue our competitive compensation and benefits programs.

## Economic

Produce between 24.0 and 25.0 million ounces of silver	Continue to support operations teams to ensure we meet production budgets at all mines.
Produce between 175,000 and 185,000 ounces of gold	
Keep cash costs in the range of \$9.45 to \$10.45	
Complete La Colorada and Dolores expansions on schedule and budget	Continue strengthening and supporting our projects teams on these key expansion projects.
Foster local procurement practices across operations	Incorporate best practices standards from our social re-view process across all operations where local procurement is material.

## Communities

*How we're working towards achieving our goals*

Implement a social grievance mechanism program	Work with CSR teams at operations to implement and monitor a pilot social grievance mechanism program, and continually assess areas of improvement and development.
Advance the implementation of the Community Development Initiative (CDI) toolkit	Apply the CDI toolkit to new sustainable development projects across all operations to evaluate the potential success and areas still requiring further development.
Conduct social reviews at Dolores and Manantial Espejo mines	Take social review teams to both sites to evaluate aspects in human rights, governance, environmental, fair operating practices, participation, and community development.
Complete a successful finalization and transition of Project Access in Bolivia to the local communities	Work closely with communities involved in Project Access to wrap up the final months and clearly communicate the results, next steps moving forward, and opportunities for future initiatives.
Develop systems to measure and track social impact	Create methodology to be used by our operations and corporate office, and provide training to our CSR teams on social impact assessment.
Continue looking for opportunities to create meaningful partnerships	Continue fostering best practices and building good relationships with NGO's and governments at an international level and in the countries in which we operate.

## Environment

Achieve zero significant environmental incidents	Continue environmental audit program and the implementation of environmental procedures and training at all operations.
Maximize opportunities to reduce energy use and improve energy efficiency to reduce costs and greenhouse gas emission intensity	Complete the power line connection to the Dolores mine and commence power supply upgrades to the La Colorada mine. Develop internal corporate energy use guideline and commence implementation.
Identify water conservation opportunities at our operations	Complete internal corporate level water use guideline and commence implementation at mine sites.
Continue to restore and revegetate habitats for biodiversity conservation	Continue progressive closure, remediation and revegetation activities at all mines in accordance with closure plans, with special focus on Alamo Dorado and Manantial Espejo mines.
Improve solid waste management and re-cycling at our operations	Continue environmental auditing program and complete internal corporate solid waste management guideline for implementation at mine sites.
Improve our environmental management systems	Complete preparation of standards and guidelines for the planning phase of environmental management system development

# 63

schools supported through teachers, infrastructure, materials, and scholarships



## Report Scope and Audience

The scope of this report covers all mines managed by Pan American: Dolores, La Colorada and Alamo Dorado in Mexico; Huaron and Morococha in Peru; Manantial Espejo in Argentina; and San Vicente in Bolivia. Based in Vancouver, Canada, Pan American also holds exploration and developments projects in the Americas, including the world-class Navidad deposit in Argentina.

The intended audience of this report are our interest groups, which includes our shareholders, employees and contractors, local communities and governments, industry associations and regulatory agencies, non-governmental organizations and civil society.

# Sustainability Management

---

**Sustainability management is often defined as a commitment to integrate social and environmental considerations into economic endeavours. A more robust definition is how companies adapt to social change, meet environmental challenges and align their corporate objectives with the priorities and interests of stakeholders.**

Pan American Silver has a 21-year history of addressing sustainability issues based on industry best practices that have evolved over time. In recent years, we recognized the need to develop a formal framework to integrate our sustainability principles and policies throughout our business. We designed and implemented a new stakeholder engagement process to identify the issues of greatest importance to our communities of interest. The responses were translated into a materiality assessment that allows us to better define our sustainability goals and priorities.

The assessment confirmed that occupational health and safety is a top priority for our employees and contractors. We learned that competitive salaries matter to people everywhere, along with non-discriminatory practices in the workplace. The environment and community development have always been important concerns, but consultation has pinpointed specific aspects that will help us be more responsive to communities affected by our operations.

Stakeholder feedback has allowed us to design and optimize our sustainability strategy to support our

business goals, manage and mitigate impacts and risks, and maintain a balance between economic success, environmental protection and social responsibility.

## Our Sustainability Strategy

The overall strategy for sustainability at Pan American is set by the Board of Directors, which also provides guidance on the policy framework for sustainability management. The day-to-day implementation of the strategy is the responsibility of executive and senior managers with more specialized mandates, such as operations, health and safety, or community relations as examples.

Integrating sustainability goals and objectives into mining operations is an evolving challenge. Stakeholders have questioned how the concept of sustainable development can apply to an industry that directly impacts on the environment and local communities. Clearly these impacts have to be managed or mitigated throughout the mine life cycle, which we believe is possible through a commitment to best practices, including appropriate reclamation and closure planning.

Our sustainability strategy is a mandate to continually improve our management systems, policies, programs and practices to strengthen our business and ensure that we operate in a safe, environmentally sound and socially acceptable manner, and generate value for stakeholders.

Other sections of this sustainability report will disclose in greater depth how we manage material issues and also discuss our performance on specific issues.

# Year in Review

STEVE BUSBY, *Chief Operating Officer*

The mining industry has faced complex challenges and pressures in recent years due to the downturn in commodity markets and the global economy. Pan American has a reputation of overcoming industry challenges and finding opportunities to create value for shareholders and other stakeholders. In 2015, we demonstrated our ability to reduce costs as we continued to mechanize our underground mines Huaron and Morococha and expand our long-term assets, notably La Colorada and Dolores in Mexico. These timely initiatives will improve our production performance and ensure that we are the best positioned silver producer in the industry when markets improve.

Overall, 2015 was a good year, with record gold and silver production and positive cash flow from operations. It was also a challenging year, with five fatalities that led to ongoing initiatives to improve our safety performance everywhere we operate. We are also working to ensure the long-term sustainability of our business, as our mines must be financially robust if we are to create value and generate benefits for employees, communities and other stakeholders.

Pan American marked one of its strongest production years in recent history in 2015, with record silver production of 26.12 million ounces and record gold production of 183,700 ounces from our mines in Mexico and South America. It was a year of transition as well, with expansion programs continuing at La Colorada and Dolores while other operations move toward closure.

Mines have finite lives and we prepare for this reality many years in advance to ensure that our business is viable and sustainable over the long term. In 2015, we focused on adding value to our long-term assets, La Colorada and Dolores. These efforts are expected to bear fruit in terms of higher production and lower costs, starting in 2017. We also continued to mechanize our mines, as this will also allow us to improve our operating performance — and our safety performance.

Safety was a critical issue in 2015, and we are focusing substantial efforts in the areas highlighted in the President's Message.

Market conditions continued to be challenging in 2015, but we met these challenges through the skills and innovation of our mine managers, supervisors and employees. An important story of the past year was our ability to find

opportunities for cost savings under present market conditions, further supported by low fuel costs and favourable currency exchange rates.

Along with record silver and gold production in 2015, we are pleased to report that we have reduced our consolidated cash costs<sup>1</sup> by 15% from 2014 to \$9.70 per payable ounce of silver, net of by-product credits. We also cut our consolidated all-in sustaining costs by 17% to \$14.92.

Our record-setting performance last year helped us generate strong operating cash flows of \$88.7 million, or \$0.58 per share, which is more than sufficient to cover annual sustaining capital of \$73.7 million. Weak metal prices and write-downs at several mines resulted in a net loss of \$231.5 million for the year. Our balance sheet remains healthy, and at year-end we had \$226.6 million in cash and short-term investments, and a working capital position of \$392.2 million.

Pan American expects to produce between 24 and 25 million ounces of silver and between 175,000 and 185,000 ounces of gold in 2016, along with by-product zinc, lead and copper. We also aim to reduce consolidated cash costs to between \$9.45 and \$10.45 per ounce of silver, net of by-product credits, with further cost reductions as the expansion programs are completed.

(1) Cash costs is a non-GAAP measure and does not have a standardized meaning. Readers should refer to the "Alternative Performance (non-GAAP) Measures" section of Pan American Silver's Management's Discussion & Analysis for the year ended December 31, 2015, for a more detailed discussion of this measure.

## Expansion Projects and Mine Mechanization

In 2015, we invested \$76.5 million in long-term project capital to advance the La Colorada<sup>1</sup> and Dolores<sup>2</sup> mine expansions in Mexico. These expansions will help offset production declines at several other mines that are moving toward the closure and reclamation stages of the mine cycle.

La Colorada is an underground mine situated in the Sierra Madre mountain range in Zacatecas. It produces oxide and sulphide polymetallic ores that are treated in separate processing plants.

The expansion program began in early 2014 and requires a total investment estimated at \$163.8 million, including

sustaining and project capital until 2017. The main components are a new 600-metre-deep mine shaft and hoisting system and a new sulphide processing plant. A new 115 kV power line will support the expanded operation and also improve energy efficiency and air quality once it replaces diesel-powered generators.

Once completed, the production rate at La Colorada will increase to 1,800 tonnes per day (“tpd”) from 1,250 tpd. Annual silver production is forecast to increase to 7.7 million ounces in 2018. It is our largest silver producing mine, and has exceptional potential for additional resources to be defined at the mine site.

Dolores is an open pit, heap leach mine in Chihuahua, Mexico, that is being expanded in order to more optimally treat higher grade material.

The investment in the expansion project is estimated at \$112.4 million. The main components are a new 5,600 tpd agglomeration plant and a new 1,500 tpd underground mine to access material both below and to the South of the open pit.

Once completed, the production rate at the expanded mine will increase to an estimated 20,000 tpd from 16,500 tpd. Average annual silver production is projected to increase by 40% to 6.3 million ounces from 4.5 million ounces, while annual gold production is projected to increase by 52% to 205,700 ounces from 135,100 ounces. We also expect to reduce average cash costs at Dolores through operating efficiencies and higher gold production.

We continued to mechanize our underground mines, notably Huaron and Morococha in Peru, as part of a strategy to maximize the value of our operations and the benefits they produce for stakeholders. Currently 100% of the production from Huaron is mechanized and Morococha is moving in that direction.

