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ABOUT PAN AMERICAN SILVER



Pan American Silver engages in mining precious metals and related activities, including exploration, mine development, extraction, processing, refining, and reclamation. The Company owns and operates silver and gold mines located in Mexico, Peru, Bolivia, Argentina and Canada. We also own the Escobal mine in Guatemala that is currently not operating.

Pan American Silver is listed on the following Stock Exchanges:

- Toronto Stock Exchange ("TSX") (Symbol: PAAS)
- Nasdaq Global Select Market ("NASDAQ") (Symbol: PAAS)

CORE BUSINESS AND STRATEGY

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

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

To execute our vision, Pan American Silver attracts, develops, and retains a sector-leading team of mining professionals. Our team has a depth of knowledge and experience in all aspects of our business, which enables us to confidently advance early stage projects through construction and into operation.

ABOUT THIS REPORT

This report articulates our vision of sustainability, shares how we address sustainable development in the context of our business, discloses how we manage environmental, workplace and social issues, and demonstrates our progress toward our sustainability goals and initiatives. Reporting also allows us and stakeholders to benchmark our performance against industry peers.

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

AUDIENCE

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

CONTENT AND SCOPE

We regularly engage with COIs to identify the issues that are most important to them. This report describes our management approach and performance with respect to these issues within the context of our overall sustainability and business strategies. The scope of this report covers our nine mining operations:

SILVER SEGMENT:

- La Colorada and Dolores¹ in Mexico
- Huaron and Morococha in Peru
- Manantial Espejo in Argentina
- San Vicente in Bolivia

GOLD SEGMENT:

- Timmins (Timmins West and Bell Creek) in Canada
- La Arena and Shahuindo in Peru

Our Escobal mine in Guatemala is on care and maintenance, and our Alamo Dorado mine in Mexico is in the post-closure phase. However, certain operating, people management, economic, environmental, and social information and data for these mines and properties are included in this report. Our other development projects and exploration sites are excluded from the scope of this report, with the exception of certain data and information related to safety and people management. When applicable, we include information and data regarding our headquarters in Vancouver and our regional offices.

¹Beginning in 2021, Dolores will move from the Silver Segment to the Gold Segment due to mine seguencing into higher gold grades over the remaining active mine life.

ADDITIONAL DETAILS

Reporting period	January 1 to December 31, 2020; report produced annually.
Date of last report	May 2020
Reporting framework	This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option and the GRI Mining & Metals Sector Disclosures. It also contains information in consideration of the Sustainability Accounting Standards Board (SASB) Standard and the Taskforce on Climate-related Financial Disclosures(TCFD) reporting framework.
	The combined GRI & SASB index can be found here.
	Information related to the TCFD is disclosed in the "Climate Change, Energy and Greenhouse Gas Emissions" section of this report.
Restatements of information	Any restatements of data from previous reports is noted in the footnotes of the relevant data tables.
Changes in reporting	We have updated our approach to materiality. We now categorize report topics as material or relevant. We have reclassified certain material topics from last year's report as relevant. However, we report on both material and relevant topics. We have included one new topic in this report – responsible supply chain. There have been no other changes to topics reported or topic boundaries from our 2019 report.
Data and assurance	Data have been reviewed internally at both the site and corporate office levels. Certain economic data have been extracted from our 2020 audited annual financial statements.
	Data are reported using the metric system and US dollars.
Additional information	In addition to annual sustainability reports, on a quarterly and annual basis we disclose our operating and financial results. These reports are available on our website.
Contact	We welcome any feedback related to this report. Please direct your comments or questions to Brent Bergeron, Senior Vice President, Corporate Affairs and Sustainability or Monica Moretto, Vice President of Social Sustainability, Inclusion and Diversity at csr@panamericansilver.com

PRESIDENT'S MESSAGE



MICHAEL STEINMANN PRESIDENT & CEO

To put it succinctly, 2020 was defined by COVID-19, a pandemic that has taken a terrible toll on human life and well-being around the world. While vaccination programs are now being deployed, the pandemic has resulted in unprecedented challenges that may persist for some time. Accordingly, we are continuing to look for ways to mitigate the negative impacts of the pandemic on our workforce, their families, and local communities.

Our primary concern remains the health and safety of our employees and contractors, and the communities in which they live and work. When COVID-19 was declared a global pandemic, we engaged our crisis response

team to proactively plan for and manage issues related to the virus. We established COVID-19 health and safety protocols for prevention and containment, including sanitation, testing, and tracing. We retained an epidemiologist to advise the Company and support the establishment of protocols and procedures to help protect health and safety. These protocols also incorporated our commitments to protecting and respecting human rights. In addition, we implemented programs to support our workforce's physical and mental health needs. For example, we launched "PAAS Listens," a platform that allows our workforce to raise concerns directly with senior leadership.

In 2020, our Latin American mines were temporarily suspended and transitioned to care and maintenance for an average of two months in response to government restrictions to reduce the spread of COVID-19. We also reduced operating capacity across all our

operations in accordance with our COVID-19 protocols. We remain diligent in monitoring information provided by governments, health authorities and have retained the services of an expert epidemiologist to advise us in updating our protocols in accordance with recommendations and best practices for prevention and containment of the virus.

The pandemic has caused a humanitarian crisis in many of the communities where we operate. In response to community needs, we have been providing health care support, assisting with sanitation efforts, and facilitating access to education. To further support our communities, we committed \$2 million towards food, hygiene and medical supplies, and personal protection equipment, including the donation of an oxygen plant to the province of Cajabamba, Peru. In addition, we made a three-year, \$1.5 million commitment to UNICEF Canada to support vulnerable children and families in Latin

America affected by COVID-19.

Adding to the challenges of the year were two devastating accidents, one at Huaron and the other at La Colorada. Both resulted in a worker fatality. We are deeply saddened by the loss of these lives and extend our heartfelt sympathy to the families and co-workers of both employees. Safety is Pan American Silver's top priority, and we will continue our unrelenting focus on improving safety for our workforce. We are currently implementing measures designed to prevent similar accidents in the future, and we continue improving programs that are focused on embedding and furthering the culture of safety at each of our sites.

The Escobal mine remains on care and maintenance pending the completion of a court-mandated International Labour Organization (ILO) 169 consultation process between Guatemala's Ministry of Energy and

I EXTEND MY GRATITUDE TO OUR EMPLOYEES AND EXECUTIVE TEAM WHO WENT ABOVE AND BEYOND IN THEIR EFFORTS TO RESPOND TO THE YEAR'S UNPRECEDENTED CHALLENGES. SUCCESS IS NOT JUST MEASURED IN FINANCIAL TERMS, BUT ALSO IN HUMAN TERMS.

PAN AMERICAN REMAINS COMMITTED TO CONTINUOUSLY IMPROVING OUR SUSTAINABILITY PERFORMANCE. WE ARE IMPLEMENTING INDUSTRY BEST PRACTICES, SUCH AS THE MINING ASSOCIATION OF CANADA'S TOWARDS SUSTAINABLE MINING (TSM) PROTOCOLS, THE VOLUNTARY PRINCIPLES FOR SECURITY AND HUMAN RIGHTS, AND THE WORLD GOLD COUNCIL CONFLICT-FREE STANDARD.

Mines and the Xinka People. In the meantime, we continue to fulfill the requirements of Escobal's environmental management plan, which includes respecting existing commitments to communities and responding to requests for information.

Pan American Silver remains committed to continuously improving our sustainability performance. We are implementing industry best practices, such as the Mining Association of Canada's Towards Sustainable Mining (TSM) protocols, the Voluntary Principles for Security and Human Rights, and the World Gold Council Conflict-Free Standard. We also became a signatory to the United Nations Global Compact. These initiatives help us improve performance and manage risk, and they create opportunities for us to collaborate with peers and stakeholders to improve performance across the industry.

To further embed sustainability throughout our Company, we established an Environmental, Social, and Governance Committee comprising cross-departmental senior and executive management representatives. This committee is guiding us in aligning our performance and reporting with additional best practice standards and frameworks, namely the Sustainability Accounting Standards Board (SASB) and the Taskforce on Climate-related Financial Disclosures (TCFD).

We know, too, that diversity makes us a better Company. In 2020, we adopted an Inclusion and Diversity Policy, which formalizes our commitment to building a more diverse and inclusive work environment. In addition, I signed a CEO BlackNorth pledge that commits Pan American Silver to take steps to end anti-Black systemic racism. Implementation of this pledge will help address barriers for all racialized communities, Indigenous Peoples, the LGBTQ+ community, women, and persons with disabilities

We achieved several other notable successes in 2020 that merit mention: we developed a

set of Sustainability Performance Indicators that allows us to track and better manage our performance in key areas of environmental and social sustainability; we pledged to retain our female workforce during the pandemic and increased the percentage of available promotions filled by women; we experienced no significant environmental incidents at any of our operations; we reduced our reliance on the external water supply at San Vicente by increasing water recycling; and, finally, Morococha's purchased electricity was certified as renewable, making it our first 100% renewable electricity operation.

I want to close by saying how very proud I am of the work that Pan American Silver has done to continue operating during this extraordinary time. I extend my gratitude to our employees and executive team who went above and beyond in their efforts to respond to the year's unprecedented challenges. Success is not just measured in financial terms, but also in human terms. While the COVID-19 pandemic is not yet behind us, I am confident that we are resilient. We will continue to successfully manage our challenges and grow opportunities by adhering to our values, listening to our stakeholders, and working collaboratively.

"We will continue to successfully manage our challenges and grow opportunities by adhering to our values, listening to our stakeholders, and working collaboratively."

- MICHAEL STEINMANN



Environmental, Social and Governance. ESG. Social License. Corporate Social Responsibility. CSR. Sustainable business practices. These terms all mean the same: Doing the Right Thing. Behaving responsibly. Sharing the wealth. Looking after ALL stakeholders.

When I started Pan American Silver in 1994, these ESG terms were unknown. Today, they are basic tenets of our business. This is a very good thing. In fact, this evolution is one of the best trends I've seen in all my years in this business. Pan American Silver has evolved a lot itself and I'm so proud that our Company is a leader in ESG.

Mining is certainly about providing a return for shareholders. But it's also about looking after workers' health and safety, it's about treating the communities around its mines with honour and respect, it's about minimizing the environmental footprint of its operations to the greatest extent possible, and it's about constantly striving to have equality and diversity built into its fabric so everyone in the Company, regardless of race, religion or orientation, can have an equal opportunity to excel and create value.

What I've learned over the years is how closely linked these things are – in other words, the more companies look after ESG matters, the more money they make for their shareholders. It's a straight line to the bottom line.

Let's look at Pan American Silver's safety record for example. When we started operating our first mine in Peru in 1995, our safety record was unacceptable. Over time, we focused more and more on safety and I'm incredibly proud to see the results. Today, Pan American Silver has more employees than ever, operating more mines in more locations. Yet our safety record in terms of lost time injury frequency and lost time injury severity rates has vastly improved,

with 2020 being the best year in our history for these measures. This improvement was the result of immense effort and investment over many years. But we have more work to do – despite all our improvements, we still suffered two fatalities in 2020. We simply have to do better, and we will!

We are also focused on our environmental performance. Minimizing environmental impacts at all our mines is fundamental to how we operate. It demonstrates the respect and care we have for this planet and for the neighbours around our mines. It's also good business. It means we don't have large clean-up costs and penalties from regulators, and we benefit from lower insurance premiums. This isn't hard to do; it just needs focus, attention and resources. Mining does have an impact on the environment, but this impact can be mitigated by good operation and good reclamation - all achievable with proper management attention. Needless to say, we also have to reduce our carbon footprint, and this effort is being addressed urgently at all our operations.

Minimizing community conflict is another increasingly big focus of Pan American Silver. We have nine mining operations in five countries. In most of the regions where we operate, our mines are the major economic engine, so social issues are constantly arising. Today's social media means any issue can be instantly communicated to the public, so transparency and honesty are more important than ever. We try to get ahead of issues by communicating our plans and meeting with communities before impact happens. Avoiding blockage and other work stoppages, keeping communities informed about our work and proactively working to reduce negative impacts are more important than ever.

We also appreciate that equality and diversity in our workforce are good for business. Mining has traditionally been a male-dominated business. We are striving to increase the number of women on our Board of Directors

CHAIR'S MESSAGE

and in our employee base at all levels, and I'm really pleased to see our progress. We strive to be "diversity neutral" in our hiring practices, eliminating bias and prejudice as much as we can. I'm very pleased that nearly all our employees come from countries and regions where we work. This takes constant effort but it's clear that a diverse workforce is a better one

ESG has also risen in importance to shareholders. Our owners expect us to operate responsibly, to look after our communities, and to have good environmental and governance practices. We work very hard to achieve these goals at every one of our operations and today have a great reputation for excellence in these areas. Our success in the past is also being tested at two of our major growth projects - Navidad in Argentina, and Escobal in Guatemala. At Navidad, we await a decision by the Province of Chubut to amend the mining law to permit open pit mining in certain zones of the province. If this occurs, we could apply for a mining permit and demonstrate how responsible mining can occur for the benefit of not just the people, but also the region. At Escobal, Guatemala's Ministry of Energy and Mines is moving forward with the ILO 169 consultation process, respecting the Xinka People's right to consultation. We look forward to participating, as requested, in a process that is based on good faith, mutual respect and transparency.

Pan American Silver has become a respected leader in the mining industry for many reasons. One of these is our attention to the broader "ESG" aspects. Doing the Right Thing. I'm so proud of our record, and of all our thousands of people who work every day and "walk the talk". This report shows some of our recent achievements and our plans to further improve performance.



ROSS BEATY CHAIRMAN

This is my last sustainability letter, because I'm retiring from Pan American Silver's Board of Directors in May 2021 after chairing the Company for 27 years. While I won't be part of the future in the same way as I've been part of Pan American Silver's past, I know our team is strong and focused on these essential issues of modern responsible mining. I look forward to hearing and reading about how well Pan American Silver will do in its sustainability efforts in the future and wish our fine team great success in these endeavours.