The change to mechanized trackless mining from manually-intensive conventional mining using jackleg drills and rail haulage was a modernization that required upgrading our underground ventilation systems. The end result is safer mines, more efficient mines that allow us to increase production at lower unit costs.

For additional information, please refer to the Company’s technical reports entitled “Technical Report – Preliminary Economic Analysis for the Expansion of the La Colorada Mine, Zacatecas, Mexico”, with an effective date of December 31, 2013, and “Technical Report for the Dolores Property, Chihuahua, Mexico - Preliminary Economic Assessment of a Pulp Agglomeration Treatment and Underground Option”, with an effective date of May 31, 2014. The results of these preliminary economic assessments are preliminary in nature, in that they include inferred mineral resources that are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the assessment will be realized. Mineral resources that are not mineral reserves have no demonstrated economic viability.”

## Creating Value

Pan American has a multi-faceted strategy to create value that extends beyond cost containment and productivity improvements at producing mines. Expanding and mechanizing existing mines as outlined above is a prudent and strategic element of our strategy, as time requirements and capital costs are usually much less than investing in new mines.

Another cost-effective way to add long-term value is through targeted exploration. We believe that our track record of mineral reserve replacement is one of the best in the business. Since 2004, we have added 293 million ounces of contained silver to mineral reserves through mine-site exploration, fully replacing 291 million ounces mined in the same period.

At year-end 2015, our proven and probable mineral reserves stood at 280 million ounces of contained silver and 2.1 million ounces of contained gold.<sup>3</sup>

Maintaining a project pipeline is also essential to the long-term sustainability of our business.

Along with mine-site exploration to replace mined mineral reserves, we also acquire or option mineral projects, and in some cases have acquired junior companies when opportunities arise that make sense from a business perspective.

Pan American has a portfolio of mineral projects at various stages of exploration and development and the expertise and experience to be selective in deciding which projects are most likely to attract investment capital and create long-term value.

Our Manantial Espejo mine in Argentina has a few years of life ahead, but we are exploring the surrounding area and have already identified targets that warrant further exploration. Our Navidad project continues to be an important asset and we are optimistic that provincial and national governments will ultimately recognize its value as a potential seed of prosperity. This is the type of project that could help sustain the region and provide employment for generations.

The current market conditions offer the potential to invest in attractive silver projects held by junior companies. We actively explore such opportunities as part of our growth strategy. As an example, we recently entered into an option agreement in connection with prospective silver properties and deposits in the Promontorio Mineral Belt of Mexico.

# Governance

---

Governance is more than a set of policies and procedures that companies use to direct and manage their affairs and comply with applicable laws, regulations and standards in the jurisdictions where they operate. Good governance requires strong leadership to ensure that the values and vision of the corporation are integrated into business decisions and strategies.

This is particularly true in the mining industry, which has high exposure to risk and operates in a complex and demanding legal and regulatory environment under cyclical market conditions.

Governance in the mining industry is a dynamic process that has evolved since the times when the emphasis was placed solely on the financial well-being of the company and protecting the interests of shareholders. Directors are now expected to consider the social and environmental impacts of mining activities and encourage proactive engagement with a wider stakeholder community.

Pan American Silver has strong leadership with the right mix of experience and expertise to ensure good governance and provide oversight and direction of strategic objectives, including sustainability goals. We have developed a governance structure that defines the roles and responsibilities of our Board of Directors, executives and senior managers, and also promotes accountability and ethical business practices throughout the Company. We believe a balanced approach to governance is essential to uphold investor confidence and build stakeholder trust.

This section of the Sustainability Report will explain the roles and responsibilities of our Board of Directors and senior management teams, review our governance policy and program framework, and discuss the external government, regulatory and civil oversight of our business.

## Roles and Responsibilities: The Board and its Committees

The Board of Directors has overall responsibility for the stewardship of Pan American Silver and provides direction with respect to its values, vision and overall corporate strategy. As the top-level body in the Company, the Board provides oversight of our business activities and ensures that governance structures and systems protect the interests of investors and our communities of interest. The responsibilities of the Board are broad in scope and challenging, which is why we value the industry experience, good judgement and exceptional competencies of our directors.

In 2015, the Board was comprised of seven individuals, including the Chair of the Board. The majority of directors are independent to ensure impartiality.

Independence is not determined solely on legal or regulatory definitions. We also determine independence based on a director's ability to act objectively, free from material relationships to the Company. We believe that having a majority of independent directors improves our corporate governance and helps prevent conflicts of interest and other potential risks.

Board members are elected each year at the Company's annual meeting of its shareholders. As a Canadian-based public company, we have adopted the majority voting policy. Under this policy, a director must tender his or her resignation if he or she is not elected by at least a majority of the votes cast, except in cases where the meeting is contested. Within 90 days of the relevant meeting, the Board will determine whether to accept the registration or not, and issue a news release stating the reasons for their decision. Our policy is to accept tendered resignations unless there are exceptional circumstances to justify a refusal. A director who tenders a resignation pursuant to the majority voting policy will not participate in any Board meeting, or any committee meeting at which the resignation will be considered.

The Board appoints a Lead Director whose primary responsibility is to ensure that the Board functions independently of management, and who acts as a liaison between the independent directors and the Chief Executive Officer. The Lead Director holds in-camera meetings at each regularly scheduled Board meeting with the other

independent directors, and then reports to the Board as required. In-camera meetings are private sessions to discuss, among other things, sensitive issues or matters that must be kept confidential for legal or regulatory reasons. Our Chair, who was previously an executive with the Company, does not attend in-camera sessions held by the independent directors.

Along with evaluating the management and performance of the Company on a regular basis, the Board plays a significant role in developing governance and sustainability policies and guidelines. Directors also must consider and monitor a broad range of potential risks, including market uncertainties, and ensure that appropriate systems are in place to manage these risks.

To help fulfil these diverse responsibilities, the Board has established five committees that have important roles in the Company's business and in sustainability and governance matters.

- The **Audit Committee** provides oversight of financial accounting, reporting and disclosure practices, and risk management and internal controls related to such matters. All Audit Committee members are independent.
- The **Health, Safety, Environment and Communities Committee** provides policy direction and oversight of safety and environmental matters. The Committee also receives management reports and audits conducted to assess compliance with internal policies and industry best practices. Currently, two of its three directors are independent.
- The primary role of the **Nominating and Governance Committee** is to oversee the effective functioning of the Board and the implementation of governance best practices. This Committee consists of two independent directors who work closely with our General Counsel and Corporate Secretary to monitor developments in corporate governance and provide guidance on governance-related matters, including our codes of conduct. The Committee is involved in Board succession planning and proposes Board and committee nominees on the basis of the qualifications and experiences necessary for these positions. All Nominating and Governance Committee members are independent.
- The **Human Resources and Compensation Committee** assists the Board in fulfilling its responsibilities related to human resources and compensation matters. In addition to making

recommendations to the Board in respect of the overall compensation strategy, this Committee comprised of three independent directors also conducts annual assessments to evaluate potential risks associated with compensation programs. All Human Resources and Compensation Committee members are independent.

- The **Finance Committee** assists the Board in monitoring and reviewing the Company's financial structure, investment policies and financial risk management program. It also makes recommendations related to these matters as appropriate. Currently, three of its four members are independent.

These committees act on issues directly related to their specific charters, but at times issues may overlap and ultimately involve the Board as a whole. We have developed a system of governance with the flexibility to respond to complex issues as they arise. By having a team-based governance system rather than a rigid organizational structure, we are better positioned to proactively respond to industry change and the aspirations of our communities of interest.

For a more detailed discussion of the roles and responsibilities of our Board of Directors and our Board Committees, or for further information on how our Directors are elected, please refer to the Company's most recent Information Circular available on the Company's website and at [www.sedar.com](http://www.sedar.com).

## Roles and Responsibilities: Executive and Senior Management

The Board has top-level responsibility for governance and sustainability and part of this mandate is to ensure that the Company has qualified executives and senior managers to lead day-to-day operations and implement corporate objectives and policies. In this respect, management provides the leadership and the momentum to instill good governance procedures and ethical practices throughout the Company.

Our executive and senior managers have diverse expertise and experience that allows us to responsibly operate mines in four countries, effectively manage our financial resources, and ensure compliance with laws and regulations in multiple jurisdictions. They are role models for our employees and contractors; each member is expected to be aligned with our values and culture in order to encourage Company-wide honest and ethical practices.



The Vice President of Environment and Sustainability actively directs and oversees programs related to this mandate at all levels, from the front lines of the mines to boardroom presentations, and reports to the Company's Chief Operating Officer. Of particular importance is the Sustainable Development Management Committee, comprised of the Vice President of Environment and Sustainability and management representatives from each of the countries in which we operate, as well as various other related disciplines. We believe that the combined expertise and experience of this management committee helps us effectively manage sustainability issues and challenges in each of the jurisdictions where we operate.

Our executive and senior managers have many specialized roles and responsibilities that are explained in detail in other sections of this report, including the Community Relations, Environmental Management, Health and Safety, and Human Resources sections.

## Policy and Program Framework

Pan American Silver has adopted a number of policies and guidelines that provide a framework for ethical business practices and the ethical conduct of directors, officers and employees. They promote integrity, accountability and transparency throughout the Company, and also help ensure that we are compliant with legal and regulatory requirements and industry best practices.

- The **Global Code of Ethical Conduct** (the "Code") is the foundation of our policy and program framework and reflects our commitment to high standards of governance and corporate ethics. As such, all of our directors, officers and employees are expected to comply with Code, assist and cooperate with audits and investigations in connection with the Code and related policies, and promptly report any violations of the Code.
- The **Global Anti-Corruption Policy** articulates our position against using tactics of bribery or corruption or other means of obtaining an improper business advantage. This is an important safeguard for any mining company with diverse geopolitical exposure.

The Code and the Global Anti-Corruption Policy together provide the fundamental tenets to ensure that we consistently operate in an ethical and responsible manner in compliance with applicable laws, rules and regulations.

Every employee — from the head office to the mine sites — and all of our directors, senior managers and service providers are expected to conduct themselves in an honest

and ethical manner consistent with the Code and Anti-Corruption Policy and take responsibility for their actions. To enforce these high standards, we analyzed all of our business units for risks relating to potential corruption and ethics violations and have established compliance mechanisms to support the Code and Policy. We have distributed these documents internally, and to many third parties with whom we do business, to ensure that our governance expectations are understood and respected.

We have, at various times, conducted training sessions with management and administrative personnel in Argentina, Bolivia, Mexico and Peru, along with training sessions with senior management in Vancouver, to reinforce the importance of good governance and ethical business practices. We plan to continue with, and improve, our ethics and compliance training.

Another important element of our governance framework is the process for reporting complaints of an ethical, accounting or audit nature, which can be done on a confidential basis without fear of reprisals, discrimination, harassment or retaliation. Directors, officers and all employees are responsible for reporting any actual or potential unethical or illegal activity, including on a confidential or anonymous basis if desired. Persons who are not employees can also submit complaints by delivering a written report by mail or courier to the General Counsel, marked private and confidential.

Pan American has adopted other policies to support ethical business practices and good governance. Of particular note is the Corporate Social Responsibility Policy, which articulates our commitment for the responsible development of mineral resources in harmony with the communities where they are located. This policy is described elsewhere in this report, along with other policies that complement our governance and sustainability framework.

## External Oversight and Guidance

As a Canadian company listed on the TSX and NASDAQ, Pan American Silver must comply with securities regulations and exchange rules and requirements designed to protect investors and the integrity of financial markets. These rules and regulations include elements of good governance, such as having a majority of independent directors and ensuring the protection of shareholders' rights. They also include rigorous requirements for the disclosure of financial information, changes in insider share ownership, and material transactions or changes such as mergers or acquisitions.

We also must disclose our technical information, including production results and mineral reserves and mineral resources, using standardized terms and definitions approved by securities regulators and mining associations. Our technical reports must be signed off by a qualified person.

The external oversight of publicly listed mining companies is not confined to stock exchanges and securities regulators. We also must adhere to government legislation and regulations that apply in the various jurisdictions where we operate. The legal and legislative framework may vary depending on the jurisdiction, but as a Canadian

company we are expected to conduct our activities to the highest standards and apply industry best practices at home and abroad. We believe it makes good sense to do so, consistently, as the mining industry in general faces intense scrutiny from non-governmental organizations and environmental groups.

Our governance policy and program framework, while internally developed, is designed to take into account the external factors that affect our industry, including market uncertainties and increasingly complex economic, environmental and social issues. We can't expect to control these external factors, but we can develop effective response strategies to navigate them.

## Social Development Strategy

Pan American Silver defines Corporate Social Responsibility as “the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve the quality of life, in ways that are both good for business and good for development.”

Our approach to social development is based on our belief that we can be a force for positive change in the communities where we operate.

Our commitment to sustainability is an ongoing journey, as we face the challenge of operating seven mines in four countries, with some mines in the expansion phase and others nearing closure. Some of our operations are near communities that have basic services and amenities while others are in remote, sparsely populated regions with little or no infrastructure. We also have almost 6,500 employees and contractors from a variety of cultural, social and educational backgrounds.

A central tenet of our CSR approach is building relationships and trust with communities and other stakeholders, including our mine employees, who are

mainly from local communities and regions. This process begins with community engagement, as articulated by the following commitments of our CSR policy:

- meet or exceed industry standards for community engagement, adhering to the laws and regulations of the countries and regions where we operate; and
- endeavour to engage our communities in a timely, inclusive, honest, transparent and culturally appropriate way before undertaking significant activities and at appropriate stages throughout the life of a project.

We learned that a ‘one-size-fits-all’ approach to community engagement is not effective, as the countries and regions where our mines are situated are very different. We have had to conduct cultural due diligence and tailor our CSR approach to each mine.

Having a hands-on approach to community engagement helps us navigate cultural differences with sensitivity. We conduct workshops to educate community-based service providers about the non-negotiable safety and environmental standards that we require as a Canadian company, which are sometimes more stringent than local regulations. The Government of Canada expects Canadian companies to embody CSR best practices and operate to the highest ethical standards, as articulated in its enhanced CSR strategy, “Doing Business the Canadian Way.” Community engagement is an important part of this strategy, as we want our employees and communities to see the realities of our industry so we can work together for mutual benefit.

Community engagement is an ongoing commitment throughout the mine life cycle. Our policy is to start consultations at the earliest possible stage of project planning and continue at appropriate stages through to mine closure.

Ongoing consultation is also important because community acceptance can never be taken for granted. Community trust must be earned every day, by every person on our team.

## Toolkits and Guidance

Another important commitment of our CSR policy is to monitor, continuously improve and publicly report our CSR related activities and performance.

Several years ago we recognized an opportunity to make improvements to our CSR tools and practices because inconsistent methods were giving uneven results across the corporation. We also decided to communicate our CSR goals and objectives in a more consistent and effective manner both internally and externally.

An early initiative that helped improve our CSR performance was sustainability backcasting, which is a planning tool to envision and analyze a sustainable future by looking backwards from that future to the present in order to plan how it could be achieved. In contrast, most forecasting tools use scenario development to extrapolate the present toward the future. Our vision is to be a leader in sustainable mining and the backcasting exercise conducted several years ago helped us define the fundamentals of our CSR programs and set the foundation of our CSR department.

Another initiative to improve our CSR performance was the establishment of our Community Development Initiative Toolkit. This efficient and straightforward tool allows our teams to critically assess social development programs that can potentially improve the economic alternatives of the communities where we operate. The CDI Toolkit contains some of the best elements of industry toolkits, but in a simpler and more user-friendly format appropriate to the CSR teams at our operations.

The main elements of the CDI toolkit are: a project overview section; a worksheet for the planning, implementation and handover phases; a competencies assessment; a partnership assessment; and a social and economic indicator worksheet. It is designed to incorporate the perspectives of local communities, based on feedback from stakeholder consultation.

The toolkit serves as a benchmark to help determine whether CSR programs are a good fit for both the company and communities. We can better determine if there is genuine interest from the community, and whether people are likely to be fully engaged. The toolkit helps us set goals, measure our performance, improve accountability, and ensure that CSR is integrated into programs from the beginning. The partnership assessment also helps us to consider potential partners and ideally share the costs of mutually beneficial programs while increasing participation in the communities and accountability in the processes.

We also improved our grievance mechanism in response to improvements in best practice related to how mining companies log grievances. The document being implemented is available in our local CSR offices. It allows the logging of environmental, labour, and social grievances, as well as general community concerns.

We worked with UNICEF in 2015 to update our CSR policy and align with children's rights and global values, as well as addressing children's issues in our 2014 and 2015 stakeholder consultations. We were one of the first Canadian mining companies to engage with UNICEF in policy development.



# 2,500

women received medical attention through local health facilities and campaigns

# CSR Programs

Pan American Silver supports a variety of community and regional development programs and projects near its mines and active projects as part of a broad-based social development strategy.

Our Corporate Social Responsibility Policy has the following commitments with respect to the purpose, planning and delivery of sustainable development projects and programs:

- Promote health, education and sustainable development programs that can potentially make a positive difference in the areas where we operate, while promoting a safe environment for our communities, and;
- Assist local and regional development through training, employment and fostering opportunities for small businesses where it is mutually beneficial to do so.

These commitments are entrenched as industry best practices, based on the principle that a mine should provide socio-economic benefits to local communities and other stakeholders. Our CSR programs are aimed at doing just that. In 2015, 41 communities in five countries benefited from our CSR programs, and more than 1,000 families were given alternative economic opportunities beyond those offered by our mines.

We focus on education and health, particularly for women and children, as these needs are evident in the communities where we operate. We also hold workshops with local support to help mothers with breastfeeding, aligned with UNICEF campaigns such as World Breastfeeding Day.

In 2015, a total of 8,593 people from our communities received medical attention through public medical centres and 34 health campaigns that we supported. In addition to general medical campaigns open to all members of communities, our programs included:

- In Peru, we focused on nutrition programs for children, maternal and women's health, vaccination campaigns, access to specialists and special needs such as prosthetics.
- In Bolivia, we provided parasite checkups for children and continued our annual dental campaign. We also

provided general medical care as needed to patients in the 11 communities surrounding San Vicente, as this area has limited or no access to health care.

- In Argentina, we improved the quality of health care by donating special equipment to the children's unit of the local hospital near the Manantial Espejo mine.
- In Mexico, we provided funds for doctors and health care practitioners in communities near our mines, with a particular focus on services to young children and women.

On the education front, 6,029 students received support for primary through tertiary education, and 63 schools were supported with infrastructure improvements, materials and scholarships. We also helped supplement teachers' wages, with 40 local teachers supported in 2015.

Education is a pillar of our sustainable development plan, as we believe it prepares children and young people for future success. Wherever possible, we try to guide and support students to pursue careers that will allow them to return to their communities and provide much needed services. We have also provided support for literacy and adult education in some communities, including the Arroyo Amplio community near the Dolores mine in Mexico.

We are working hard to improve the efficiency and maximize the benefits of our social programs in order to optimize social investments for the communities and Pan American. We focus on programs that build community and regional governance capacity so as to not overlap our efforts with local governments' role. We also work with communities to develop programs that can be self-sustaining, particularly at our longer life mines and projects.

We are looking ahead and considering the impacts of our expansion projects in Mexico, including infrastructure needs, such as schools and housing. At Dolores, the local population has increased from 135 families to approximately 350 families. Our CSR and environmental teams are working progressively to adjust for the population increase and monitor its impacts on factors like water and energy consumption. The mine expansion may provide more opportunities for us to increase local procurement and support small businesses.

# Sustainable Development Projects

Pan American has invested more than \$3.6 million over the last five years in sustainable social development projects focused on alternative economic opportunities not directly related to our mines. Highlights of the programs and projects in the nations where we operate are provided below.

Together with the Canadian Department of Foreign Affairs we have invested approximately CAD\$1 million in Project Access, which was designed to improve the lives of 220 families in 11 communities surrounding the San Vicente mine. This region of Potosí is sparsely vegetated due to its high altitude and arid climate. The only land uses, other than mining, are tourism and llama grazing.

The three main goals of Project Access are to improve llama breeding skills, strengthen the local Llama Producers Association, and develop successful llama breeding businesses.