2020 HIGHLIGHTS



ZERO SIGNIFICANT ENVIRONMENTAL INCIDENTS



ADOPTED AN INCLUSION AND DIVERSITY POLICY



90%
REDUCTION IN WATER FROM
EXTERNAL SOURCES FOR MINERAL
PROCESSING AT SAN VICENTE



COMMUNITIES AND INDIGENOUS
GROUPS THAT BENEFIT FROM OUR
SOCIO- ECONOMIC PROGRAMS
DIRECTLY OR INDIRECTLY



\$2,000,000 COMMITED TO SUPPORT LOCAL COMMUNITIES DURING COVID-19 PANDEMIC



100%
RENEWABLE ELECTRICAL
ENERGY SUPPLY CERTIFIED IN
MOROCOCHA



843,995 HOURS OF SAFETY TRAINING IN 2020



PARTNERSHIP WITH UNICEF CANADA
TO SUPPORT VULNERABLE CHILDREN
IN LATIN AMERICA



BECAME SIGNATORIES OF THE UN GLOBAL COMPACT

COMPANY AT A GLANCE

OPERATING MINES AS OF DECEMBER 31 2020



GOLD SEGMENT

TIMMINS WEST & BELL CREEK

Location: Canada Ownership: 100% Mine Type: Underground

SHAHUINDO

Location: Peru Ownership: 100% Mine Type: Open Pit

LA ARENA

Location: Peru Ownership: 100% Mine Type: Open Pit

SILVER SEGMENT

MOROCOCHA Location: Peru Ownership: 92.3%

Mine Type: Underground

DOLORES²

Location: Mexico Ownership: 100%

Mine Type: Open Pit/Underground

SAN VICENTE

Location: Bolivia Ownership: 95%

Mine Type: Underground

LA COLORADA

Location: Mexico Ownership: 100% Mine Type: Underground

HUARON

Location: Peru Ownership: 100% Mine Type: Underground

MANANTIAL ESPEJO / COSE /

JOAOUIN

Location: Argentina Ownership: 100% Mine Type: Underground

Shahuindo La Arena Huaron Morococha San Vicente Silver Segment Mining Operations Navidad Gold Segment Mining Operations Manantial Espejo Development and Advanced Stage **Explorations** Project

² Beginning in 2021, Dolores will move from the Silver Segment to the Gold Segment due to mine sequencing into higher gold grades over the remaining active mine life.

OUR PRODUCTS

Our principal products and sources of sales are silver and gold doré and silver bearing zinc, lead, and copper concentrates.

SILVER (Ag)



SOLAR PANELS

Silver paste is a key component of photovoltaic cells used in solar panels that transform sunlight into electrical energy.



BARS & COINS
Silver is refined into bars and coins for sale to international markets



HEALTH

Silver's antimicrobial and non-

toxic qualities are beneficial for

human health.

ELECTRONICS & BATTERIES

Silver is malleable, resists corrosion and oxidation, and is the best thermal and electrical conductor of all metals



JEWELRY

Silver is used to create beautiful, pieces of jewelry around the world.



SILVER

Silver is used to create everything from serving trays, to cutlery, to candlesticks.



WATER PURIFICATION

Silver can be found in water purifying systems due to its antibacterial qualities.

GOLD (Au)



Globally, jewelry is the primary use of gold



Gold is an efficient conductor of electricity and used in most electronic devices.

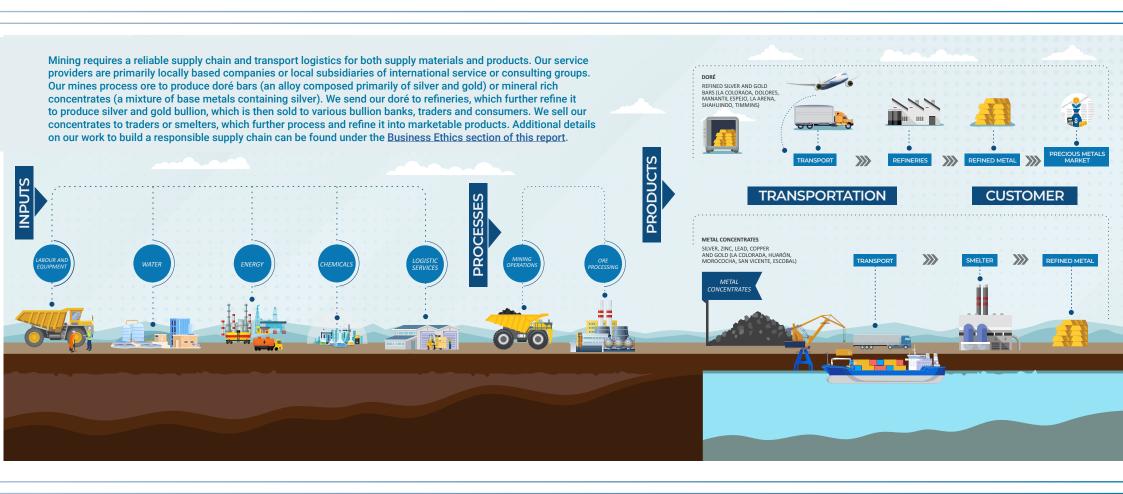


INVESTING

Governments, institutions, or individuals may hold gold coins or bullion as forms of investment.

Silver is an essential and versatile metal and plays a crucial role in the transition from fossil fuels to a low-carbon economy. We are working with the Silver Institute to improve the general understanding of silver's unique and vitally important role in low-carbon energy solutions. For more information, visit the website of the Silver Institute. https://www.silverinstitute.org

OUR SUPPLY CHAIN



GOALS AND PERFORMANCE

Our annual corporate goals are largely established by our employees and supervisors, which encourages a high level of understanding and commitment by those who carry out our day-to-day business activities. In 2020, we developed a set of Sustainability Performance Indicators (SPIs), to measure and monitor monthly performance on key social and environmental activities at our operations. Health and safety indicators are also monitored. Please see our 2021 Information Circular for the results of our 2020 corporate goals.

2020 GOALS	2020 RESULTS	2020 PERFORMANCE	2021 GOALS					
OPERATIONS AND SAFETY								
Achieve zero fatalities.	X	We incurred two fatalities at our mines.	Achieve zero fatalities.					
Achieve a lost time injury frequency (LTIF) of 1.1 or less.	✓	LTIF rate 0.35 per million hours worked.	Maintain LTIF of 0.90 or less.					
Achieve a lost time injury severity (LTIS) of 565 or less.	✓	LTIS rate 534.	Maintain LTIS of 525 or less.					
		SOCIAL						
Achieve zero significant social disputes at our operations.	Х	 La Arena - 2020 La Colorada - Ongoing Escobal - Ongoing³ 	Achieve zero new social disputes at our operations.					
All medium and high-risk grievances resolved by the end of 2020.	X	2% of the grievances and requests received in 2020 that remained open at the end of 2020 are medium and high-risk.	All medium and high-risk grievances resolved by the end of 2021.					
		Peru mines grievance system was reviewed by the internal audit team.	Expand the internal auditing of response mechanisms to all mines.					
			Review Mexico grievance system performance.					
Achieve Level A in Towards Sustainable Mining (TSM) Protocol for Community and Aboriginal Outreach by end 2020 (Silver Segment operations)	✓	All Silver Segment operations achieved Level A in TSM Protocol for Community and Aboriginal Outreach.	Achieve Level A in TSM Community and Aboriginal Outreach Protocol Relationships.					

³Prior to our acquisition of Tahoe Resources, the Escobal operation's mining license had been suspended pending the completion of an International Labour Organization (ILO) 169 consultation process mandated by the Constitutional Court of Guatemala. The mine is presently on care and maintenance pending the completion of the consultation. See the Escobal Project section of this report for more information.

2020 GOALS	2020 RESULTS	2020 PERFORMANCE	2021 GOALS
Continue to expand our community engagement activities through in-depth engagement with COIs in ou community development projects and through greater participation in our annual survey.	r d	All mines updated their COI engagement plans to align with TSM and UN Guiding Principles for Business and Human Rights requirements. We increased COI participation in our annual survey from 1,146 in 2019 to 1,901 in 2020.	Continue to expand our community engagement activities based on open dialogue and transparency, following international best practices.
Improve access to quality education in the communities near our mines.		We supported remote education during the COVID-19 pandemic through donations of laptops, printed materials and supplies.	Improve access to quality education in the communities near our mines.
Improve access to health care in the communities near our mines.		In response to the COVID-19 pandemic, we provided the Province of Cajabamba in Peru with an oxygen plant.	Continue to improve access to health care in the communities near our mines in coordination with local government priorities.
		Additionally, we provided health equipment, rapid tests, and medications to health units in our host communities.	
Develop additional alternative economic opportunities in communities near our mines.		While most of the economic development projects were paused due to the COVID-19 pandemic, we revised the Community Development Initiative (CDI) tool and KPIs for projects at our operations in Bolivia and Peru.	Continue to develop additional alternative economic opportunities in communities near our mines.
		PEOPLE	
Conduct on-site leadership skills programs at all our operations.	Χ	Due to the COVID-19 pandemic, we cancelled the leadership training planned for 2020.	Continue the development of community training programs that attract new talent to operations.
Conduct safety behavior training programs and facilitate the exchange of learning amongst operations.		We advanced a behaviour-based pilot safety program and our Peruvian operations, and supported learning exchanges between operations.	
		We trained our workforce on COVID-19 safety protocols.	

2020 GOALS	2020 RESULTS	2020 PERFORMANCE	2021 GOALS
Inclusion and diversity by percentage of women in new hires and promotions by 15%	s ✓ 1	7.4%	Complete the first phase of our Building Respect Together program ⁴ , covering 70% or more of our workforce
		ENVIRONMENT	
Achieve zero significant environmental incidents (SEIs) at our operations.	l √ Z	Zero SEI's at our operations.	Achieve zero significant environmental incidents (SEIs) at our operations.
Improve on bi-annual environmental audit performance.	r	mproved audit performance at La Colorada by educing the total number and severity of non-conformances compared to prior audit.	Improve environmental audit performance.
Reduce water use compared to business as usual by implementing improved project design at our operations.	ç F t	Reduced freshwater withdrawal for processing by 20% at our San Vicente operation. Reduced effluent generation at the potable water reatment plant at our La Colorada operation. Reduced water use for camp and road dust sup-	Reduce water consumption by 6% compared to 2021 base case. ⁵
		pression at our Peruvian operations.	
Continue post-closure activities at Alamo Dorado and conduct interim reclamation projects at our active		Post-closure with ongoing monitoring and naintenance activities at Alamo Dorado.	Continue post-closure activities at Alamo Dorado and conduct interim reclamation projects at our active operations
operations.		Completed progressive closure activities at La Arena on schedule.	Achieve 80 hectares net positive impact on vegetation and biodiversity across all our sites.
Reduce hazardous and non- hazardous non-rock related waste generation at our operations compared	L	Morococha recycled 42% more scrap metal and a Colorada 100% compared to 2019.	Reduce 11% of non-rock related waste compared to 2021 base case.
to business as usual.		Huaron started a composting program in 2020 processing 3 tonnes of organic waste.	

⁴The "Building Respect Together" program is aimed at fostering a more respectful, safe and inclusive work environment at Pan American Silver.

^{\$}The 2021 base case is our projected 2021 water use, energy use, GHG emissions, and waste generation, as calculated using our life of mine plans adjusted for annual production guidance (for more information on our 2021 guidance, please refer to the Company's news release dated January 19, 2021 or click here.)

2020 GOALS	2020 RESULTS	2020 PERFORMANCE	2021 GOALS
Implement projects to reduce energy use at our operations compared to business as usual.		Achieved 4,100 MWh of electricity savings through implementation of energy saving projects.	Reduce 0.3 % of energy consumption compared to 2021 base case.
		Achieved 35% reduction in electrical energy consumption for freshwater pumping and 27% reduction in gasoline consumption at San Vicente.	
Implement projects to reduce greenhouse gas emissions at our operations compared to business as		Certified 100% renewable electrical energy supply at Morococha.	Reduce GHG emissions by 11% compared to 2021 base case.
usual.		Installed grid connection of remote equipment at La Arena and Shahuindo.	
		Reduction of GHG emissions from energy projects at all operations.	
Achieve Level A TSM performance in 2020 at Silver Segment operations. Achieve Level A by 2022 or earlier at Gold Segment operations.		Level A for most protocols was achieved at our Silver Segment operations, however, we did not achieve our overall goal. More details are provided in the Sustainability Governance and Management section of this report.	Achieve Level A TSM performance for all protocols at all operations.



ENGAGING WITH

COMMUNITIES OF INTEREST

Engagement is an important focus at Pan American Silver, as our business success depends on establishing positive relationships and trust with COIs, which include employees and contractors, unions, local communities, governments, suppliers, industry associations, regulatory agencies, non-governmental organizations, civil society, analysts, and investors.

We welcome meaningful and inclusive engagement with all COIs. Through listening and dialogue, we learn about the issues COIs see as important, which enables us to more effectively manage these issues and to better align our goals and priorities with those of COIs. This approach also helps us build constructive, long-term relationships with these groups.

We progress our COI engagement processes by applying a structured and strategic approach. Our processes include:

- Identification of a broad and inclusive range of COIs
- Development of procedures, tools, and resources that support effective engagement, measure their effectiveness, and help us understand and manage COI expectations
- Establishment and continuation of meaningful dialogue with COIs in order to identify and manage issues of concern
- Conducting an annual COI survey in all countries where we operate

ANNUAL COMMUNITIES OF INTEREST SURVEY

We annually survey COIs identified in our mapping processes to better understand their sustainability-related interests and concerns. Each year, we place significant emphasis on the participation of individuals without computers and/or internet access. This involves installing computer terminals at site to collect worker feedback and outreach by community teams to collect input directly from individuals in the communities.

Our survey process entails having COIs identify and rank their 10 most important sustainability topics from a list of topics that is based on the GRI Standards. Each year we adjust our questions and refine the topics to capture relevant and emerging issues. For example, the 2020 survey was designed to cover topics related to effects of the COVID-19 pandemic.

In 2020, we had a 65% increase in survey participation. A total of 1,901 individuals, representing seven key COI groups, responded compared to 1,146 in 2019. Priority topics identified in the 2020 survey related to health and safety, job security, and community investment and engagement. This represents a change in priority topics from previous years, most likely due to concerns related to the impacts of the COVID-19 pandemic. Survey results are a key input into our materiality process.



TOPICS OF INTEREST

The table below lists our key COIs, typical types of engagement with those groups, and the three most important topics to each group identified through our 2020 COI survey. Our approach to managing these topics is discussed within this report's material topics.