The initiative is managed and monitored by our CSR team at San Vicente and a Canadian NGO, the Society for Cooperation in International Development (SOCODEVI). The project has achieved exceptional results throughout the three-year implementation period. Animal husbandry practices are improving and locals are learning how to raise healthier animals. We were forced to change some key aspects of the project during rollout due to unforeseen issues like the widespread informal market for llama meat in the area. The lesson learned is that our CSR teams need to continually monitor progress of our projects and make timely adjustments to ensure the original project goals are achieved.

Recruiting community leaders was an important step and we now have 24 leaders, including 10 women, who undertook additional specific training and are charged with passing on this training to other community members. The training program focused on developing products that can be sourced from llama breeding, the correct use of pastures and sowing fodder to supplement animal feeding through the winter months, and other general agricultural techniques.

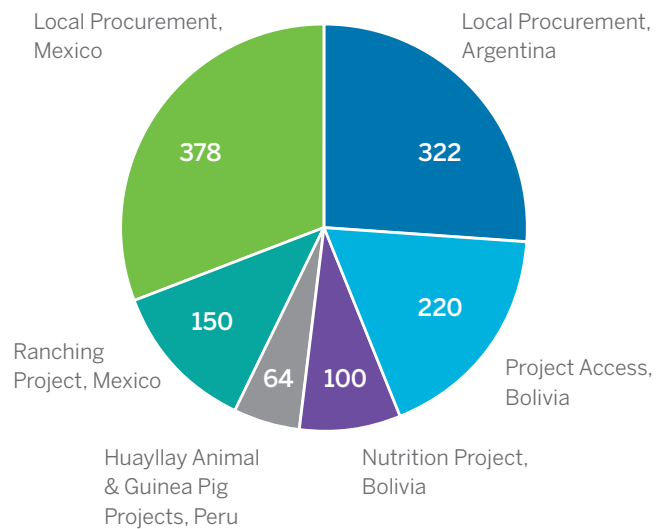
Pan American has started a new three-year, \$176,000 program in the communities near our San Vicente mine. The Nutrition Project will promote the health benefits of natural foods and grains, where families will have the opportunity to grow their own produce in self-built greenhouses.

We have supported construction of 40 greenhouses to date and we will continue welcoming more families to the program in 2016 and 2017.

Uqllu — otherwise known as “Alpaca de los Andes” — is a sustainable development program to promote artisan weaving in communities near our Peruvian mines. The program has operated for more than 10 years, with approximately \$500,000 invested to provide artisans with the equipment, tools, supplies, training, support and safe working environments needed to create handmade woven products from the finest Alpaca fibres.

Uqllu has a track record of many years of success, with weavers receiving fair prices for their high-quality creations, generally above the rate of other local weaving businesses. We have now completed the first phase of this project, with the first group of weavers opening their own workshops as three different artisan associations. The Company is still providing some assistance to the associations with training on marketing, business, and accounting practices. The Alpaca de los Andes workshops remain as a training facility open to the communities and those who are interested in acquiring the knowledge to develop more new businesses through the art of weaving.

## Families Benefited by our Sustainable Development Projects



The Huayllay Project is an alpaca and sheep breeding project designed to assist 700 community members and their animals in the region surrounding the Huaron mine in the Pasco Region, Peru. This project is intended to improve the health and vitality of local alpacas and sheep, including addressing congenital disorders largely due to the lack of new animals being introduced into the local herds.

The initial steps of this project, which will continue throughout 2016, consist of animal registration to help avoid inbreeding, neutering animals with disorders, parasite control and vaccinations, and training community members in animal health care and breeding practices.

The Guinea Pig Project in Peru is designed to benefit community members without access to arable land of sufficient size to support farming. Guinea pigs have been an important part of the Peruvian diet since ancient times and are still considered a delicacy. They are high in protein, inexpensive to breed, and well-suited for small business development.

The local CSR team at the Huaron mine has set the following primary goals for this project: create greenhouses to support hydroponic crops, select seeds suitable for the project, provide training on parasite control and vaccinations, and guinea pig registration and tracking.

In Argentina, we have continued our social presence at the Navidad silver project in Chubut province. Our programs at this development-stage project include training in trades intended to bring practical benefits to the region over the long-term.

In Mexico, most of our programs have a practical focus, including training in trades and other courses that allow people to improve their skills, find jobs or pursue business opportunities. Another important objective is to support local businesses.

## Corporate Giving Committee

---

Pan American contributes to a diverse range of social projects in Vancouver, Canada. These investments are generally modest but meaningful, as our goal is to support small low-overhead projects that in most cases benefit the most vulnerable groups in society.

Our support is given in the form of cash and material donations, fund raising, and employee participation. At least one of our employees personally champions each of the causes we support, which has resulted in a more meaningful engagement with the organizations in our community and has further strengthened our commitment to help. We prioritize causes where our support can provide the greatest impact on as many individuals as possible.

Homelessness in Vancouver is an especially visible issue in the downtown area, and much of our support goes towards supporting homeless shelters.

Of the CAD\$45,400 distributed in 2015, 22% went to a women's shelter and 13% went to a youth shelter. Contributions also were made to Growing Chefs, the Vancouver Food Bank, and the Vancouver International Children's Festival, among other worthy causes.

**1,141**

students were provided  
with school supplies  
through our support



# Our People

The past year was both rewarding and challenging for the human resources team at Pan American Silver. We made progress in our efforts to improve working and living conditions at our mines in Mexico and South America. Our compensation review confirmed that we are providing fair wages that exceed “liveable wage” calculations for each of our workplaces.

With our challenges in 2015, safety remains our top priority and we are conducting extensive training programs to integrate a culture of safety everywhere we operate. Financial and metal market uncertainty also continued in 2015, resulting in increased concerns about mine closures and job losses in our industry.

Pan American has a history of overcoming challenges and creating value through the leadership, the ingenuity and the hard work of our people. We believe having the right human resources is the key to safe, productive and responsible development of natural resources. We are investing in leadership training and development to ensure the long-term success of our business and the safety and well-being of our employees, contractors and communities where we operate.

## Policy and Performance Review

Stakeholder consultation and our 2015 materiality assessment have confirmed that human resources issues are matters of critical importance for our communities of interest, particularly for people who work in or live near our operating mines. The material aspects identified are of paramount importance for our Company as well, as people are our most important asset.

Occupational health and safety was by far the most significant material aspect identified in 2015. We are responding to this issue — and the fatalities that occurred at our mines last year — with an action plan that includes extensive training programs everywhere we operate. The details of our health and safety programs and initiatives are discussed elsewhere in this report.

Non-discrimination in the workplace, competitive salaries, employment issues, and training and education also ranked within the top ten aspects identified by our stakeholder respondents.

Pan American has established an organizational structure to deal with these and other human resources matters. The Board of Directors sets the overall policy direction and delegates certain powers and duties to the Human Resources and Compensation Committee. Day to day responsibilities and administration related to human resources matters is carried out by management led by the Vice President of Human Resources.

One of the key issues to emerge from our materiality analysis is the desire for fair wages and fair treatment at all of our mines. As part of our corporate social responsibility strategy, we are committed to providing competitive wages to all employees. Mining in general is the best paying industry in each of the countries where we operate, and we know that our compensation and benefits must be competitive if we are to attract skilled and motivated employees.

In 2014, we evaluated wages at each of our work sites and were pleased to find that even our lowest paid employees were earning above a “liveable wage” at each location. We reviewed salaries and wages again in 2015, with similar positive results.

In public policy, a “living wage” is defined as the wage that can meet the basic needs to maintain a safe, decent standard of living and quality of life within the community. The specific amount that must be earned to meet these needs varies, depending on the location, but a “living wage” is intended to provide more than the just the basics of food, clothing and shelter. It is not to be confused with a minimum wage, which is set by law and often insufficient to meet basic needs.

In recent years, shareholders and other stakeholders have scrutinized executive compensation as an indicator of fairness and social responsibility. Our executive compensation is considered modest by industry standards.

Non-discrimination was identified as a material issue in 2015. We are committed to fair treatment in the workplace and one of our core values is to conduct our business affairs free from favouritism, fear, coercion, discrimination and harassment.

Concerns about employment opportunities and our economic performance also surfaced in our latest materiality assessment. Some of this may be related to economic uncertainty and market conditions, but it also may reflect the realities of our business and the mine life cycle.

We are in the process of expanding the Dolores and La Colorada mines in Mexico to offset production declines at mines that are nearing the end of their productive lives. This transition means we have to lay off people at some mines and reallocate the financial resources to other operations. Our employees identify with their mines, but they are part of our team. We want people affected by these transitions to know they will be treated fairly.

We continued to invest in improving living and working conditions at our operations, whether in camps or in nearby communities. Some of our mines are situated in

remote high-altitude regions, which require employees to live on site, away from their families. Other mines are in areas with minimal educational and health services. The commitments and investments we make in these areas are based on needs identified in community review processes. We conducted our first social review in Bolivia, and plan to do more in the years ahead.

An important goal of our human resources strategy is leadership and management training. We have 6,500 employees and contractors at our mines and projects, including 4,000 employees. Within that group, we have 250 leaders and managers from diverse backgrounds who will be the future of our company. Along with technical and safety training, they are learning the value of sustainability in a practical sense. We are putting the right leaders with the right values in place, and ensuring that they take responsibility for entrenching those values in the workplace.

## Diversity, Inclusion, and Human Rights

Feedback from six previous sustainability reports has helped us examine the strengths and weaknesses of our CSR strategy as perceived by stakeholders.

We want governments and our communities of interest to know that we abide by the laws established around human rights in the countries where we operate. We respect the Universal Declaration of Human Rights and the Convention on the Rights of the Child.

We also want employees and unions to know that we respect workers' rights, including rights of association and collective bargaining. Almost 50% of our employees are in unions and we work with union leaders to improve safety standards and working conditions at our operations.

Pan American is committed to becoming a more diversified and inclusive company. We embrace the diversity of our workforce and the communities where we operate.

Cultural diversity is important to us, as we have mines in four countries and senior managers from each of these nations. Most of our mine employees and supervisors live in or near the communities and regions where we operate.

For Pan American Silver, diversity includes but is not limited to race, age, gender, culture, socio-economic background, religious beliefs, and sexual orientation. We strive to achieve an inclusive work environment where all are treated fairly and respectfully, have equal access to resources and opportunities, and can contribute to the success of the organization.

Through our policies and practices, we focus on promoting participation of diverse groups in our consultation processes, providing opportunities to work with our Company as employees, contractors or suppliers, or participate in our numerous social programs.

**548,936**

hours of safety training





# Health and Safety

## Protecting the health and safety of employees, contractors and communities is our top priority and a cornerstone of our sustainability strategy.

We have worked to integrate a culture of safety at each of our mines and projects through safety and leadership training and the implementation of safety policies and procedures. Our performance has improved continuously over the years and we are proud of our reputation as a safe and responsible operator.

Despite our steady progress, we are saddened to report that five fatalities occurred at four of our mines in 2015. We investigated these incidents thoroughly and met with our senior management and country managers to devise a Serious Incident Reduction Initiative. We will be carrying out extensive training as part of this initiative to strengthen our front-line supervisory capacity and implementing pledges and cardinal rules to improve health and safety for everyone, everywhere we operate. We also made changes to safety protocols and audits so standards and criteria are more consistent from mine to mine.

Our employees, contractors and other stakeholders overwhelmingly identified occupational health and safety as the most significant material issue for 2015. Along with a review of our safety performance in 2015 and goals for the year ahead, this section of the report will discuss industry initiatives and strategies aimed at reducing mining fatalities and serious accidents.

Pan American has developed a comprehensive Health and Safety Policy to protect the health and safety of employees and contractors at its operating mines and active development projects.

The Board of Directors sets the policy direction by approving the specific actions required to fulfill this commitment such as: providing tools and training so employees can work safely; complying with laws and regulations; adhering to best safety practices; and providing safe workplaces by minimizing and/or eliminating hazards, among other specific requirements.

Management is responsible for implementation of the policy and regularly reports to the Board's Health, Safety and Environment Committee on compliance with the policy.

The Board sets our annual safety targets, which are intended to reflect results from all operating mines and active projects.

## Safety Performance

Our safety performance is measured in three ways: Lost Time Injury Frequency (LTIF); and Lost Time Injury Severity (LTIS) and number of fatalities.

LTIF and LTIS are calculated as follows:

$$LTIS = \frac{(\# \text{ of lost work days}) * (1,000,000)}{\text{Total hours worked}}$$

$$LTIF = \frac{(\# \text{ of accidents}) * (1,000,000)}{\text{Total hours worked}}$$

The targets set by the Board for 2015 were zero fatalities, a LTIF goal of 1.60 or lower, and a LTIS goal of 750 or lower. We reported 19 lost-time injuries including 5 fatal injuries in 2015, for a LTIF rate of 1.09, while the LTIS rate was 1,757. Our targets for 2016 are zero fatalities with LTIF and LTIS of 1.60 and 750, respectively.

Our initiative includes a commitment to conduct increased amounts of training to strengthen our front-line supervisory capacity and improve our overall safety performance. We also made changes to safety protocols and audits so that standards and criteria are more consistent from mine to mine. In the past, we audited some mines annually and others every other year. Going forward, we will audit every mine at least once a year.

At our mature underground mines, we are improving our safety performance by continuing our efforts towards increased mechanization and implementing modern mining methods and ground support systems.

## Safety Training

Our training investments in 2015 were significant and clearly signal that we are responding in a responsible manner to the concerns of our employees, contractors and

stakeholders. The following chart shows the total number of training hours for 2015, with a breakdown of hours by operation, and for each specific element of safety training.

Our training targets for 2016 will be similar to 2015, but will include additional training for supervisors as well as continued training for mine rescue and emergency response teams.

We have worked hard to improve our emergency response capacity and are very proud and thankful for all of the dedicated employees who volunteer to be a part of the mine rescue and first aid teams at our operations. Mine rescue teams members from all of our operations attended a mine rescue competition in Mexico during 2015 and placed well.

	General Safety	Mining Induction	Geotechnical	Formal Safety Meetings	Mine Rescue	Total
La Colorada	21,384	17,358	485	4,252	2,177	45,656
Dolores	102,639	25,399	566	1,812	6,900	137,316
Alamo Dorado	6,135	281	-	481	2,500	9,397
Huaron	162,758	60,021	1,349	1,205	1,789	227,121
Morococha	33,074	9,648	2,345	66,084	1,891	113,042
San Vicente	2,343	1,188	-	969	1,075	5,574
Manantial Espejo	2,845	510	-	662	1,623	5,640

## Safety and Mine Planning

Integrating safety into mine planning is an important priority for Pan American Silver.

We are in the process of expanding two operations — La Colorada and Dolores — as part of our strategy to invest in long-term low-cost mining assets. Safety was an important consideration in the planning stages of these expansion programs.

We determined that our highest risk project would be the shaft-sinking program at La Colorada in Zacatecas, Mexico. We selected Redpath, a Canadian company with an excellent safety record, as our lead contractor for the project, based on its expertise and commitment to safety. We are pleased to report that the shaft-sinking was conducted without a lost-time injury in 2015.

The new shaft and hoisting system is designed to meet Mexican and Canadian standards. It will make access to La Colorada safer and more efficient which will allow us to safely expand the mine capacity while also improving ventilation and productivity.

At Dolores, also in Mexico, a ramp is advancing for a safe, modern and efficient underground mine that together with a new pulp agglomeration plant will allow us to expand the mine capacity and improve the metallurgical recovery from the higher grade ores.

## Safety Achievements

Despite a difficult year for serious accidents, we had positive results in overall safety indicators at many of our operations. Our Mexican mines achieved a cumulative total of 20 million hours without a Lost Time Injury and we are pleased to report that our La Colorada mine received the prestigious Silver Hard Hat (Casco de Plata) safety award in Mexico.



# 6,494

employees and contractors across our seven operations in four countries

# Environmental Management

Pan American is dedicated to operating mines and developing projects in an environmentally responsible manner. To fulfil this pledge we have adopted a management system to guide environmental planning and performance, assembled in-house environmental expertise, and developed comprehensive strategies to manage and mitigate the impacts of our activities.

Our Environmental Policy sets the direction for how we address environmental issues throughout the mine life cycle. The foundation of our environmental strategy is the use of best practices, such as environmental baseline studies, mine audits and closure planning. Best practices in our industry are not static and evolve through a process of continuous improvement.

We are pleased that no Significant Environmental Incidents occurred at our operations in 2015, allowing us to maintain this record for a third year in a row. Stakeholder consultation has shown that environmental issues — notably biodiversity, water and waste management, air quality and energy use — are important to our employees and communities of interest. They are important to us as well, and this section of the report will discuss how we are addressing these and other environmental concerns to ensure our reputation as a safe and responsible operator.

Pan American is proud to produce silver and other metals that generate value and social and environmental benefits for society. We also recognize that the mining and processing of minerals inevitably has positive and negative effects on the local environment and nearby communities.

We have a responsibility to minimize and mitigate the impacts of mining and maximize the restoration of land during progressive and final mine closure. We manage this process at our seven mines, each with its own unique environment, through all stages of the mine life cycle.

In addition to internal policies and procedures, we must comply with external laws and regulations set by governments and other authorities, which vary according to jurisdiction. Our activities also are closely scrutinized by non-governmental organizations.

Our overall strategy for environmental management is set by the Board of Directors and its sub-committee — the Health, Safety, Environment and Community Committee. The Board is kept informed of material issues and concerns and part of the Committee's mandate is to monitor environmental performance and regulatory compliance.

Our Environmental Policy was largely developed at our mines and has been updated over the years with input from our country managers, mine managers and supervisors. They are responsible for implementing the policy everywhere we operate and also train staff on specific actions and practices, such as efficient energy use and recycling.

Another element of environmental management is our audit program, which requires every mine to be audited at least every two years. We use a cross-audit system where each mine is audited by a team of corporate staff and environmental managers from other Pan American mines on a continually rotating schedule. This fosters integration between the mines and helps our teams understand our standards and values, and how they are applied in practice. The audit program has shown consistent improvement in environmental management at our mines since 2012.

## ZERO

Significant Environmental Incidents occurred at our operations



While no two mines are the same, we have to agree on common guidelines to ensure that we comply with internationally recognized industry standards and best practices, as well as the laws and regulations of each country. We believe we have established a good set of internal standards and are developing our environmental management system based on this framework.

We are taking planning steps toward developing environmental management systems at our mines. The first step was to define our key environmental aspects, and from that we are developing corporate guidelines on each key aspect. The goal is to have each operation adjust its procedures and guidelines so they are consistent with our corporate guidelines.

Once we move toward implementation of the management system at our mines, we will consider certification of our mines in Peru, Bolivia and Argentina. Our mines in Mexico are already independently certified through the Mexican Clean Industry program.

Our overall environmental performance in 2015 was consistent with the prior two years in that we reported zero “Significant Environmental Incidents.” This internal metric represents environmental incidents that negatively impact the environment, communities, and our reputation beyond the mine site.

Our 2015 materiality assessment shows that the top-of-mind environmental issues for stakeholders are: biodiversity; water extraction, use and recycling; and wastewater, solid waste and spills. Other identified concerns are: air emissions and greenhouse gases; and energy use and intensity.

## Water Stewardship and Energy Efficiency

We are aware of the importance of water as some of our mines and projects are situated in predominantly arid regions of Mexico and South America. We recognize that reducing energy use and greenhouse gas (GHG) emissions provides environmental benefits as well as cost savings. We pay close attention to water and energy issues as the potential impacts can occur outside our organization and beyond our operating boundaries.

We strive to reduce energy intensity and GHG emissions in many ways, such as connecting our operations to more efficient grid power, upgrading and expanding operations to improve production efficiency, training new staff on energy efficiency in the workplace, and the use of videoconferencing and decentralization to reduce long-distance travel.

We rely on the use of best practices in environmental impact assessment, notably detailed environmental baseline studies, which describe in detail the natural environment of a mine project. These studies take place before any development and are used to check the results of environmental monitoring during mine operation to assess potential impacts.