Communities of interest	Our Employees	Our Contractors	Investors	Community members and Indigenous groups	Religious groups	Government	NGOs
Types of engagement	Meetings Face-to-face interactions Email and internal communications Lunch and learns Conferences Training Negotiations with Worker Unions Internal memorandums and communications Grievance mechanisms Engagement surveys	Meetings Face-to-face interactions Email and internal communications Lunch and learn sessions Conferences Training Negotiations with Worker Unions Internal memorandums and communications Grievance mechanisms Engagement surveys	Annual ESG Call Quarterly calls Quarterly and annual reporting Roadshows Conferences Meetings Engagement surveys	Community offices Face-to-face meetings Response mechanisms Community roundtables Engagement surveys Site visits Newsletters Radio and other media Grievance mechanisms Consultations	Community offices or churches Face-to-face meetings Response mechanisms Community roundtables Engagement surveys Grievance mechanisms	Community partnerships meetings Face-to-face meetings Conferences Public meetings Newsletters Consultations Negotiations with Worker Unions Audits and inspections Engagement surveys	Public meetings Response Mechanism Conferences Partnerships discussions Engagement surveys
Priority topics for 2020	1. Health and Safety 2. Socio-economic Impact and Development 3. Community Relations and Stakeholder Engagement/Outreach	Health and Safety Emergency Preparedness and Business Continuity Inclusion, Diversity and Equal Opportunity	Tailings and Mineral Waste Management Health and Safety Human Rights	1. Health and Safety 2. Environmental Programs and Management Systems 3. Socio-economic Impact and Development 4. Human Rights	Socio-economic Impact and Development Community Relations and Stakeholder Engagement/Outreach Health and Safety	Socio-economic Impact and Development Health and Safety Community Relations and Stakeholder Engagement/Outreach	Health and safety Inclusion, Diversity and Equal Opportunity Human Capital Development

MATERIALITY

This report covers our material topics - those relating to Pan American Silver's most significant environmental and social impacts and of high importance to COIs. Our process to define this report content is guided by the Global Reporting Initiative (GRI) Standards' Principles for Defining Report Content. Our COI and Executive Management surveys form the basis of our materiality assessment. We also review other inputs, including global trends, international standards, industry best practices, sustainability reporting frameworks, and Pan American Silver's business priorities. Identified topics are scored and ranked on a materiality matrix.

Pan American Silver's Materiality Process



26 ESG topics identified as relevant to Pan American Silver

Sources

ESG Rating Reports (i.e. S&P, Sustainalytics MSCI, ISS) Internationa standards, frameworks and protocols (i.e. GRI, SASB, TSM, TCFD) Pee Reports

Impacts

Executive Management Survey & meetings to dentify the topics with the most significant mpact.

Influence

Annual COI Survey to identify the topics with the most influence on stakeholder assessment decisions & opinions. The COIs included: employees, contractors, investors, NGOs, community members, religious groups, and government.

Review of internal and external engagement surveys
Scoring of topics by impacts and influence on a 1 (high) to 5 (highest) scale

Calibration & Mapping

Calibration of significance of impacts based on frequency of ESG topics. Mapping the 41 topics on the COI survey to the 26 ESG topics identified as relevant to the Company.

Materiality Matrix

Determination of materiality threshold to rank top 12 material topics. Review by ESG
Management
Committee
Final adjustments.

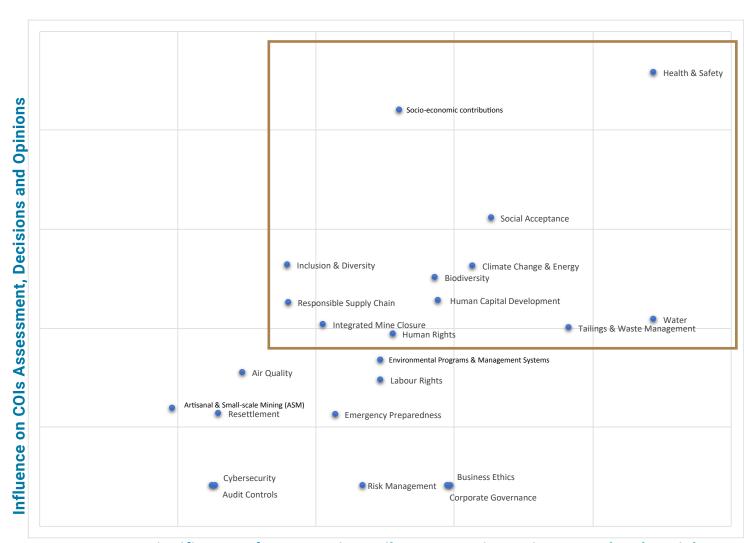
Annual reporting progress on identified material topics.

PAN AMERICAN SILVER'S MATERIALITY MATRIX

For reporting purposes, we have considered the topics with the highest ranking to be material. These 12 topics are identified within the yellow box on the matrix. The reporting boundary for each identified topic is limited to our operations and local communities.

We have included certain non-material topics in this report that are particularly relevant to our Company and within the industry context. These topics include environmental management systems, emergency preparedness, air quality, artisanal and small-scale mining, governance, business ethics, risk management, labour rights, and cyber security.

Although not included as a standalone material topic, we acknowledge the significant impact that the COVID-19 pandemic has had on our Company and COIs. Our report includes a section on our response to COVID-19 and additional details on the pandemic's effects within the relevant material topics.



Significance of Pan American Silver Economic, Environmental and Social Impacts

20

PAN AMERICAN SILVER • Sustainability Report 2020

2020 MATERIAL TOPICS

MATERIAL TOPIC	SUB-SECTION
C	COMMUNITIES
Social Acceptance	Impacts on Local CommunitiesEngaging Indigenous Peoples at our Timmins Operations
	Social Audits
	Community Response Mechanisms
	Community Disputes
	Escobal Project
Socio-Economic Contributions	Community InvestmentSustainable Development ProgramsLocal EmploymentLocal Procurement
Human Rights	Security personnel
	 Indigenous Rights
	Artisanal and Small-scale Mining (ASM)
	PEOPLE
Health & Safety	Safety Performance
	 Health and Safety training
	Health and Safety Audits

MATERIAL TOPIC	SUB-SECTION
Human Capital Development	Employment Conditions and Benefits
	Labour Relations
	Employee Attraction and Retention
	Training and Development
Inclusion & Diversity	Gender Diversity
morasion a Diversity	Cultural Diversity
	Generational Diversity
	Non-Discrimination and Pay Equity
	Respectful Workplaces
Е	NVIRONMENT
Water	Water Quality
	Water Use
	Oliverty Olivery
Climate Change & Energy	Climate Change
	Energy UseGreenhouse Gas Emissions
	Greenhouse Gas Emissions
Tailings and Waste	Tailings Facility Management
Management	
	 Waste Rock Dumps and Heap Leach Facilities
	 Industrial and Domestic Waste Manage-
	ment
	• Spills
Diadirania	Diadiyayaity Managazzzz
Biodiversity	Biodiversity ManagementLand Use
	• Land Use
Mine Closure	Mine closure
	Social closure
	PONSIBLE BUSINESS
Responsible Supply Chain	Supplier Code
	Supplier Risk and Due Diligence

COMMITMENTS AND MEMBERSHIPS

We are members and supporters of industry associations and other initiatives that help us advance our sustainability performance. Our participation provides a forum to learn from and dialogue with our peers as well as a platform through which we collaborate and contribute to industry best practices. We also partner with and support civil society organizations on initiatives that help address key sustainability challenges of relevance to our Company and COIs. Examples include:

- Member of the Mining Association of Canada (MAC) Through our membership in MAC, we are currently implementing the Towards Sustainable Mining (TSM) performance system. Our TSM performance is discussed in the <u>Sustainability Governance and Management section</u>.
- United Nations Children's Fund (UNICEF) Canada To support the wellbeing and rights of children, we have been working with UNICEF Canada for several years. In 2020, we entered into a 3-year \$1.5 million partnership commitment with UNICEF Canada, to provide support in the areas of health and education to vulnerable children and families in the Latin American countries where we operate. The program will put emphasis on Covid-19 related issues.
- United Nations Global Compact In 2020, we became a signatory to the United Nations Global Compact. This formalizes our commitment to driving global sustainable development and contributing to the United Nations Sustainable Development Goals.
- BlackNorth Initiative In 2020, our CEO signed the BlackNorth Initiative's CEO pledge committing Pan American Silver to take steps to end anti-Black systemic racism.
- Silver Institute We are working with the Silver Institute on a new study to assess and communicate silver's unique role in low-carbon energy solutions.
- Member of Women in Mining

 We are advancing the interests of women and facilitating conversations on inclusion and diversity in mining sector.

The full list of our memberships and partnerships by the countries where we operate is provided in our GRI & SASB data tables under <u>Memberships of Associations</u>.



SUSTAINABLE DEVELOPMENT GOALS





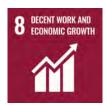














In 2015, the United Nations launched the 2030 Agenda for Sustainable Development, along with the Sustainable Development Goals (SDGs): 17 goals aimed at focusing and accelerating efforts to address global challenges and achieve an inclusive, sustainable future.

The Sustainable Development Goals highlight that respect for human rights is essential to achieving sustainable development. Human rights principles and standards are strongly reflected in the ambitious 2030 Agenda. Grounded in international human rights law, it offers critical opportunities to further advance the realization of human rights for all people everywhere, leaving no one behind. Meeting the 2030 target year for these goals requires strong, collaborative efforts from governments, private sector entities, and civil society.

We believe the mining industry has great potential to drive future progress on the SDGs, as mines are often situated in remote and developing regions, where implementing the SDGs can be challenging but where achieving them can have large and lasting impacts. Pan American Silver is committed to the principles of sustainable development and to the values essential to advancing all 17 of the SDGs

During 2020, we conducted an exercise to identify the SDGs on which our Company can have the greatest impact and to map our initiatives to those SDGs. The analysis considered four key criteria: (1) contribution of the mining industry to the SDG, (2) the SDG independent country assessments⁶ for the countries where Pan American Silver operates, (3) Pan American Silver's current efforts and initiatives to support the SDG, and (4) the linkage between the SDGs and Pan American Silver's material topics. Following this exercise and analysis, we prioritized the eight SDGs outlined in the following two pages.

⁶ The Sustainable Development Report (formerly the SDG Index & Dashboards) conducts an independent assessment of all 193 UN Member States, as a measurement of the country's total progress to achieving each SDG. <u>Sustainable Development Report 2020 (sdqindex.org)</u>



Mining can contribute to SDG3 by championing occupational health and safety, offering and encouraging preventative care, mitigating the spread of disease, and increasing mental health awareness in our COI communities. Our 2020 material topics "Socio-economic Contributions" and "Health and Safety" is directly linked to SDG3. Of the countries where Pan American Silver has activities, the independent SDG country assessments find that Bolivia, Guatemala, and Peru face major challenges and Argentina, Canada, and Mexico face significant challenges to meeting this SDG.



Mining can contribute to SDG4 through initiatives that support educational outcomes in communities, upgrade the local skills base, and train and educate the workforce. We have identified two of our 2020 material topics to be linked to SDG4: "Socio-economic Contributions" and "Human Capital Development". The SDG independent country assessment finds that, of the countries where Pan American Silver has activities, Guatemala and Mexico face significant challenges to meeting SDG4.



As a historically male-dominated industry, mining can contribute to this SDG by offering equal opportunities for women and practising gender inclusion across the business and project life cycle. Our 2020 material topic "Inclusion & Diversity" is directly linked to SDG5. The SDG independent country assessment finds that, of the countries where Pan American Silver has activities, Guatemala faces major challenges and Canada, Mexico, Peru, and Bolivia face significant challenges to meeting this SDG.



Our activities such as developing comprehensive baseline regional water resource information, infrastructure investments, conserving and recycling water, monitoring water quality, and managing water holistically can contribute significantly to this goal. Our 2020 material topic "Water" is directly linked to SDG6. The SDG independent country assessment finds that, of the countries where Pan American Silver has activities, Bolivia, Guatemala, and Mexico face major challenges in providing potable water and basic sanitation services. Argentina and Peru also face significant challenges to meeting this SDG.



Through improving energy efficiency and incorporating renewable energy, the mining industry can make a significant contribution to SDG7. Our 2020 material topic "Climate Change, Energy and GHG Emissions" is directly linked to SDG7. The SDG independent country assessment finds that, of the countries where Pan American Silver has activities, Guatemala and Mexico face significant challenges to meeting this SDG.



The mining industry can contribute to SDG8 by providing well-paid direct and indirect jobs. In particular, mining can contribute to the economic outcomes of local communities by supporting and procuring from local suppliers. We have identified three of our 2020 material topics to be linked to SDG8: "Socioeconomic Contributions", "Inclusion and Diversity" and "Social Acceptance". The SDG independent country assessment finds that, out of the countries where Pan American Silver has activities. Argentina, Guatemala, and Mexico face major challenges and Peru faces significant challenges to meeting the SDG.



Mining companies can promote responsible consumption and production by minimizing resource use and waste, and incorporating lifecycle thinking into all phases of the project, from planning to closure. Our 2020 material topic "Tailings and Waste Management" is directly linked to SDG12. The SDG independent country assessment finds that, of the countries where Pan American Silver has activities, Canada faces major challenges and Argentina and Mexico face significant challenges to meeting this SDG.



Mining companies can contribute to SDG13 by reducing emissions, building climate change resilience, and recognizing climate change in planning and investment. Our 2020 material topic "Climate Change, Energy and GHG Emissions" is directly linked to SDG13. The SDG independent country assessment finds that, of the countries where Pan American Silver has activities, Canada and Mexico face major challenges and Argentina faces significant challenges to meeting this SDG.

For more details on how Pan American Silver contributes to the eight prioritized SDGs, please see the SDGs section of our sustainability website or click here.

OUR ESG JOURNEY

Q&A WITH BRENT BERGERON, SENIOR VICE PRESIDENT, CORPORATE AFFAIRS AND SUSTAINABILITY

What do you see as Pan American Silver's key environmental, social and governance (ESG) opportunities?

Expectations around ESG disclosures are creating an opportunity for us to improve both our performance and our disclosures. For instance, we recently developed an initial set of SPIs that measure operational-level ESG performance on key issues. One example is the length of time our teams take to respond to requests or concerns that come from the community through our response mechanisms. SPI performance is reported by operations and reviewed by senior management on a monthly basis. Operations now have a better understanding of our external reporting requirements and the relevance of key ESG issues, and senior management has better oversight of these issues through consistent and frequent reporting. We have also been focused on ESG risk management. Together with operations, we have created standardized country risk assessment processes that take into account a broad range of non-operational risks, such as community access to water and changing climate regulations. These tools give operations the ability to proactively manage potential risks before a serious issue or conflict arises. Both the SPIs and risk processes will drive continuous improvements on ESG issues, strengthen our management systems, and, we believe, raise the quality of our external disclosures.

Pan American Silver held its first responsible investor call ("A conversation on ESG") in September 2020. What did you learn from this call?