Environmental planning was a critical element of our expansion programs at the Dolores and La Colorada mines in Mexico. We ensured that environmental considerations were taken into account at the design stage so they could be built into the mine expansions, avoiding difficult and expensive modifications after construction.

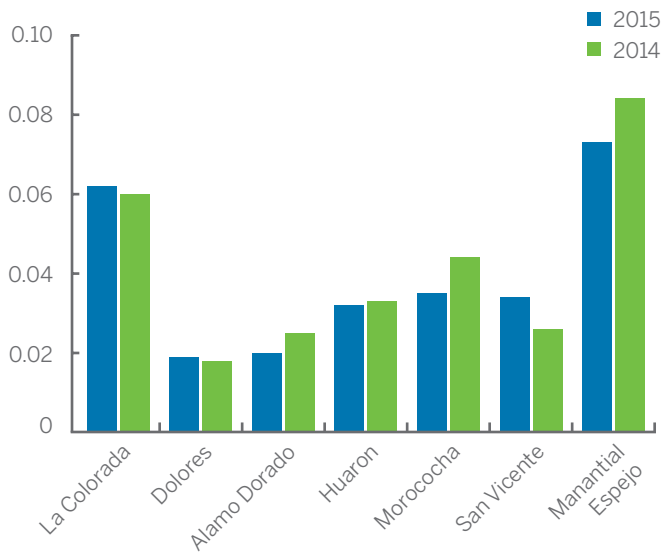
The expansion project at Dolores will reduce both water use intensity and GHG emissions. Dolores is a zero-discharge mine as the water used in operations is captured, treated and recycled back into the process, with zero discharge into the environment. The new pulp agglomeration is designed to increase silver and gold production, improve metal recovery, and use water more efficiently per ounce of silver produced. The mine’s new power line connection will facilitate the transition to grid electrical power from diesel generators, thus improving air quality and reducing GHG emissions and emission intensity.

The expansion at La Colorada is designed to generate environment benefits along with increased production. A new 115kV power line will supplement existing power supply and avoid GHG intensive on site power generation. Once completed, the new shaft will reduce fuel use for ore haulage in the mine and decrease GHG emission intensity. The mine dewatering treatment plant is being upgraded as part of the expansion.

Water treatment was a priority in 2015, with plants being upgraded at the Huaron mine in Peru, and at San Vicente in Bolivia. Automation not only makes water treatment plants more cost-efficient, it provides additional confidence in discharge compliance. Real-time automation sensors at the Huaron treatment plant adjust automatically to ensure that discharge limits are in total compliance and have contributed to reduced reagent usage and treatment costs.

## GHG Intensity

(tonne CO<sub>2</sub>/tonne ore processed)



Greenhouse gas emissions per tonne of ore processed reduced at Alamo Dorado mainly due to reduced open pit mining rates and increased processing of stockpiled ore, and a similar effect was seen at Manantial Espejo. Reductions at Morococha are due to changes in mine plan which reduced fuel usage, a reduction in explosives, and increased plant throughput which improved overall energy efficiency. The increase at San Vicente is due to an error in 2014 data where only plant energy consumption was reported, not entire mine site consumption.

## Water Use Intensity

(m<sup>3</sup>/tonne ore processed)

La Colorada	0.39	0.13
Dolores	0.05	0.02
Alamo Dorado	0.21	0.23
Huaron	3.54	3.58
Morococha	3.69	3.92
San Vicente	0.60	0.49
Manantial Espejo	0.65	0.35

Water use intensity from external water sources saw significant reductions at La Colorada, Dolores, San Vicente, and Manantial Espejo driven mainly by improved water conservation and increased rainfall at all mines which increased water collection in tailings facilities and leach pads reducing reliance on external fresh water supply.

## Biodiversity and Mine Closure Planning

We are actively implementing progressive closure plans at both the Alamo Dorado and Manantial Espejo mines that cover physical, environmental and social aspects.

Physical and environmental closure plans for Alamo Dorado and Manantial Espejo have been approved by the relevant authorities. We are also working with our employees and local communities to address social aspects including managing expectations so communities can develop alternative land-use options after mine closure.

We have conceptual reclamation plans in place for all our mines, which will use local plants identified in baseline studies for revegetation work. Some of these plants are removed from areas to be mined and later transplanted in the closure phase. The goal is to protect biodiversity and restore land as close as possible to its natural state. We also conduct ongoing monitoring of biodiversity at our mines and in many cases, such as Manantial Espejo, have seen improvements of baseline conditions by protecting natural areas from overgrazing during mine operations.

We have revegetated significant amount of land using local plants at Manantial Espejo, including more than six hectares to reclaim a former waste dump. A similar process is taking place at Alamo Dorado and on a smaller scale at our other mines.

## Tailings Management Facilities and Concentrate Transport

We continued work on a safety review of tailings management facilities that began in 2014, and which focused on the Huaron mine in 2105.

Huaron is our highest consequence tailings facility by virtue of size and other criteria. We carried out an internal review of this facility and shared the findings with an independent North American engineering company in 2014, which conducted a site visit and gathered information for an initial report. This report found the dam to be safe and compliant, but made certain recommendations that we jointly reviewed with the Peruvian Engineer of Record for the facility. The recommendations were implemented in early 2015, and the consequence rating of the facility was confirmed by dam-break simulation study. A final site visit was conducted by the North American engineers, who then prepared a final report confirming that all recommendations had been implemented.

Our decision to review concentrate transport stemmed from a 2012 incident in Bolivia, when a concentrate truck was caught in a river during a flood and overturned. We reported the incident and completed a full clean-up, verified by water monitoring and sediment sampling. We were able to conclusively determine that there was no impact from this incident, but recognized there was a risk in concentrate transport that should be evaluated to prevent future accidents.

A large part of our concentrate production comes from San Vicente in Bolivia, and from Huaron and Morococha in Peru. We began our review in Peru, where we ship the largest volumes of concentrates. We interviewed owners of trucking companies, reviewed their facilities and the certification of their trucks and drivers. We visited the three port concentrate stores that we use, and reviewed permits, ship-loading practices and other aspects to give

us confidence that our concentrates are handled in an appropriate way by these third parties.

We did not find significant risks in our management of concentrate transport in Peru, but saw room for improvements such as simplifying documentation to make the process more efficient and effective.

We also performed a review in Bolivia, where our concentrates go through a Chilean port. We went to concentrate stores in Chile, examined the loading and unloading of rail cars, and toured port facilities. Several opportunities for improvement were identified and many aspects of the Peruvian concentrate handling system can be applied in Bolivia. We are working to implement improvements in 2016, and plan to conduct a similar review at La Colorada, the only other mine in our Company that produces concentrates.

## Financial Management

**ROB DOYLE**, *Chief Financial Officer*

Sustainability and financial management are often thought of as separate endeavours, but today's reality is that they are inextricably intertwined. At Pan American Silver, sustainability means protecting and strengthening the foundations for long-term success so we can create value for shareholders and other stakeholders. We must be a financially viable business if we are to continue to provide positive benefits to communities, employ thousands of people, allocate business to suppliers and service providers, and pay taxes in the jurisdictions where we operate.

The past year was a difficult one as the downturn in commodity prices and global markets continued to impact our operations. In response, we sharpened our focus on operating excellence and cost containment and restructured and streamlined our Company in order to adapt to the current environment.

We were fortunate to have gone into the downturn with a strong balance sheet, as this has allowed us to invest in long-term assets such as the La Colorada and Dolores mines in Mexico. We had to make tough decisions, such as reducing our annual dividend, to ensure that these high-value assets could be financed internally without reliance on capital markets. As tough as 2015 was, we believe that the decisions made to optimize operations and allocate capital to quality, long-term assets will place the Company

in a stronger financial position as silver prices rebound.

### Year in Review

Pan American Silver produced a record 26.12 million ounces of silver in 2015, along with record gold production of 183,700 ounces. This was a truly impressive performance as our realized prices for silver and gold declined 16% and 8%, respectively, from 2014.

We are also in the process of transition, with some mines being expanded or modernized, while others are moving toward the closure stages of the mine cycle.

We have worked hard in the past year to contain costs and are pleased to report that we reduced our overall consolidated cash costs<sup>1</sup> by 15% from 2014 to \$9.70 per payable ounce of silver, net of by-product credits, and cut our consolidated all-in sustaining<sup>1</sup> costs by 17% to \$14.92.

Our record-setting performance helped us generate strong operating cash flows of \$88.7 million in 2015, or \$0.58 per share, which is more than sufficient to cover annual sustaining capital of \$73.7 million. A net loss of \$231.6 million was recorded for the year, which reflects the combination of weak metal prices, foreign exchange losses and impairment charges related to write-downs at several mines. Our balance sheet remains healthy, however, and

at year-end we had \$226.6 million in cash and short-term investments and working capital of \$392.2 million.

Looking ahead, we expect to produce between 24 and 25 million ounces of silver and between 175,000 and 185,000 ounces of gold in 2016, along with by-product zinc, lead and copper. We also aim to reduce consolidated cash costs to between \$9.45 and \$10.45 per ounce of silver, net of by-product credits, with further cost reductions as our expansion programs are completed.

(1) Cash costs is a non-GAAP measure and does not have a standardized meaning. Readers should refer to the "Alternative Performance (non-GAAP) Measures" section of Pan American Silver's Management's Discussion & Analysis for the year ended December 31, 2015, for a more detailed discussion of this measure. Cash costs per payable ounce of silver, net of by-product credits ("cash costs") and all-in sustaining costs per silver ounce sold, net of by-product credits ("AISCOS") are non-GAAP measures. Cash costs and AISCOS do not have standardized meanings and Pan American Silver's method of calculating them may differ from the methods used by other entities. Readers should refer to the "Alternative Performance (non-GAAP) Measures" section of Pan American Silver's Management's Discussion & Analysis for the year ended December 31, 2015, for a more detailed discussion of these measure and their calculation.

## Investing in our Future

An important development in 2015 was our continued expansions of the La Colorada and Dolores mines in Mexico. It is unusual in this challenging environment for companies to expand their operations as there has been little industry growth in recent years. We are investing in these high-quality assets at the right time, as prices for everything from engineering services to consumables are much lower than they were years ago, at the top of market cycle.

We believe that these mine expansions will benefit stakeholders for years to come, as they are designed to increase production and lower costs dramatically in the years ahead, starting in 2017.

We are financing our expansion programs from internal treasury, even though we have a \$300 million revolving line of credit, as it is important for us to be conservative and keep our financial flexibility. As part of this strategy, we reduced the amount of our dividends, and paid \$42 million in 2015, as compared to the \$76 million in 2014.

Our investments in long-term assets, including the expansion projects and the mechanization of some underground mines, are part of a strategy to create value for shareholders and sustain our future business. We are allocating capital so that we can be the best positioned silver producer when metal markets improve — and there are signs this has already started.

Our shareholders and stakeholders also want us to be socially and environmentally responsible, as these issues can affect companies' risk profiles, reputations and financial performance. While we have curtailed

non-discretionary spending in certain areas, we have not reduced investments in corporate social responsibility, as we view these as fixed rather than variable costs.

Having a long-term outlook that integrates various aspects of sustainability into our business model is essential if we are to maintain our project pipeline and mineral reserve and resource base. Gaining community support and acceptance is vital to the success of our business strategy. We recognize that shareholders and stakeholders expect us to demonstrate our CSR commitment everywhere we operate, starting at the exploration stage and continuing through the mine cycle.

Our executive and senior management teams have a history of making financially astute investments — particularly during industry downturns — that went on to become profitable and productive mines or promising development assets. We are continuing to pursue this growth strategy, which includes evaluating potential merger and acquisition opportunities.

With our strong balance sheet, we are also well positioned to invest in attractive silver projects held by junior companies. In 2016, as an example, we secured an option agreement which allows us to earn a 75% interest in certain prospective silver properties and deposits in the Promontorio Mineral Belt of Mexico.

## Local Expenditures

Revenues from our mining activities play a key role in driving economic development and although silver is a finite resource, we believe that our mines can create social and economic benefits that persist beyond the life of the mine.

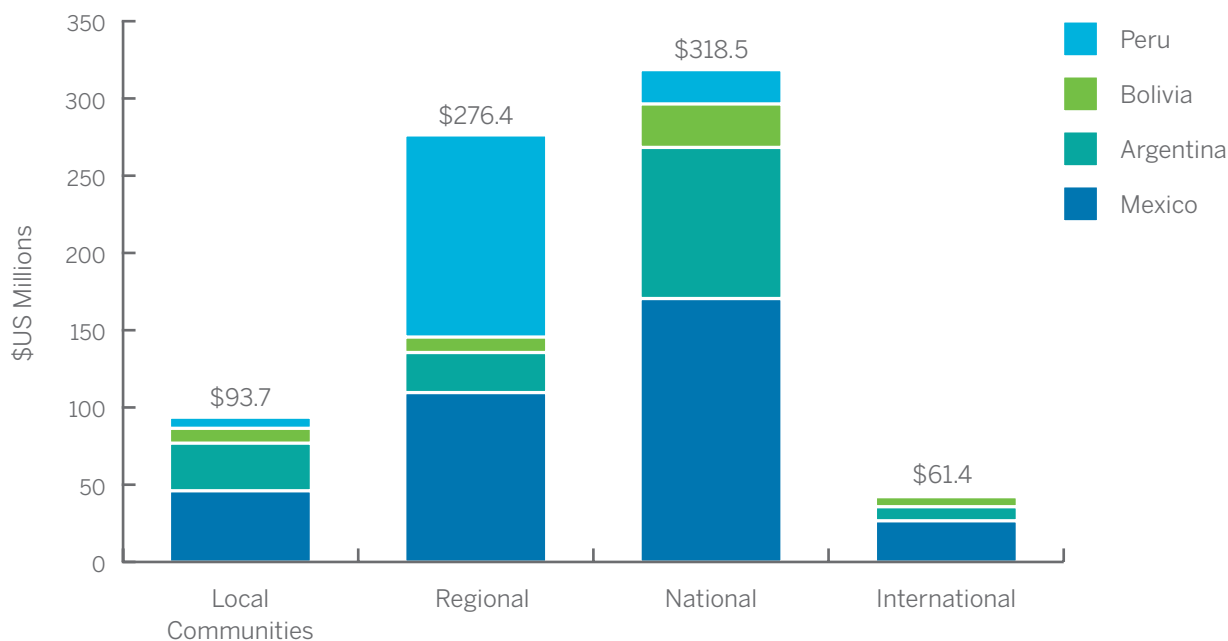
We continued to make significant contributions to the local economies in every one of our host communities during 2015, in spite of challenging market conditions. In addition to the sums that we pay in salaries, taxes and other fees, we maintain an established practice of supporting local economies through our supply chain and the use of local providers of goods and services, whenever it is possible and practical. We work closely with local communities to support their capacity to actively participate in the supply chain we need for our operations, and to help them develop self-sustaining economies. We continually strive to instill our core values of sustainable development in all of our supply chain partners.

In previous years we reported our spending broken down into three geographical categories; "local", "national", and "international". In 2015, we expanded the reporting to

add the additional geographical category of “regional”. The introduction of this additional geographical category is intended to reflect expenditures that are outside of the local communities surrounding the mines; a larger geographical area which includes entire provinces or states where the mines are located and where significant economic and social influence exists. We defined “regional”

on a mine-by-mine basis by assessing the specific social and economic circumstances and influences of each of the mines, whereas local reflects only expenditures in communities directly related to the mine. The national category includes all other areas within each of the countries that are excluded from either local or regional.

### Spending by Region



As we did in prior years we focused on four main cost items: wages, supplies and services, taxes, and royalties. These cost items are comprised of the following income and cash flow statement line items: production costs, royalties, general and administrative, exploration and project development, income taxes paid and payments for mineral properties, plant and equipment. The sum of the aforementioned costs added up to \$750 million of total spending in 2015 (2014: \$792.1 million). The contribution to local communities continued to be significant in 2015; 12% of the total spending, compared to 15% in 2014. An additional 37% of our total spending occurred within the regional area of our mines, bringing the spending in local and regional economies to almost half of total expenditures in 2015.

Importantly, of the \$750 million total spending in 2015, 92% (2014 – 90%) was spent within the same countries where the operations are located. In the coming years, we hope to continue to strengthen the benefits to local economies by helping viable businesses to grow and improving the supply chain, so that an increasing proportion of our expenditures can continue to be destined to local and regional businesses so long as it also improves the efficiency of our business. We believe that strong relationships within our communities, and helping local entrepreneurs grow along with us, will increase value for all of our stakeholders. This approach has been, and will continue to be, an integral part of Pan American Silver’s success.



#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INFORMATION

CERTAIN OF THE STATEMENTS AND INFORMATION IN THIS SUSTAINABILITY REPORT CONSTITUTE "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 INFORMATION. FORWARD-LOOKING STATEMENTS OR INFORMATION IN THIS SUSTAINABILITY REPORT RELATE TO, AMONG OTHER THINGS: OUR ESTIMATED PRODUCTION OF SILVER, GOLD AND OTHER METALS IN 2016 AND FUTURE YEARS; OUR ESTIMATED CASH COSTS PER PAYABLE OUNCE OF SILVER AND AISCSOS IN 2016 AND FUTURE YEARS; THE ABILITY OF THE COMPANY TO SUCCESSFULLY COMPLETE ANY CAPITAL INVESTMENT PROGRAMS AND PROJECTS AND THE IMPACTS OF ANY SUCH PROGRAMS AND PROJECTS ON THE COMPANY; AND ANY ANTICIPATED LEVEL OF FINANCIAL AND OPERATIONAL SUCCESS IN 2016 AND FUTURE YEARS.

THESE STATEMENTS REFLECT THE COMPANY'S CURRENT VIEWS WITH RESPECT TO FUTURE EVENTS AND ARE NECESSARILY BASED UPON A NUMBER OF ASSUMPTIONS THAT, WHILE CONSIDERED REASONABLE BY THE COMPANY, ARE INHERENTLY SUBJECT TO SIGNIFICANT OPERATIONAL, BUSINESS, ECONOMIC AND REGULATORY UNCERTAINTIES AND CONTINGENCIES. THESE ASSUMPTIONS INCLUDE: TONNAGE OF ORE TO BE MINED AND PROCESSED; ORE GRADES AND RECOVERIES; PRICES FOR SILVER, GOLD AND BASE METALS REMAINING AS ESTIMATED; CURRENCY EXCHANGE RATES REMAINING AS ESTIMATED; CAPITAL, DECOMMISSIONING AND RECLAMATION ESTIMATES; OUR MINERAL RESERVE AND RESOURCE ESTIMATES AND THE ASSUMPTIONS UPON WHICH THEY ARE BASED; PRICES FOR ENERGY INPUTS, LABOUR, MATERIALS, SUPPLIES AND SERVICES (INCLUDING TRANSPORTATION); NO LABOUR-RELATED DISRUPTIONS AT ANY OF OUR OPERATIONS; NO UNPLANNED DELAYS IN OR INTERRUPTIONS IN SCHEDULED PRODUCTION; ALL NECESSARY PERMITS, LICENCES AND REGULATORY APPROVALS FOR OUR OPERATIONS ARE RECEIVED IN A TIMELY MANNER; AND OUR ABILITY TO COMPLY WITH ENVIRONMENTAL, HEALTH AND SAFETY LAWS. THE FOREGOING LIST OF ASSUMPTIONS IS NOT EXHAUSTIVE.