I was pleased at the level of attendance across our target audience groups. The call was geared towards the ESG investment community, but the audience also included non-ESG investors, the insurers, refineries, mining peers, and other companies looking to move in a similar direction on ESG. To me this highlights the growing recognition of the connection between a Company's ESG performance and risk management to its financial performance.

Having regular ESG investor calls is important for several reasons. It allows the audience to hear directly from our executives, who set the tone in conveying the importance of strong ESG performance. It's an opportunity to showcase our Sustainability Report and highlight our past year's performance. And it gives us a chance to talk about the challenges affecting our operations. Mining is not an easy business, and we should not be afraid to acknowledge the issues we are facing. Nor should we shy away from telling the story of the work that we are doing to manage these challenges in ways that will see us welcomed into communities and given the opportunity to partner in sharing the successes of our operations.

How have investors' demands for greater transparency and accountability on topics related to ESG performance affected Pan American Silver?

For Pan American Silver, stakeholder expectations and perceptions changed when we acquired Tahoe Resources in 2019. There was increased interest in how we were managing the challenges and complexities of our new operations. There was, and still is, particular interest in our Escobal mine in Guatemala, where the history of that operation and the on-going challenges have been quite public.

By being open in discussing the complexity of these challenges and demonstrating how we are actively working to address them – in terms of the teams and resources being dedicated, the processes being put in place, and the necessity of actively listening to our communities of interest – we give our stakeholders a better understanding of our approach and appreciation for the amount of time it takes resolve these challenges in a transparent manner and in a way that is respectful of our host communities and countries.



INVESTORS // SAVE THE DATE

Pan American Silver
Responsible Investor Conference Call:
A conversation on ESG
September 9, 2021

Additional information and webcast will be made available at www.panamericansilver.com

SUSTAINABILITY GOVERNANCE AND MANAGEMENT

BOARD OF DIRECTORS

Good governance is critical for effective corporate performance and plays a major role in protecting stakeholder interests and maximizing stakeholder value. Our Board of Directors (the Board) oversees the direction and strategy of the business, guided by Pan American Silver's values, legislative and other governance standards, stock exchange rules, and industry best practices. The Board executes overall responsibility for corporate governance matters by:

- · Approving corporate policies and guidelines
- Assisting in the definition of corporate objectives, assessing and approving key plans
- · Evaluating the Company's performance on a regular basis
- Ensuring that the Company is led by qualified executives and senior managers

For additional details on our Board's mandate, members, committees, processes, and our corporate policies see our 2021 Information Circular or the corporate governance section on our website

SUSTAINABILITY GOVERNANCE STRUCTURE

Sustainability is embedded in our vision, values, and business strategy. Governance and oversight of sustainability at Pan American Silver start at the Board level. From the top level of the organization, accountability for sustainability cascades to our sites.



ORGANIZATIONAL ROLES DIRECTLY RESPONSIBLE OR ACCOUNTABLE FOR SUSTAINABILITY PERFORMANCE

BOARD OF DIRECTORS

- Health, Safety, Environment and Communities Committee (HESC Committee) provides policy direction and oversight of safety, environmental, and corporate social responsibility matters. It reviews the Company's sustainability performance on a quarterly basis and reports back to the full Board.
- Nominating and Governance Committee oversees the effective functioning of the Board and the implementation of governance best practices.
- Audit Committee provides oversight of financial reporting and disclosures, internal controls, and risk management.
- Human Resources and Compensation Committee oversees human resources, compensation, and succession planning.

CORPORATE MANAGEMENT TEAM

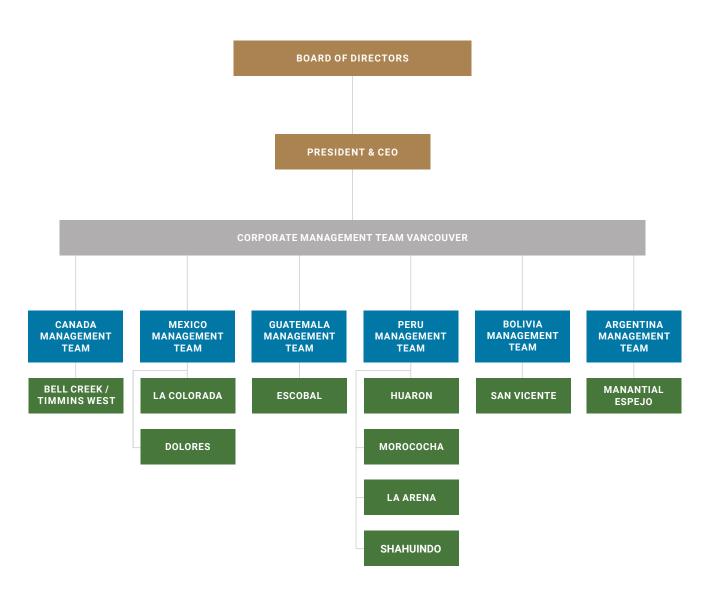
Our CEO and senior leadership directs and oversees strategy, programs, initiatives, and performance related to communities, health and safety, environment (including climate change, water management, biodiversity conservation, and tailings and waste management) and human resources. They also monitor sustainability indicator performance on a monthly basis. The Environmental, Social, Governance (ESG) Committee, comprised of cross-departmental senior and executive management representatives, supports the Company in fulfilling its ESG management responsibilities.

COUNTRY MANAGERS

 Country Managers oversee and manage sustainability in each of the countries where we operate.

MINE MANAGERS

 Mine managers implement sustainability programs and initiatives and supervise teams responsible for community relations, environment, safety, and human resources.



SUSTAINABILITY RISK MANAGEMENT

In 2020, we developed a standardized set of SPIs that measure and monitor mine-level performance on the following social and environmental issues:

- · Social risk management
- Community grievance management
- Community investment
- Significant environmental incidents
- Environmental audit performance
- Water consumption

- Energy consumption
- GHG emissions
- **Biodiversity Conservation**
- Waste management
- TSM performance

Health and Safety performance indicators are also monitored. Senior management review SPI performance on a monthly basis; the Board receives quarterly performance reports.

During the year, we also formalized and standardized our existing country risk assessment processes. Across all countries in which we operate, we employ a systematic approach to identifying, analyzing, and evaluating external, non-operational risks across 10 categories. All the identified risks are monitored, managed and/or mitigated at the operation or country level. Significant risks are discussed by senior management quarterly; the Board receives quarterly reports. Going forward, we will develop the implementation plan for an enterprise risk management (ERM) system, which we intend to rollout company-wide in 2022.

Both the SPIs and country risk assessments are improving our ability to proactively identify and manage potential risks before serious issues arise, contributing to the achievement of operational plans, and helping us to leverage opportunities for growth and value creation.

Country Risk Assessments

Risk Categories:



SUSTAINABILITY MANAGEMENT AND INTEGRATION

Our sustainability management implementation system provides us with a consistent approach to operating in an ethical and responsible manner in compliance with applicable laws and industry best practices. Through this system, our corporate policies translate our vision and values into specific commitments, which we implement within our Sustainability Pillars. The system is designed to consider the external factors that affect our industry, including market uncertainties and increasingly demanding political, economic, environmental and social circumstances. We do not control these external factors but have developed an approach to help us navigate risk and deliver value to all COIs.

Our Pillars



Sustainability management implementation system

VISION

To be the world's premier silver producer, with a reputation for excellence in discovery, engineering, innovation and sustainable development.

VALUES

Our values set the standard for how we operate as a business. Operating in a responsible and ethical manner that complies with applicable laws, rules and regulations. Providing a safe and healthy workplace for all of our employees and contractors. Conducting our business affairs free from favouritism, fear, coercion, discrimination or harassment. Providing full, fair, accurate, timely and understandable disclosure to all regulatory bodies, stakeholders and employees.

CODE OF CONDUCT

Our Code sets out key principles and expectations for ethical business conduct in how we operate and interact each other and our Communities of Interest.

POLICIES

Our policies translate our values into specific commitments.

SYSTEMS

Our systems and standards incorporate best practices and provide consistent guidance to sites for managing our sustainability foundations.

PILLARS

Our focus is on managing performance in these areas: Community Investment & Sustainable Development; Health & Safety; Human Rights; Water; Employee Attraction, Retention & Development; Climate & Energy; Business Ethics & Anti-Corruption; Biodiversity & Mine Closure; Tailings & Waste

Towards Sustainable Mining

Through our membership in the Mining Association of Canada we are currently implementing the TSM performance system, a world class management standard designed to help mining companies responsibly drive sustainability performance and manage risk.

A major focus for us in 2020 was the continued implementation of TSM protocols and frameworks. We completed self-assessments of each site against the TSM protocols and developed detailed action plans to address gaps and enhance internal guidelines and processes. Progress towards our goal, based on self-assessments is shown in the table below:

Site	TSM Level Goal 2020	Tailings	Energy	Biodiversity	Water	Safety	Crisis Communications	Aboriginal and Communities Outreach	Child and Forced Labour	Average
Timmins	В	100%	100%	100%	100%	100%	100%	100%	100%	100%
Dolores	А	-	100%	95%	95%	100%	100%	100%	100%	99%
La Colorada**	А	75%	100%	100%	100%	75%	100%	100%	100%	94%
La Arena	В	-	100%	100%	100%	100%	100%	100%	100%	100%
Shahuindo	В	-	100%	100%	100%	100%	100%	100%	100%	100%
Huaron**	А	50%	100%	100%	100%	75%	100%	100%	100%	91%
Morococha	А	65%	100%	100%	100%	100%	100%	100%	100%	96%
San Vicente	А	100%	100%	100%	100%	100%	100%	100%	100%	100%
Manantial Espejo	А	100%	100%	100%	95%	100%	100%	100%	100%	99%
Average		82%	100%	99%	99%	94%	100%	100%	100%	98%

^{**} Completion of level A on safety protocol affected by fatal accident

Although delayed by the COVID-19 pandemic and the related mine suspensions, our mines made major progress on achieving 2020 TSM goals. Fatal accidents at La Colorada and Huaron prevented those mines from achieving Level A on the TSM safety protocol. Implementation of training programs and additional reporting are required to reach level A on water and biodiversity at Dolores. Our Manantial Espejo mine implements the Argentina Chamber of Mining Companies (CAEM) TSM protocols, which require an internal audit to reach Level A for the water protocol. The audit was unable to be completed in 2020 but is planned for Q2 2021. All sites made excellent progress on the TSM Tailings Management Protocol, but pandemic-related delays and priorities prevented final completion of extensive action plans at Huaron, Morococha and La Colorada. We are committed to continually improving our performance to achieve minimum Level A for all TSM protocols at all sites in 2021.

RESPONDING TO COVID-19

Q&A WITH STEVE BUSBY, COO

How has Pan American Silver continued to operate during COVID-19 while keeping its workforce safe?

Since the start of the pandemic, our primary focus has been on protecting the health and safety of our workforce and their communities. We developed and implemented best practices and protocols for dealing with the virus. We secured the services of a leading epidemiologist to provide training and education to mine managers and to guide any changes to our protocols, which we update and reinforce as necessary. We also developed programs to provide workers and their families with medical surveillance, advice, and support. Although we have continued to operate throughout the pandemic, all our Latin American mines were temporarily suspended and placed on care and maintenance for a period of time in accordance with government orders. We voluntarily suspended operations at three of our mines for an additional temporary period of time to help curtail the spread of the virus in those regions where those mines are located.

In regions where a high number of cases is being reported, we have been deploying intensive testing, contact tracing, and quarantining practices. We have invested in local health care resources and laboratories, and have even built our own labs to test for

the COVID-19 virus where it was necessary to improve the accuracy and speed of testing. In certain jurisdictions, we have installed or adapted new technologies, such as infrared cameras, to monitor worker temperatures, and a phone App to improve our communication with workers. These best practices have been shared across all our operations. As we move into 2021, we are very aware of the potential for COVID-19 fatigue and the uncertainties around vaccination rollouts. We will continue to adapt and reinforce our protocols and processes to reflect local virus

What role did digital technology play in Pan American Silver's response to COVID-19?

conditions and implement supports for our

workers.

A key to our business continuity during 2020 was the ability to adapt rapidly to using digital technology and collaboration platforms both to continue with our core work and to respond to the complex challenges posed by COVID-19. These platforms have been vital in sustaining the Company, which has been operating under work-from-home orders and a virtual ban on international traveling.

What's been surprising to me is the use of these platforms has been exceedingly successful at breaking down language, spatial, and

hierarchical barriers in our business. While the pandemic has compelled deeper engagement and critical discussions across operations and functions, this virtual technology has allowed us to include a broader range of perspectives and input in those conversations. The result has been more and better collaboration, which, in turn, has led to better problem solving. Importantly, our increased communication with operations during the pandemic has made us much more aware of issues on the ground and improved our ability to take action.



"Since the start of the pandemic, our primary focus has been on protecting the health and safety of our workforce and their communities."

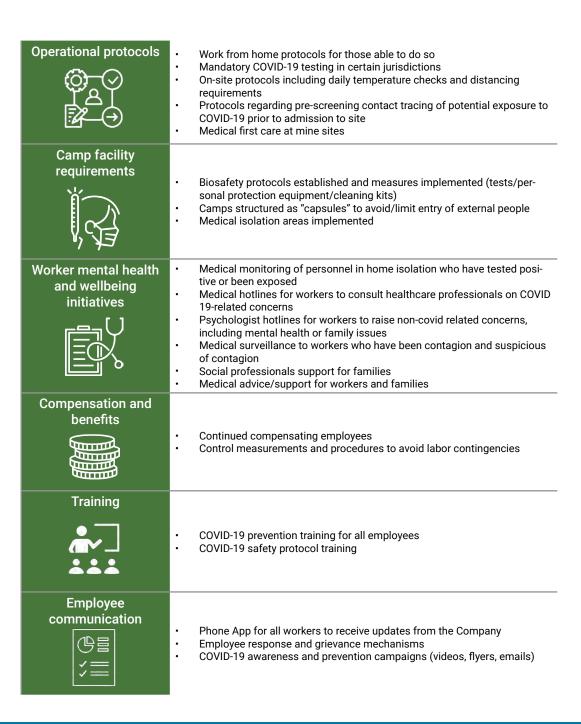
OUR OPERATIONAL RESPONSE TO COVID-19

Supporting our workforce during the COVID-19 pandemic

Throughout the pandemic, our primary concern has been the health and safety of our employees and contractors, and the communities in which they live and work. A cross-functional team comprising human resources, legal, safety, human rights, operations, and communities established COVID-19 health protocols specific to each operation. The protocols contain recommendations by the World Health Organization, the United Nations Development Program, local health authorities, and our epidemiologist, and consider each operation's context, comply with requirements of national and regional governments, and incorporate our commitments to human rights. We also established a system through which compliance with protocols is actively monitored.

When COVID-19 was declared a global pandemic, we shut the corporate office and implemented work-from-home protocols. At operations, we restricted on-site staffing levels, implemented screening and testing requirements, and moved most administrative staff to a work-from-home environment in order to reduce potential virus exposure levels, particularly to our vulnerable personnel, and to accommodate certain personal obligations such as at home child or elderly care. We have also accommodated those employees who have been unable or unwilling to return to productive work.

We recognize that the physical health and safety of our workers is only one component of the pandemic. The pandemic has created new and additional stresses on our workforce, resulting from lengthy lockdowns on site, worker shortages, isolation during quarantine, as well as family pressures. We are taking measures to improve overall worker wellbeing, including mental health. In the fall of 2020, we surveyed approximately 30% of our employees to collect feedback on how Pan American Silver was doing in managing the impacts of COVID-19 and what additional support was required. In response to the feedback, we have developed several initiatives, including:





SOCIAL ACCEPTANCE

WHY IS SOCIAL ACCEPTANCE IMPORTANT?

Although mining can be a driver of economic growth and positive social development, it can also have negative impacts on host communities. Stakeholder interest in and scrutiny over the effects of mining activities on communities and groups impacted by those activities, particularly vulnerable groups, is growing. Expectations for the industry have increased. Mining companies are expected to engage with host communities and help them understand the full range of possible impacts, both positive and negative, throughout the mining lifecycle. Social acceptance is gained through transparency, engagement, and impact management. A company's failure to establish social acceptance with host communities can manifest in conflict and social unrest and result in legal challenges, production delays, the revocation of permits and licenses, and even the suspension of mining operations.

For Pan American Silver, business success depends on social acceptance by COIs, including host communities. It is important to us to be a partner of choice for our host countries and communities. Mutual trust and understanding are prerequisites to this acceptance. We build and maintain trust through ongoing engagement, open and inclusive dialogue, and through managing both the actual and perceived impacts of our activities. Social acceptance requires ongoing commitment. We must be willing to adjust the way we work in response to COI concerns and interests, and to work together to effectively contribute to the long-term social and economic development of host communities.

OUR APPROACH

We have adopted formal policies, procedures, and industry best practices to manage our impacts on and contribute to the social and economic development of communities. Each country and community in which we operate has a distinct culture and social context. Our social management approach provides us with a consistent methodology for identifying, managing, and measuring our social impacts and performance across our mines. This approach provides a level of standardization while allowing each mine the necessary flexibility to tailor tools and processes as needed to meet the distinct social and environmental contexts of local communities.

ANALYST CENTER Material Topic - Social Acceptance

What is included in this section:

- Managing impacts on local communities
- Social audits
- Community response mechanisms
- Community disputes
- Engagement with Indigenous Peoples at Timmins Operation
- Escobal project

GRI indicator: 403-9; 408-1; 408-103; 409-1; 409-103; 411-103; 413-1; 413-103; 413-2; G4 MM5; G4 MM6; G4 MM7

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

Prioritized SDGs: 3; 8

Potential Risks and Impacts:

- Community opposition to mine operations or development resulting in project or production, loss of or failure to obtain permits, and/or loss of social acceptance
- Economic dependence by or wealth disparity within local communities, changes to the social dynamics, pressures on infrastructure, housing and services, harm to vulnerable groups
- Political or social instability change

Social Management Approach















ENGAGE

Community Teams

Each mine site has a community office and team responsible for ongoing engagement.

COI Survey

We gather information annually on issues that are important to our COIs as well as their perceptions of our performance.

Response Mechanisms

Each community office maintains a response mechanism, which helps us understand and respond to community questions or concerns around the perceived or actual impacts of our activities.

PLAN

Participatory Baseline Assessments

We conduct assessments jointly with communities and third parties to:

- Understand the current social context within and the potential impacts of our operations on the host communities
- Identify programs appropriate for the social context of the communities

COI Mapping

 Identify and map relevant COIs, including vulnerable groups who may be disproportionately affected by our activities.

Community Development Initiative Tool

Our tool helps sites work collaboratively with local communities when developing socio-economic projects and programs.

IMPLEMENT

Programs and initiatives

Our programs, designed in collaboration with communities, are intended to provide sustainable benefits for these communities, promote local hiring and procurement, and support new or ongoing infrastructure or services.

Capacity Building

Training

We train our local teams on systems and procedures to manage potential impacts and align our socioeconomic development programs with community needs and aspirations.

Education

We educate employees and community-based service providers about our expectations regarding ethical, safety, environmental, and CSR standards.

MONITOR & EVALUATE

Social audits

We conduct social audits at each mine biennially to monitor the programs we run in partnership with neighbouring communities, to assess our contractors' camps and facilities, and to identify opportunities for improvement.

Towards Sustainable Mining (TSM) Aboriginal and Community Relationship Protocol

Our sites self-assess their performance against this protocol and develop corresponding action plans for improvement.

Sustainability Performance Indicators (SPIs)

We use SPIs to measure and improve our performance in key areas.



ACCOUNTABILITY

The Board's HSEC Committee has oversight of the Company's social performance.

The Vice President of Social Sustainability, Inclusion and Diversity, leads sustainable development programs and initiatives, which are overseen by the Senior Vice President, Corporate Affairs and Sustainability.

The Human Rights Officer reports to the General Counsel and oversees implementation of the Human Rights Policy and related programs.



OUR PERFORMANCE

Managing Impacts on Local Communities

Our community processes are participatory and involve a broad range of COIs. Ongoing engagement as well as participatory baselines and perception assessments help us understand the priorities and concerns of host communities, which, in turn, helps us identify and manage our actual and perceived impacts, understand community needs, and manage social risk.

In addition to supporting communities during the COVID-19 pandemic, our work focused on aligning with the TSM Aboriginal and Community Relationship Protocol and international best practices by formalizing our processes related to COI engagement and social risk management. For example, mine-level community teams and corporate collaborated to standardize our approach to COI mapping, engagement planning, and response mechanisms across operations. We also trained communities teams on the TSM protocol requirements and the appropriate design and functioning of response mechanisms. Currently, all of our Silver Segment operations meet TSM A level on the TSM protocol, and our Gold Segment operations are on track to meet TSM A level in 2021. In 2021, we will begin implementing the new TSM Community and Indigenous Relationships Protocol.

In 2020, we developed an initial set of social SPIs to help us measure operational-level performance and manage social risks.

Corporate and community teams also collaborated with internal and external human rights experts to create a standardized, country-level, social risk assessment tool, which is built on our existing risk framework. All of our COI engagement processes serve as inputs to the risk assessments process. This tool improves our ability to proactively identify and manage

potential risks before a serious issue or conflict arises. During the COVID-19 pandemic, the tool has proven vital in helping us manage social risks.

Standardizing and formalizing our social sustainability processes and tools is helping us create a common language around and improving our understanding and management of social issues. SPI performance and social risk assessments are now reported to and reviewed by senior management on a monthly basis. These improved processes will help us meet the requirements of the new TSM protocol.

Social Audits

We conduct social audits to help us monitor our social footprint and manage our performance. The audits are conducted by community team employees from across the Company. Our audit framework which is based on the ISO 26000 guidance standard on social responsibility and incorporates Pan American Silver's policy commitments, is continuously updated to incorporate international best practice, such as:

- Industry standards and best practice guidance
- TSM Aboriginal and Community Outreach Protocol
- United Nations Guiding Principles (UNGP) on Business and Human Rights
- UNICEF Canada's Child Rights and Security Checklist
- Voluntary Principles on Security and Human Rights
- International Labour Organisation's Guide for Enterprise Diagnostics



SOCIAL AUDIT PROCESS

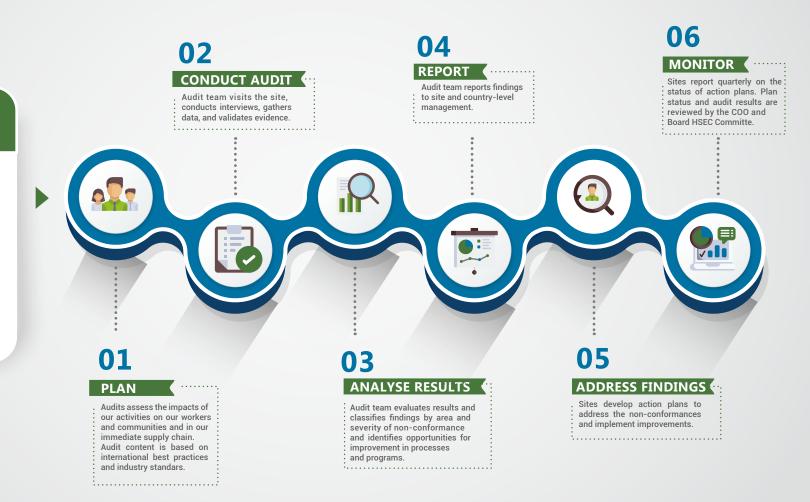


Labor Practices (camp conditions, contracts, security, child and forced labour)

Community Relations Capacity (corporate values, pillars, performance)

Community Engagement (socialization of policies, program effectiveness, communication)

Human Rights Lens

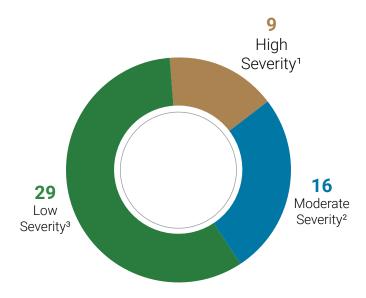


Social Audits Performance

In 2020, the Social Sustainability team completed a social audit at Manantial Espejo in Argentina. The main findings were related to unsatisfactory maintenance of camp conditions at the mine. These issues have been addressed. Social audits scheduled for Bolivia and Mexico were postponed until 2021 due to COVID-19-related site restrictions.

Social Audit Results 2020 - Argentina

Number of Non-Conformance Audit Findings



Notes:

- (1) High Severity (A) applies to non-conformance audit findings that may have a critical impact on the Company's reputation and/or a high economic impact.
- (2) Moderate Severity (B) applies to non-conformance audit findings that may have a moderate impact on the Company's reputation, and/or a potential economic impact.
- (3) Low Severity (C) applies to non-conformance audit findings that have a low potential impact on the Company's reputation.

Community Response Mechanisms

Our community response mechanisms provide a means through which community members can engage with our operations. Community members can submit questions, requests, concerns, and/or grievances to us in person or via:

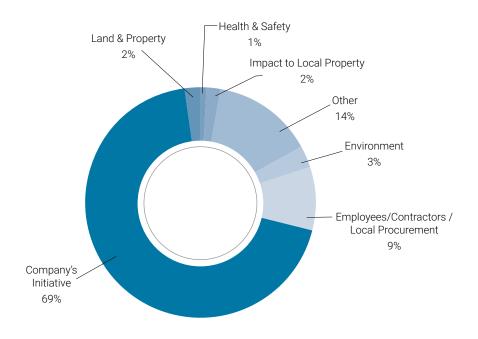
- Community Mailbox
- Telephone
- Email
- Suggestion boxes
- Community offices

All requests or grievances are logged by the community office. The social department works with other departments, as required, to respond. If there is an objection to the response, the case escalates to an appeal process that involves the mine's senior management. Community teams report progress and outcomes monthly to the Vice President of Social Sustainability, Diversity and Inclusion. The effectiveness of the mechanism is evaluated through our social audit system.

In 2020, we continued our work to formalize our response mechanisms in alignment with the United Nations Guiding Principles on Business and Human Rights and TSM protocol requirements. Due to concerns

over the high number of grievances received related to local procurement issues in Peru, we engaged our internal audit team to review the effectiveness of our response mechanisms at our four Peruvian mines. We identified areas for improvement, specifically regarding grievance processing times. We hope that improving our accountability and responsiveness will, in turn, foster greater trust in and use of the system by community members. In 2020, we received 1.290 requests and grievances, nearly four times as many as we received in 2019. The majority, 69%, of the feedback fell into the category of "Company's Initiative", which includes requests for information about our operational activities or actions related to COVID-19, requests for employment opportunities, and requests for donations. By the end of 2020, we had closed 95% of the total cases. Our community teams continue to work with the individuals and communities concerned to resolve the 61 grievances and requests that remained outstanding at the end of the year.

Grievances & Requests Received by Category in 2020



Our response mechanisms track requests and grievances in 12 categories. In a given year, we may or may not receive requests or grievances pertaining to a specific category.

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

Note: Does not include data from the Escobal response mechanism.

Significant Social Disputes

Significant social disputes are defined as grievances that cannot be resolved jointly within a reasonable time frame and/or require significant financial resources to resolve. These disputes are escalated to site-level or country-level senior management for oversight of the resolution process.

From time-to-time disputes arise with our communities that are not resolved through our response mechanism process. In January 2020, a dispute was initiated by the community near our La Arena operation in Peru. The dispute was in relation to a commitment by Tahoe Resources, the mine's previous operator, to provide the community with a potable water system. In protest, the community set up a roadblock in January 2020 that lasted 12 days. Acknowledging our obligation to uphold previous commitments to communities, we began an extensive engagement process with the community. We succeeded in identifying an alternative water distribution network and have started construction of the system that will provide potable water to 1,500 families. This system includes a water supply pipeline, treatment plant, and connections to La Arena community homes.

We are currently involved in two other social disputes, which we are actively working to address. As part of an expansion at La Colorada that commenced in 2015, we built new camp facilities and reaccommodated workers as well as a group of families who lived on our property. Eleven families filed a land rights claim in the Mexican Agrarian Court. This group also engaged the United Nations Office of the High Commissioner for Human Rights (OHCHR) in Mexico City. In addition, a process was initiated before the Secretariat of Agrarian, Territorial and Urban Development in Zacatecas to declare lands legally owed by the Company as national property. We have been proactively working with the OHCHR and the families affected to resolve the issues. In

2018, the OHCHR identified areas of concern and opportunities for improvement from a human rights perspective, including improving water, electricity and facilities access, as well as changes to physical security infrastructure. We took immediate steps to address these issues and continue working towards resolving this issue. We have met with representatives of families and officials from OHCHR and National Human Rights Commission on three occasions, once at the mine site, once in Zacatecas City and once virtually (due to COVID-19 restrictions) to listen to concerns and to explore opportunities to address outstanding issues with the objective of finding a final and permanent resolution for the families still living in our camp facilities.