THE COMPANY CAUTIONS THE READER THAT FORWARD-LOOKING STATEMENTS AND INFORMATION INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE ACTUAL RESULTS AND DEVELOPMENTS TO DIFFER MATERIALLY FROM THOSE EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS OR INFORMATION CONTAINED IN THIS SUSTAINABILITY REPORT AND THE COMPANY HAS MADE ASSUMPTIONS AND ESTIMATES BASED ON OR RELATED TO MANY OF THESE FACTORS. SUCH FACTORS INCLUDE, WITHOUT LIMITATION: FLUCTUATIONS IN SILVER, GOLD AND BASE METALS PRICES; FLUCTUATIONS IN PRICES FOR ENERGY INPUTS, LABOUR, MATERIALS, SUPPLIES AND SERVICES (INCLUDING TRANSPORTATION); FLUCTUATIONS IN CURRENCY MARKETS (SUCH AS THE CANADIAN DOLLAR, PERUVIAN SOL, MEXICAN PESO AND BOLIVIAN BOLIVIANO VERSUS THE U.S. DOLLAR); OPERATIONAL RISKS AND HAZARDS INHERENT WITH THE BUSINESS OF MINING (INCLUDING ENVIRONMENTAL ACCIDENTS AND HAZARDS, INDUSTRIAL ACCIDENTS, EQUIPMENT BREAKDOWN, UNUSUAL OR UNEXPECTED GEOLOGICAL OR STRUCTURAL FORMATIONS, CAVE-INS, FLOODING AND SEVERE WEATHER); RISKS RELATING TO THE CREDIT WORTHINESS OR FINANCIAL CONDITION OF SUPPLIERS, REFINERS AND OTHER PARTIES WITH WHOM THE COMPANY DOES BUSINESS; INADEQUATE INSURANCE, OR INABILITY TO OBTAIN INSURANCE, TO COVER THESE RISKS AND HAZARDS; EMPLOYEE RELATIONS; RELATIONSHIPS WITH, AND CLAIMS BY, LOCAL COMMUNITIES AND INDIGENOUS POPULATIONS; OUR ABILITY TO OBTAIN ALL NECESSARY PERMITS, LICENSES AND REGULATORY APPROVALS IN A TIMELY MANNER; CHANGES IN LAWS, REGULATIONS AND GOVERNMENT PRACTICES IN THE JURISDICTIONS WHERE WE OPERATE, INCLUDING ENVIRONMENTAL, EXPORT AND IMPORT LAWS AND REGULATIONS; DIMINISHING QUANTITIES OR GRADES OF MINERAL RESERVES AS PROPERTIES ARE MINED; INCREASED COMPETITION IN THE MINING INDUSTRY FOR EQUIPMENT AND QUALIFIED PERSONNEL; AND THOSE FACTORS IDENTIFIED UNDER THE CAPTION "RISKS RELATED TO PAN AMERICAN'S BUSINESS" IN THE COMPANY'S MOST RECENT ANNUAL REPORT ON FORM 40-F AND ANNUAL INFORMATION FORM FILED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION (THE "SEC") AND CANADIAN SECURITIES REGULATORY AUTHORITIES. ALTHOUGH THE COMPANY HAS ATTEMPTED TO IDENTIFY IMPORTANT FACTORS THAT COULD CAUSE ACTUAL RESULTS TO DIFFER MATERIALLY, THERE MAY BE OTHER FACTORS THAT CAUSE RESULTS NOT TO BE AS ANTICIPATED, ESTIMATED, DESCRIBED OR INTENDED. INVESTORS ARE CAUTIONED AGAINST UNDUE RELIANCE ON FORWARD-LOOKING

STATEMENTS AND INFORMATION. FORWARD-LOOKING STATEMENTS AND INFORMATION ARE DESIGNED TO HELP READERS UNDERSTAND MANAGEMENT'S CURRENT VIEWS OF OUR NEAR AND LONGER TERM PROSPECTS AND MAY NOT BE APPROPRIATE FOR OTHER PURPOSES. THE COMPANY DOES NOT INTEND, NOR DOES IT ASSUME ANY OBLIGATION TO UPDATE OR REVISE FORWARD-LOOKING STATEMENTS AND INFORMATION, WHETHER AS A RESULT OF NEW INFORMATION, CHANGES IN ASSUMPTIONS, FUTURE EVENTS OR OTHERWISE, EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW.

#### CAUTIONARY NOTE TO U.S. INVESTORS CONCERNING ESTIMATES OF MINERAL RESERVES AND RESOURCES

THIS SUSTAINABILITY REPORT HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CANADIAN PROVINCIAL SECURITIES LAWS, WHICH DIFFER FROM THE REQUIREMENTS OF U.S. SECURITIES LAWS. UNLESS OTHERWISE INDICATED, ALL MINERAL RESERVE AND RESOURCE ESTIMATES INCLUDED IN THIS MD&A HAVE BEEN PREPARED IN ACCORDANCE WITH CANADIAN NATIONAL INSTRUMENT 43-101 – STANDARDS OF DISCLOSURE FOR MINERAL PROJECTS ("NI 43-101") AND THE CANADIAN INSTITUTE OF MINING, METALLURGY AND PETROLEUM CLASSIFICATION SYSTEM. NI 43-101 IS A RULE DEVELOPED BY THE CANADIAN SECURITIES ADMINISTRATORS THAT ESTABLISHES STANDARDS FOR ALL PUBLIC DISCLOSURE. AN ISSUER MAKES OF SCIENTIFIC AND TECHNICAL INFORMATION CONCERNING MINERAL PROJECTS.

CANADIAN STANDARDS, INCLUDING NI 43-101, DIFFER SIGNIFICANTLY FROM THE REQUIREMENTS OF THE SEC. AND INFORMATION CONCERNING MINERALIZATION, DEPOSITS, MINERAL RESERVE AND RESOURCE INFORMATION CONTAINED OR REFERRED TO HEREIN MAY NOT BE COMPARABLE TO SIMILAR INFORMATION DISCLOSED BY U.S. COMPANIES. IN PARTICULAR, AND WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THIS SUSTAINABILITY REPORT USES THE TERMS "MEASURED RESOURCES", "INDICATED RESOURCES" AND "INFERRED RESOURCES". U.S. INVESTORS ARE ADVISED THAT, WHILE SUCH TERMS ARE RECOGNIZED AND REQUIRED BY CANADIAN SECURITIES LAWS, THE SEC DOES NOT RECOGNIZE THEM. UNDER U.S. STANDARDS, MINERALIZATION MAY NOT BE CLASSIFIED AS A "RESERVE" UNLESS THE DETERMINATION HAS BEEN MADE THAT THE MINERALIZATION COULD BE ECONOMICALLY AND LEGALLY PRODUCED OR EXTRACTED AT THE TIME THE RESERVE DETERMINATION IS MADE. U.S. INVESTORS ARE CAUTIONED NOT TO ASSUME THAT ANY PART OF A "MEASURED RESOURCE" OR "INDICATED RESOURCE" WILL EVER BE CONVERTED INTO A "RESERVE". U.S. INVESTORS SHOULD ALSO UNDERSTAND THAT "INFERRED RESOURCES" HAVE A GREAT AMOUNT OF UNCERTAINTY AS TO THEIR EXISTENCE AND GREAT UNCERTAINTY AS TO THEIR ECONOMIC AND LEGAL FEASIBILITY. IT CANNOT BE ASSUMED THAT ALL OR ANY PART OF "INFERRED RESOURCES" EXIST, ARE ECONOMICALLY OR LEGALLY MINEABLE OR WILL EVER BE UPGRADED TO A HIGHER CATEGORY. UNDER CANADIAN SECURITIES LAWS, ESTIMATED "INFERRED RESOURCES" MAY NOT FORM THE BASIS OF FEASIBILITY OR PRE-FEASIBILITY STUDIES EXCEPT IN RARE CASES. DISCLOSURE OF "CONTAINED OUNCES" IN A MINERAL RESOURCE IS PERMITTED DISCLOSURE UNDER CANADIAN SECURITIES LAWS. HOWEVER, THE SEC NORMALLY ONLY PERMITS ISSUERS TO REPORT MINERALIZATION THAT DOES NOT CONSTITUTE "RESERVES" BY SEC STANDARDS AS IN PLACE TONNAGE AND GRADE, WITHOUT REFERENCE TO UNIT MEASURES. THE REQUIREMENTS OF NI 43-101 FOR IDENTIFICATION OF "RESERVES" ARE ALSO NOT THE SAME AS THOSE OF THE SEC, AND RESERVES REPORTED BY THE COMPANY IN COMPLIANCE WITH NI 43-101 MAY NOT QUALIFY AS "RESERVES" UNDER SEC STANDARDS. ACCORDINGLY, INFORMATION CONCERNING MINERAL DEPOSITS SET FORTH HEREIN MAY NOT BE COMPARABLE WITH INFORMATION MADE PUBLIC BY COMPANIES THAT REPORT IN ACCORDANCE WITH U.S. STANDARDS.

Technical information contained in this Sustainability Report with respect to Pan American has been reviewed by Martin Dupuis, P.Geo., Director Geology, and Martin Wafforn, P.Eng., VP Technical Services, who are Qualified Persons for the purposes of NI 43-101.

Please visit our 2015 Sustainability Report website at:

[www.panamericansilver.com/sustainabilityreport2015](http://www.panamericansilver.com/sustainabilityreport2015)

Please do not hesitate to contact us; we welcome any and all feedback. Please direct any questions regarding this report to Matt Andrews, Vice President of Environment and Sustainability, or Monica Moretto, Senior Manager of Sustainability: [csr@panamericansilver.com](mailto:csr@panamericansilver.com)

#### CORPORATE OFFICE, VANCOUVER

Pan American Silver Corp.  
Suite 1440 – 625 Howe Street  
Vancouver, British Columbia  
Canada, V6C 2T6  
Tel. 604-684-1175  
Fax. 604-684-0147  
[info@panamericansilver.com](mailto:info@panamericansilver.com)  
[www.panamericansilver.com](http://www.panamericansilver.com)

#### ARGENTINA OFFICE

Pan American Silver Argentina  
Tel. 54-11-5533-8700  
Fax. 54-11-5533-8768  
Country Manager – Bret Boster

#### BOLIVIA OFFICE

Pan American Silver (Bolivia) S.A.  
Tel. 59-12-279-6990  
Fax. 59-12-215-4216  
Country Manager – Luis Collarte

#### MEXICO OFFICE

Pan American Silver Mexico  
Tel. 52-618-128-0709  
Fax. 52-618-128-0692 x 102  
Country Manager – Chris Warwick

#### PERU OFFICE

Pan American Silver Peru S.A.C.  
Tel. 51-1-618-9700  
Fax. 51-1-618-9729  
Country Manager – Jorge Ugarte