We also classify the situation at Escobal as an ongoing dispute. Prior to our acquisition of Escobal in 2019, its mining license had been suspended by the Constitutional Court of Guatemala based on the determination that the Ministry of Energy and Mines' had omitted to conduct the required consultation with the Xinka Indigenous People. The mine is currently on care and maintenance while the government of Guatemala conducts the court-mandated International Labour Organization (ILO) 169 consultation process. We will participate in the processes as requested by the government. (Additional details on the Escobal mine and the ILO consultation process are provided in the Escobal Project section of this report.) Protesters near the town of Casillas have blocked the primary highway that connects Guatemala City to San Rafael Las Flores and the Escobal mine. A second roadblock. initiated in 2018 near the community of Mataguescuintla, also remains in place. We are engaging with community leaders, government agencies, and NGOs to develop a productive dialogue process aimed at resolving the dispute and reaching a peaceful conclusion and improved community relationships.

ENGAGING WITH INDIGENOUS PEOPLE AT TIMMINS

Pan American Silver recognizes and respects the rights, cultures, heritage, and interests of Indigenous Peoples and is committed to building and maintaining positive relationships with Indigenous groups in areas where our mines are located. We see ongoing engagement and identification of mutually beneficial opportunities as key to developing these positive connections. At our Timmins operations, we engage proactively and regularly with all COIs and implement formal partnership agreements where applicable. Our partnership agreements with Mattagami, Flying Post, Matachewan, and Wahgoshig First Nations establish frameworks for continued consultation on the mines' existing and future operations. They also include provisions regarding education and training, employment, business and contracting opportunities, environmental care, and economic benefits. Highlighted below are examples of initiatives collaboratively created to support local Indigenous communities.

On-Going Engagement

We believe that meaningful engagement provides the greatest potential for building positive, long-term, and mutually beneficial relationships with Indigenous Peoples. It also helps us understand and contribute to their goals. At our Timmins operations, we engage with our Indigenous communities through multiple channels, including site tours, job fairs, community visits, and educational events. We also have an Indigenous Coordinator on site who is selected and employed by the Wabun Tribal Council, a regional chiefs' council, and responsible for sharing Company information with two of the four Indigenous communities.

Local Hiring

Pan American Silver emphasises local hiring of trained and qualified candidates. At Timmins operations, approximately 6% of our employees currently self-identify as being of Indigenous descent, and initiatives are in place to increase this number, including strategic training programs comprised of a skilled elite miner training program directed to our Indigenous partners. Additionally, we provide all job postings to our Indigenous partners prior to mass dissemination and give hiring priority to qualified experienced Indigenous persons.

Environmental Stewardship

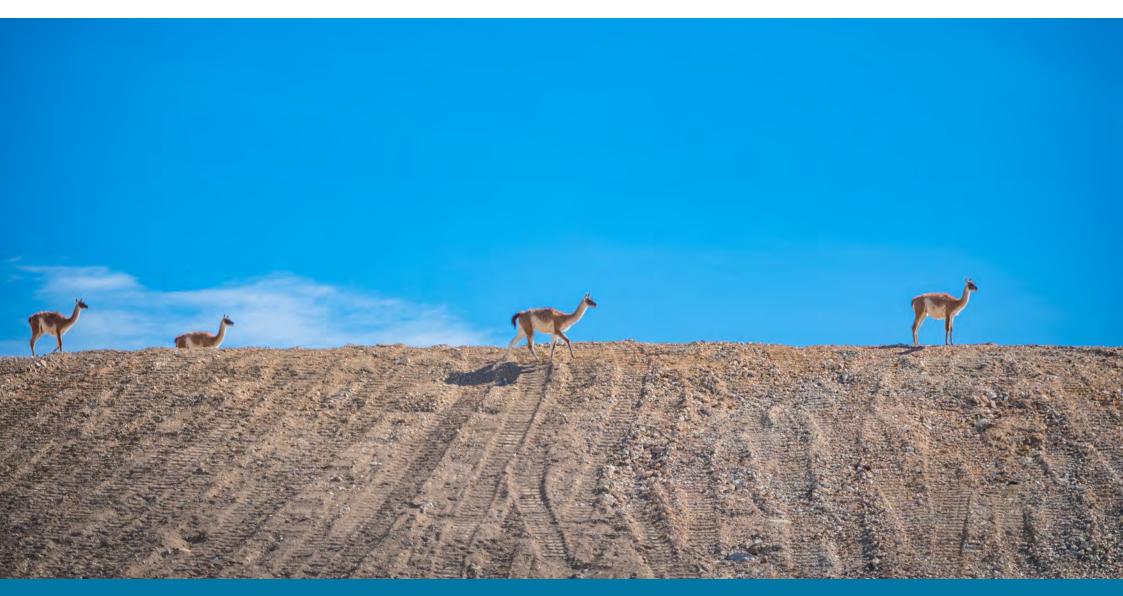
In addition to proactive consultation and reporting on all existing and future project activities, we also provide support to our Indigenous partners for their community projects. For example, we provide on-going support in the form of labor and materials for the Mattagami fish hatchery. We also have representatives attend and assist in the operations of the hatchery. Walleye are native to most of Canada and are a commercially valuable food fish as well as a popular sporting fish. The Mattagami Fish Hatchery raises and releases hundreds of thousands of Walleye into local streams and lakes each year.

Social Closure

We are in the process of developing a corporate Social Closure Standard, which will be rolled out to operations in 2021. The standard will align with the Towards Sustainable Mining's (TSM) Mine Closure Framework as well as the social closure requirements of the International Council for Minerals and Metals' (ICMM) Integrated Mine Closure, Good Practice Guide (2019) and Performance Expectation 6.1.

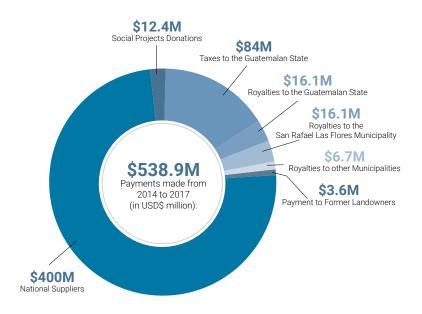
To learn more about our mine closure, please see the Mine Closure section.

- Finalize and rollout the corporate Social Closure Standard
- Conduct audits of the community response mechanisms at all mines
- Begin implementation of the new TSM Community and Indigenous Relationships Protocol



ESCOBAL PROJECT

Escobal's Payments and Contributions to the Guatemalan Economy from 2014 to 2017



Background of the Escobal Mine

The Escobal mine is in the municipality of San Rafael las Flores, near Guatemala City. With an industrial footprint of less than one square kilometer, the underground silver mine was built to produce silverrich zinc and lead concentrates through a selective flotation process. The mine and process facilities use state-of-the-art paste backfill, filtered tailings, and a dry stack tailings facility, minimizing water consumption, waste generation, and environmental disturbance.

During operations from 2014 to 2017, the mine provided over 1,500 direct jobs, thousands of indirect jobs, and was a major contributor to the national economy through spending with local suppliers, royalties, and tax contributions. In July 2017, the Escobal mining license was suspended as a result of a court proceeding initiated by a non-governmental organization in Guatemala, based upon the allegation that the Guatemala Ministry of Energy and Mines (MEM) violated the Xinka Indigenous people's right of consultation under ILO 169

Escobal's context is unique. Already built and with an operating history of 3.5 years, stakeholder expectations for a restart have remained high during the nearly four-year suspension. However, the government-led ILO 169 consultation process continued to experience delays during 2020 due to a change of government, the COVID-19 pandemic, and differing views and interpretations of the Constitutional Court ordered process. In addition to the Xinka people awaiting the start of the court-ordered consultation process and its outcome, there are diverse groups of stakeholders that have been negatively impacted by the suspension and are awaiting the restart. These include hundreds of former employees and contractors seeking employment, over 400 suppliers unable to provide services, local municipalities and central government negatively impacted on taxes and royalties, landowners not receiving contractual royalties, and other community members not receiving the benefits of community investment initiatives.



Highlights from 2020

During 2020, the mine continued under care and maintenance. The COVID-19 crisis was a significant challenge during 2020, and Guatemala and the communities around San Rafael las Flores were heavily impacted. With more than 75% of the workforce participating in the informal economy, many found it difficult to comply with health guidelines, movement restrictions, and isolation mandates. A lack of health infrastructure compounded the challenges faced by local communities in Guatemala. Pan American Silver's subsidiary in Guatemala, at the request of local communities, provided over 5,400 food packages and material support to local health centers. This support was provided without condition.

In 2020, there were changes in various levels of government and limited progress in advancing activities ordered by the Constitutional Court. Following the elections in 2019, Alejandro Giammattei began his term as President in January 2020, appointing new cabinet ministers. At the same time, several newly elected mayors assumed their duties. The administrative procedures ordered by the Constitutional Court Resolution have been filed and duly received by the Supreme Court, and the MEM recently set a date for the preconsultation to commence on May 21, 2021. However, the process and timing for completing the ILO 169 consultation remain uncertain.

Our involvement and preparations for the consultation process during 2020 were focused on cooperation with the new government, and in particular the MEM. The Ministry of Environment and Natural Resources (MARN) approved an updated Environmental Management Plan and an updated environmental permit during the year as stipulated in the court order. The Ministry of Health and Social Assistance (MSPAS) issued the Court-ordered health study, and the Ministry of Culture (MICUDE) issued its court ordered documents regarding the archaeological site. In addition, our team participated in three

Indigenous relations workshops during 2020, one of which was provided by the Presidential Commission against Discrimination and Racism (CODISRA), facilitated by the MEM.

We are very pleased to see progress during the year with MEM and Xinka Parliament holding regular meetings, engaging in respectful dialogue, and reaching an agreement on the date and broad participation for the preconsultation. In February 2021, the Company and MEM coordinated a visit to the site by Xinka leaders and community members. The Xinka conducted a ceremony at a protected archeological site on the Escobal property, observing COVID-19 prevention protocols determined by the health ministry.

Care and Maintenance Activities

Although Escobal operations remain suspended, we continue to be an important member of the community, a major employer, and a source of income for many local suppliers while conducting required care and maintenance activities including continuing all regular environmental monitoring and compliance programs. Since the acquisition we have responded to the numerous requests for support and information from local stakeholders while complying with all requests by MEM to advance the ILO 169 Consultation process. Since suspension in 2017, MEM, MARN and other government agencies have conducted and documented over 21 visits and inspections to verify the condition of the mine and facility, the Company's activities, and compliance with the court ordered suspension.

Feedback from the Communities

As part of the community engagement activities included in our environmental management plan, we conducted two perception surveys, met with local stakeholders, and engaged on a regular basis with national and local institutions.

In August 2020, we conducted a perception survey with 255 participants in an attempt to understand their needs, concerns and interests. The survey results supported favorable community responses to the Company's actions during the pandemic and confirmed we are acting consistent with our stated values. Concerns were expressed regarding employment opportunities, a desire for increased communication from the Company, use of royalties, and general concerns regarding health during the COVID-19 pandemic.

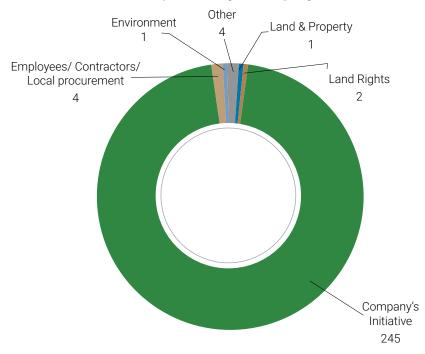
In addition to our perception survey, 355 stakeholders responded to our annual COI survey. In our survey, COIs expressed concerns regarding job security, health and safety, and investment in environmental and community development programs.

During the year, we received 245 requests and 12 grievances through our community response mechanism. Grievances were related

to health and safety, employment matters, and land matters. At year end, five cases remained open.

Some community members and NGOs have been vocal and active in their opposition to mining and exploration activities in Guatemala. Since 2017, a group of protesters near the town of Casillas have intermittently blocked the primary highway that connects Guatemala City to San Rafael Las Flores and the Escobal mine. A second roadblock was initiated in 2018 at the entrance of Mataguescuintla municipality. During 2020, the Company met publicly with community members from the Casillas roadblock to discuss supply movements for our activities under care and maintenance. This meeting was open to the public with local and national government representatives in attendance.

Grievances & Requests By Category - Escobal 2020



Human Rights and Security at Escobal

During the year, we continued to develop our activities in human rights and security, with a focus on due diligence under the COVID-19 crisis, management training, and training our support services organization and our contract security guards. In addition to complying with government health mandates, we reviewed the human rights aspects of our activities using the guidance checklist developed by the United Nations Development Program (Rapid Self-Assessment Tool for Business to Support Human Rights During COVID-19).

The Escobal management team participated in over 200 hours of virtual training led by our Human Rights Officer, Our contract security personnel participated in over 1,400 hours of specific training related to human rights policies and practices, use of force, and managing conflict. We do not contract public security forces at Escobal, however, we held two meetings with public security forces (National Police and Interior Ministry) during the year. In these meetings, we introduced our Company human rights policies, programs, and practices. We also participated in the Guatemalan Voluntary Principles on Security and Human Rights working group, led by local diplomatic missions.

Through our grievance mechanism, we received no human rights related reports, and we received no human rights complaints related to our contract security or security activities. Under our general risk assessment process, we continuously assess human rights.

Implementing Towards Sustainable Mining and Industry Best Practices

We have made significant progress in the deployment of TSM protocols at the Escobal site. During the year we focused on:

- Improving our community response mechanisms,
- Maintaining and building our relationships with institutions and communities, providing information regarding the status of the project, our programs, and activities,
- Updating and enhancing our protocols for management, design, and monitoring of the dry stack tailings facility,
- Updating our water management and biodiversity policies, practices, and information materials,
- Increasing documentation and activities related to our safety program,
- Updating our emergency plans and conducting site exercise to better prepare for possible emergencies, and
- Completing a compliance review under the Preventing Child and Forced Labor protocol and UNICEF guidelines.

Following the suspension of mining in 2017, the Escobal mine reached agreements with the government ministries and municipalities to defer pending royalty payments until the mine restart. During 2020, we formalized key partnerships with the San Rafael las Flores municipality as well as other municipalities to understand perceptions, to increase the transparency of royalty payments and document the use of funds. These activities culminated in a virtual workshop with the Guatemala Extractive Industry Transparency Initiative (EITI) and representatives from the municipalities and the Company. A summary of royalties disbursed during the year under these amended agreements can be found at the Canadian Extractive Sector Transparency Measures Act (ESTMA) web page.

We are working in partnership with the United Nations Development Program in Guatemala to enhance government capacity and measure progress towards achievement of Sustainable Development Goals.

Environmental Performance

We achieved several significant environmental objectives during the year, including the reforestation of 1.6 hectares of land. We also completed a major update to the integrated social and environmental mine closure plan for the mine in 2020.

We facilitated the launch of a participatory environmental monitoring program in partnership with the Municipality of San Rafael la Flores and the Foundation for Excellence in Engineering (FUNCIN). Activities have been suspended recently during COVID 19, but we look forward to reinitiating this process to provide additional transparency in the monitoring of the Company's activities and potential environmental impacts.

Preserving biodiversity has been an important part of Escobal's activities since 2009. Over two thirds of the property is preserved natural forest and naturally reclaimed reforested areas as well as an area designated for sustainable coffee plantations. Activities to promote and protect biodiversity continued during 2020, such as more reforestation, care and management of a native plant nurseries, biodiversity, and monitoring. Our management and protection of these reclaimed areas on our site have created favorable habitat conditions for the reintroduction of important native species, such as margay, ocelot and jaguarundi felines.

We have also contributed with the donation of more than 20,000 trees to employees and/ or community members that will be used for reforestation purposes in the region.



Socio-economic contributions

WHY ARE SOCIO-ECONOMIC CONTRIBUTIONS IMPORTANT?

Mining companies can provide significant economic benefits in their host countries. Moreover, companies are increasingly under pressure to provide value to a broader and more inclusive range of stakeholders. Sharing the benefits from mining operations with host communities is a key component of social acceptance, failure to do so can lead to conflict, legal disputes, and project or operational delays or disruptions. Companies create value in local communities through taxes, royalties and fees paid to governments, direct investments in community programs, development planning and infrastructure upgrades, and local employment and procurement. If not managed properly, however, these contributions can create economic dependence or wealth disparity within communities.

At Pan American Silver, we want host communities to see our presence as a positive factor in their lives. We work hard to understand community needs and interests and to identify and implement beneficial and viable social programs and that contribute to long-term community well-being and self-reliance. Our objective is to invest in projects and programs that benefit host communities beyond the lifespans of our mines.

ANALYST CENTER MATERIAL TOPIC - SOCIO-ECONOMIC CONTRIBUTIONS

What's included in this section:

- Community Investment
- Sustainable Development Programs
- Local Employment
- Local Procurement

GRI indicator: 201-1; 201-103; 202-103; 203-1; 203-103; 203-2; 204-1; 204-103; 413-1; 413-103

SASB indicator: EM-MM-210b.1

Prioritized SDGs: 3; 4; 8; 12

Potential Risks and Impacts:

- Community opposition to mine operations or development resulting in project or production, loss
 of or failure to obtain permits, and/or loss of social acceptance
- Economic dependence by or wealth disparity within local communities, changes to the social dynamics, pressures on infrastructure, housing and services, harm to vulnerable groups

See these data tables for additional information: GRI 201-1; GRI 202-2; GRI 204-1

OUR APPROACH

We invest a significant portion of the economic value we generate back into host countries and local communities in alignment with our sustainability pillars. Our social management approach provides us with processes and tools to identify and manage our actual and perceived impacts, understand community needs and interests, and identify opportunities for long-term investment.

Policies

- CSR Policy
- Global Human Rights Policy
- Inclusion & Diversity Policy

Programs and initiatives

- Participatory community assessments
 Help us understand the social context
 within and the potential impacts of our
 operations on our host communities, and
 community needs and interests
- Identify programs appropriate for the social context of the communities
- Community investment Provides sustainable benefits for local communities, promote local hiring and procurement, and support new or ongoing infrastructure or services
- Community response mechanisms Provide a mechanism for community members to lodge grievances and/or make requests of the Company
- Training and capacity building Provide our community teams with the ability to apply our tools and processes,

manage potential impacts, and align our sustainable development programs with community needs and aspirations

Monitor and evaluate

- TSM Aboriginal and Community Relationship Protocol – Provides a standard process for community engagement against which operations self-assess their performance
- Community Development Initiative Tool

 Helps us identify and develop socioeconomic programs with a high likelihood
 of long-term success and measure these
 programs' impacts
- Social Sustainability Performance Indicators – Help us set goals to measure and track our social performance

Accountability

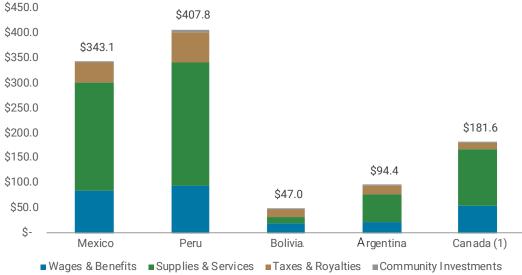
- The Vice President of Social Sustainability, Diversity and Inclusion leads social sustainability programs at the corporate level
- The Senior Vice President, Corporate Affairs and Sustainability oversees social sustainability in the Company
- The Board's HSEC Committee has oversight of the Company's community investments

OUR PERFORMANCE

Community Investment

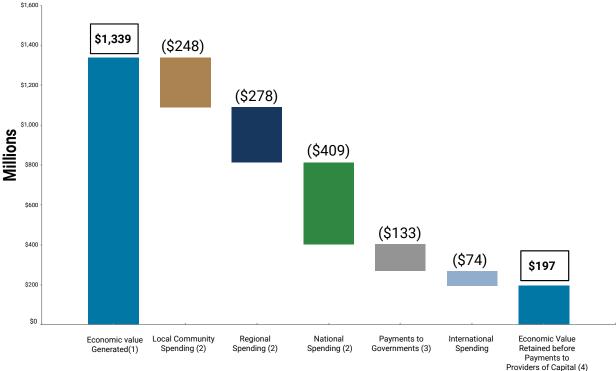
Our core business activities generate economic value for COIs at the international, national, regional, and community levels, both directly and indirectly. Our direct investments include wages paid to employees, community investments, purchases of local products and services, and payments to government in the form of taxes, royalties, and fees. Payments made to governments can be reinvested in social and economic programs that benefit the communities, regions, and countries where we operate.

Operating Mines Spending by Country



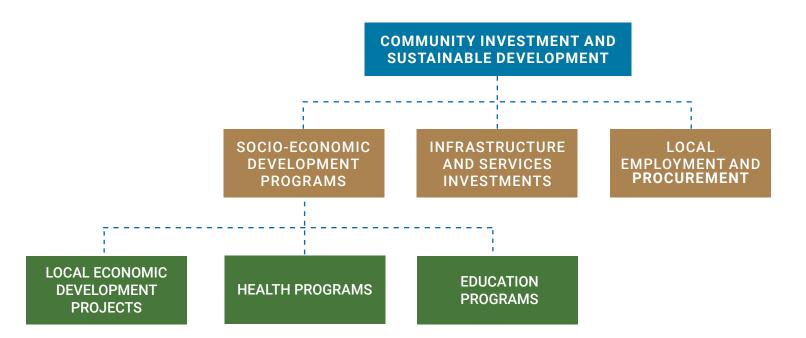
Note: Canada amounts only include expenditures from our Timmins West & Well Creek operations and exclude Corporate expenditures.

Direct Economic Value Generated and Distributed 2021



Notes:

- (1) Based on 2020 accrued revenue as per annual Financial Statements for fiscal 2020, dated February 17, 2021.
- (2) We have broken down our spending into four geographical categories; "local", "regional", "national", and "international". The "local" category refers to the expenditures in communities in the direct area of influence. The "regional" category is intended to capture expenditures in the indirect areas of influence within surrounding regions. The "national" category includes all other areas within each of the countries that are excluded from either local or regional.
- (3) Includes \$1.9M of royalty payments from Escobal not included under Royalties in the 2020 Financial Statements. Royalty payments were postponed upon the suspension of mining operations in 2017. The 2020 payments reflect portions of outstanding balances due for pre-suspension production that we paid during the year, under amended royalty agreements which provided for improved transparency and controls over the allocation and expenditure of the royalties.
- (4) This is the economic value retained by the Company after expenditures from mining activities, but prior to distributions to providers of capital (shareholders and debtholders). Expenditures from mining activities include production costs, royalties, general and administrative expenditures, exploration and project development, mine care and maintenance, income taxes paid, payments for mineral properties, plant and equipment, payment of lease obligations and reclamation expenditures, as described in the annual Financial Statements for fiscal 2020, dated February 17, 2021. Production costs exclude purchase price allocation inventory fair value adjustments and NRV inventory adjustments.



Socio-economic development programs

We invest in socio-economic development programs with the intention to provide lasting benefits to host communities. Our mines have limited lifespans, and as automation and mechanization increase, fewer direct jobs are available for community members. Consequently, we prioritize investments in our socio-economic programs, which relate to education, health, and local economic development projects. These programs, if successful, will provide benefits that exceed the lifespan of our mines. Our objective is that all our programs:

- Address community needs and interests
- Are developed and implemented with community participation

- Are appropriate to the local social context
- Consider mine closure
- Incorporate key performance indicators

Local economic development projects

Our local economic development projects support local communities, families or groups in creating and self-sustaining economic opportunities not directly related to our mines. In 2020, COVID-19 restrictions and concerns around the possible transmission of the virus limited our teams' on-the-ground participation in these projects. However, we continued to support these projects by sustaining investments in infrastructure and maintenance, transitioning to online training where possible, and providing in-person professional support when safe to do so.

The pandemic created economic hardships in communities and disrupted local commerce and supply chains. Consequently, our projects aimed at providing technical skills to increase local food production and contribute to the self-sufficiency of small-scale food producers and family farmers were particularly important during the year. Examples of these projects include:

 Nutritional Greenhouse Program, Bolivia and Mexico – Provides supplies, training, and capacity building to support the community in greenhouse construction and maintenance as well as in sustainable food production. Greenhouse projects allow for the production of vegetables and greens in areas isolated from main access to markets, providing fresh vegetables at low cost and nutritional accessability to all families. In Mexico at La Colorada and Dolores, 25 new greenhouses were built, and nine Our core business activities generate economic value for COIs at the international, national, regional, and community levels, both directly and indirectly.

pre-existing greenhouses were repaired for improved production. In Bolivia at San Vicente, 93 greenhouses continue producing, while four new ones were built.

- Guinea Pig Program, Peru Provides families with training and supplies to increase guinea pig production in the districts of Chungales, Raumate, La Arena and La Unión. In 2020, we constructed sheds and provided technical assistance to 394 local producers and their families.
- Ranching Program, Peru Supports improvements in the genetic quality of livestock to maximize meat and wool production for personal consumption and sales. In 2020, we provided capacity building to improve the technical capacities of breeders, supporting 172 producer families.

Health

Our health programs are intended to facilitate access to health services for all community members, with an emphasis on identified vulnerable groups such as young children, women, and elders. As examples of our ongoing programs, near our Morococha mine in Peru, children have been identified as being at risk of anemia due to high levels of malnutrition. We are supporting health centres by funding testing and donating the vitamins necessary for treatment. In La Arena, we are funding the salaries of health professionals who provide health care to the community.

In 2020, our initiatives were focused on supporting the health, safety, and wellbeing of communities during the pandemic. We created a \$2 million COVID-19 fund to provide resources through which our operations could support communities in their areas of influence. Responding to community requests, we facilitated community access to health care and provided hygiene and medical supplies. We assisted in sanitization of community common areas and essential public facilities, such as schools, hospitals, and community

centers. We also developed materials for communities containing general information about COVID-19 as well as health and safety prevention measures.

Local Infrastructure and Services Investments

Some of our operations are located near communities that have basic services and amenities, whereas others are in remote, sparsely populated regions with little or no infrastructure. We regularly make investments in and upgrades to local infrastructure and social services in the communities near our operations. Examples of our infrastructure initiatives in 2020 include:

- Construction of a new school near Shahuindo, Peru, benefiting 365 students
- Upgrades of other school facilities near Shahuindo, Peru
- Construction of a water treatment and distribution system that will connect 1,500 families with potable water near La Arena

Together with supply chain partners and local authorities, we transported, assembled, and installed the facility at the Hospital Nuestra Señora del Rosario, one of the few hospitals in the area, serving over 70,000 people. This plant has helped to make oxygen available to hospital patients and now provides oxygen cylinders to other hospitals and health care facilities in the region.

Local Employment and Procurement

Given the remote location of some of our sites, our operations may provide one of the few opportunities for long-term, stable employment in the area. Consequently, we provide jobs through direct employment or as service providers for our mine sites.

Our procurement practices also create opportunities for local businesses. We purchase a substantial amount of necessary goods and services from within local, regional, and national economies. We also help community members launch and/or sustain small businesses that provide our mines with necessary goods and services. This approach supports our ability to operate profitably over the long term by deepening our sites' relationships with local suppliers, providing a higher level of service, and helping us build a more resilient supply chain. In 2020, 47% of goods and services (\$311.2 million) were provided by local or regional suppliers.

Key goods and services sourced locally include:

- Materials for road construction
- Machinery and small parts
- Food and catering services
- Maintenance services
- Earthmoving equipment for road maintenance and smaller construction projects

Where local suppliers cannot meet our needs or business standards, we invest in their capacity by offering programs and support focused on:

- Business skills, such as accounting and bookkeeping
- Bidding processes
- Pan American Silver's business standards and expectations
- Health and safety training for contractors
- Health and addiction workshops

We created a
\$2 million
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in their areas of
influence.

Supporting Communities during the COVID-19 Pandemic

The COVID-19 pandemic has resulted in a humanitarian crisis in many of the communities where Pan American Silver operates. It has exposed social inequities and increased levels of vulnerability among women, the elder population, children, and poverty-ridden families around our operations. Communities have seen an influx in skilled workers returning from cities, where they were no longer able to work. These factors have created immense stress for local communities and challenged our Company to respond in a respectful and meaningful way.

Throughout the year, we were actively engaging with and listening to communities to better understand the effects of the pandemic and identify how to best support their needs. Our teams were not always able to be in the communities due to COVID restrictions. In these cases, we worked directly with local governments and Non-Governmental Organizations (NGOs) to support community needs as well as to identify and provide support for the most vulnerable families in each mine's area of influence.

Early in the pandemic, we created a COVID-19 fund and committed \$2 million towards food, hygiene and medical supplies, and personal protection equipment in support of host communities. This includes construction and donation of an oxygen plant to the Province of Cajabamba, where our Shahuindo mine is located, which supplies medical oxygen to local hospitals and health care centres in the region.

- In response to community requests and identified needs, we donated:
- Cleaning supplies, food, and heath supplies to more than 15.000 families
- 6,850 COVID-19 rapid tests to the health centers near our mines
- Firewood to communities in the Patagonia, Argentina who were facing harsh winter weather

- Seeds to the communities near San Vicente and Dolores to improve food security for vulnerable families
- Education materials to primary schools in Peru, Mexico, and Argentina
- 250 laptops to schools in Gobernador Gregores, Argentina, to help students continue their studies during lockdowns
- 950 radios to 14 elementary schools in La Arena, which, during lockdown, provided students with access to educational programming broadcast by the Peruvian government

By the end of the year, we had invested nearly \$1.1 million into initiatives supporting 104 local communities. We anticipate investing the remaining COVID-19 fund during 2021.

A PARTNERSHIP BETWEEN PAN AMERICAN SILVER AND UNICEF CANADA

To support the well-being and rights of children, we entered into a 3-year \$1.5 million partnership commitment with UNICEF Canada, to provide health and education to vulnerable children and families in the Latin American countries where we operate.

Pan American Silver has provided support to UNICEF's response to COVID-19, which focuses on the following priorities:

- Strengthening risk communication and community engagement
- Improving infection prevention and control and providing critical medical and water, sanitation and hygiene supplies
- Supporting continued access to essential health and nutrition services for women, children and vulnerable communities
- Supporting access to continuous education, social protection, child protection, and genderbased violence services

Support from Pan American Silver and other partners has enabled UNICEF across Latin America to:

- Reach 423 million people with COVID-19 risk communication messages (addressing key issues such as handwashing and social distancing)
- Support authorities in developing multi-sectoral education responses, including teacher training, development of learning materials, and school feeding programs
- Support 45 million children with distance and home-based learning, delivered through multiple platforms
- Reach 8.6 million people with water, sanitation, and hygiene (WASH) supplies and services
- Provide over 8.8 million children and caregivers with community-based mental health and psychosocial support and messaging.

This commitment will continue post pandemic with a primary focus on hygiene and sanitation in schools and will ensure UNICEF and partners are able to build forward better for children and their families.

- Align all socio-economic development programs with social closure and mine legacy programs
- Revise the CDI tool to include context-specific environmental components related to climate change and conservation.

HUMAN RIGHTS

WHY ARE HUMAN RIGHTS IMPORTANT?

Human rights are one of the foundations of sustainability. All companies have a responsibility to respect international human rights standards. This requires companies to prevent infringements on human rights and to address adverse impacts that they cause or contribute to, or that are directly linked to their operations, products or services. Largely due to their location and nature of operations, mining companies have the potential to impact human rights. Human rights issues have become increasingly important for the mining industry, the investor community, and the public. Governments and civil society are requesting improved management of and transparency on supply chain human rights. Consequently, industry groups such as MAC, of which Pan American Silver is a member, are working to support member companies in aligning with global human rights objectives.

At Pan American Silver, respect for human rights is a transversal approach that has guided our relationships with our communities of interest, especially local communities, throughout our history of operating in the Americas. The work we do affects people and ecosystems in our operations' areas of influence. It is paramount not only that we take steps to understand the linkages between the impacts of our activities and human rights, but also that we progressively implement proper measures to respect human rights and manage our potential impacts on rights holders.

OUR APPROACH

Pan American Silver abides by applicable local human rights laws, is aligned with key international human rights conventions and normative developments and is actively working to apply industry best practices. Our focus is on upholding human rights and recognizing and respecting the cultural values, beliefs, and traditions of the people in the countries and communities where we operate, as well as the rights of Indigenous peoples. Proactive identification and management of human rights risks and impacts are components of our social management framework.

Policies

- Global Code of Ethical Conduct
- Global Human Rights Policy
- Inclusion and Diversity
- Supplier Code of Conduct
- Corporate Social Responsability Poilcy

Systems and standards

 Pan American Silver Security and Human Rights Standard – Provides a robust, auditable security management framework that embeds respect for stakeholder rights

Programs and initiatives

- Training and capacity building Provide employees with an understanding of our Global Human Rights Policy and educate community members on areas related to basic human rights
- Community and employee response mechanisms – Provide community members and employees with systems through which to voice concerns around perceived or actual impacts of our

ANALYST CENTER MATERIAL TOPIC – HUMAN RIGHTS

What's included in this section:

- Human rights analysis
- Rights of Indigenous Peoples
- Artisanal and small-scale mining
- Human rights in our supply chain
- · Security and human rights

GRI indicator: 407-1; 407-103; 408-1; 408-103; 409-1; 409-103; 410-1; 410-103; 411-1; 411-103; G4 MM5: G4 MM8: G4 MM9

SASB indicator: EM-MM-210a.2; EM-MM-210a.3

Prioritized SDGs: 3; 4; 5; 6; 7; 8; 12; 13

Potential Risks and Impacts:

- Community opposition to mine operations or development resulting in legal proceedings, production delays, revocation of permits, and/or loss of social acceptance
- Infringement of human rights related to local communities, labour, health and safety, or environment.
- Security risks and the protection of people and assets
 - operations and to receive a response from the Company
- Participatory processes Involve COIs in our community processes such as baselines and socio-economic development programs, which helps us identify human rights risks
- Site-level community teams Work with local professionals, including social workers, teachers and health practitioners, to identify and manage potential human rights risks and concerns

Monitoring and evaluation

 Human resources procedures – Screen for child and forced labour at our operations

- Social audits Screen for risks to human rights from our operations, including the effects of our social programs on vulnerable groups
- Security contractor assessments reviews the relationships of armed private security contractors with public security entities
- TSM Aboriginal and Community Outreach Protocol – provides a standard process for community engagement against which operations self-assess their performance

Accountability

The Human Rights Officer leads the implementation of the Global Human

Rights Policy and associated programs and practices

- The Director of Security implements the security framework, which is overseen by the Senior Vice President, Corporate Affairs and Sustainability
- The General Counsel oversees human rights across the Company
- The Board's HSEC Committee has oversight of human rights in the Company

OUR PERFORMANCE

In 2019, Pan American Silver adopted its Global Human Rights Policy, which is based on the three pillars of the United Nations Guiding Principles (UNGP) on Business and Human Rights and the Organization of Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises. It formalizes our approach to fostering a positive human rights culture throughout our organization and our work to prevent, minimize or mitigate adverse impacts from our activities on our communities, workforce, and other stakeholders.

At the start of the COVID-19 pandemic, we took measures to align our response with our policy and embed our human rights commitments into our response protocols and procedures. Our Human Rights Officer and Compliance Officer were involved in developing our protocols, which incorporated the United Nations Development Program Human Rights Due Diligence and COVID-19 Human Rights checklist. Our objective was that our response respected and supported the rights of our workforce and host communities. To monitor our performance and adherence to our protocols, we created compliance mechanisms to check that all operations followed procedures and adhered to our standards. As salient human rights issues differ at each

of our operations, we are implementing the policy in a site-specific manner by training management and community teams to develop tools and training appropriate to each site's context. Our objective is to educate our workforce on human rights issues and the related expectations set out in our policies. Our employees are at the forefront of our engagement with community members. If they are able to recognize the actual and potential impacts of our activities on human rights, they will also be able to act to uphold and respect those rights.

In 2020, we rolled out five training sessions at La Colorada, Dolores, Manantial Espejo, San Vicente and Escobal. The training covered a broad range of human rights issues, including:

- Building an understanding of human rights
- The Escazú Agreement the Latin American treaty that provides access to environmental information, public participation in environmental decision making, and measures to protect environmental activists
- Understanding and implementing the Sustainable Development Goals

Human Rights Analysis

We have several processes that help us identify both actual and potential human rights risks and impacts resulting from our activities as well as opportunities for respecting human rights. These include our participatory community processes, such as baseline assessments and perception studies, our social audit process, our community and employee response mechanisms, and country-level risk assessments. We implement a range of programs and processes intended to uphold salient human rights.

SALIENT HUMAN RIGHTS FOR PAN AMERICAN SILVER			
Category	Salient Right	Examples of our management approach	
Labour	Equality Non-discrimination Peaceful assembly and association Safe and healthy working conditions	Our Inclusion and Diversity Policy formalizes our commitments. Our Inclusion and Diversity Program is helping us build safe, respectful, and inclusive work environments, free from discrimination We are piloting a behaviour-based safety programs to improve safety performance in our mines The majority of our sites have collective agreements with one or more unions. We work in partnership with these unions to further the health and safety of our employees	
Socio-economic	Adequate standard of Living Education Equality Health Non-discrimination Participation in cultural life	We invest in socio-economic development programs that provide lasting benefits to host communities. We prioritize programs related to education, health, and local hiring and procurement opportunities. We have been actively working to support community health and wellbeing during COVID-19. We implement anti-corruption measures to help host communities receive the value generated by our operations	
Security	Peaceful assembly and association Life, liberty, personal security	We are implementing the <u>Voluntary Principles on Security and Human Rights</u> across our operations to integrate respect for human rights into our security practices	
Environment	Clean water and sanitation Health	We have systems and processes in place to reduce our use of freshwater, use water more efficiently, and avoid negative impacts on water quality within and beyond our operating boundaries.	

Rights of Indigenous Peoples

All of our community processes are participatory. We respect all communities' rights to self-identify and organize and adapt our processes to engage appropriately. As a member of MAC, we will implement MAC's TSM Indigenous and Community Relations Protocol, which includes aiming to achieve free, prior, and informed consent for impacts on rights of directly affected Indigenous Peoples before proceeding with new projects and expansions.

We have two operations near Indigenous communities - our Timmins West & Bell Creek mines in Canada and our Escobal mine in Guatemala. Indigenous Peoples have both individual and collective rights. Both national and international laws address the rights of Indigenous Peoples. One such instrument is the International Labour Organization Convention 169, which includes a mandate for governments to consult with Indigenous communities surrounding mining operations prior to granting mining rights, permits, or approvals. This is currently the situation with our Escobal mine in Guatemala where operations are suspended while the government of Guatemala completes an ILO 169 consultation process with local Indigenous communities, as ordered by the Constitutional Court of Guatemala

Both the Timmins West and Bell Creek mines have impact benefit agreements (IBA) with the local First Nation communities. Both IBAs establish frameworks for continued consultation on the mines' existing and future operations, and include provisions regarding education and training, employment, business and contracting opportunities, environmental care, and economic benefits.

In 2020, we had no new incidents involving violations of the rights of Indigenous People.

Artisanal and small-scale miners

Artisanal, or informal, mining can be a key source of income for local communities. However, it can result in a number of negative impacts, including environmental degradation, human rights abuses, and the funding of conflict. Because government administration is often lacking in the locations where these mines operate, the activities are largely unregulated and work conditions are often unsafe, creating health risks for the miners and the local communities.

In Peru, 118 groups of informal miners are active on land adjacent to our Shahuindo mine. These miners, represented by the Asociación de Mineral Artesanal San Blas (AMASBA), are working with the Peruvian government to formalize their operations. We are supporting this formalization process and working with the government, local authorities, and AMASBA to define the boundary of the land within which these miners will be permitted to operate.

In 2020, the economic crisis triggered by the pandemic along with high gold prices have prompted a surge of artisanal mining, unrelated to AMASBA. We are aware of attempts by artisanal miners to expand their operations into more of Shahuindo's land and we are in the process of confirming the land allocated to these miners

Human Rights in Our Supply Chain

We recognize that we have the potential to be indirectly associated with human rights abuses in our supply chain, including child and forced labour. Our Supplier Code of Conduct sets out our expectations for suppliers working with Pan American Silver, including the requirement that they comply with our Global Code of Ethics and

Global Human Rights Policy, which address the rights, cultural diversity, and customs of local communities and Indigenous Peoples. Our social audit process screens for human rights risks that are included as provisions in certain contractor and subcontractor agreements. Through our new supplier due diligence system, which is currently being rolled out, we screen high-risk suppliers for compliance with our Supplier Code of Conduct and for any documented violations of human rights, instances of corruption, or associations of companies with organized crime.

We are committed to respecting international human rights conventions and best practices, including:

- OECD Guidelines for Multinational Enterprises
- TSM: Aboriginal and Community Outreach Protocol⁹
- UNICEF Canada's Child Rights and Security Checklist
- UNICEF Convention on the Rights of the Child
- UNGPs on Business and Human Rights
- United Nations Universal Declaration on Human Rights

Security and Human Rights

Since the acquisition of Tahoe Resources in 2019, we have been formalizing and standardizing our approach to both security and human rights. We are in the process of implementing a more structured, auditable security management framework that aligns with the Voluntary Principles on Security and Human Rights (VPSHR) and other international human rights best practices. In 2019, we conducted a gap assessment of our security practices against the requirements of the VPSHR and UNICEF Canada's Child Rights and Security Checklist at two of our three mines with armed security forces: La Colorada in Mexico and Escobal in Guatemala. In 2020, we completed the final assessment at Dolores in

During the year we developed the Pan American Silver Security and Human Rights Standard, which is aligned with the VPSHR and incorporates UNICEF Canada's Child Rights and Security Checklist and the World Gold Council Conflict-Free Gold Standard. Our intent was to create a standard for operations that, through implementation, sites would use to meet the requirements of all three frameworks. Our standard has three components:

- A security and human rights risk assessment and register
- An implementation toolkit for security providers
- Guidance on managing relationships with public security groups

Regional management teams in Guatemala and Mexico have completed the development of human rights risk assessments and registers and are beginning to implement the toolkit for security providers. Implementation is in progress at all other Pan American Silver operations. As part of our efforts to implement

⁷For more information, please see the Konrad Adenauer Stiftung 2019 report.

^{*}High-risk is defined after assessing factors including transaction amounts, the nature of goods or services supplied, and/or exposure to corruption risks.

For more information on the Towards Sustainable Mining (TSM) initiative and how this protocol supports mining companies in respecting human rights, please see: Towards Sustainable Mining: Aboriginal and Community Outreach Protocol at: https://mining.ca/wp-content/uploads/2019/02/Aboriginal-and-Community-2017-EN.pdf

these standards throughout the company, during 2021 we provided training to the Board, officers, executives, and all senior management on the VPSHR and how they integrate into our security practices with additional training on understanding local cultures, rule of law, dialogue and peace building.

We are part of the Voluntary Principles on Security and Human Rights Working Group of Guatemala, a collaboration between the UK, Swiss, American, and Canadian embassies, civil society, human rights defenders, and companies. The objective is to promote awareness of and support companies in the implementation of the VPSHR.

In addition, we have started applying the World Gold Council Conflict Free Standard. This standard provides us with an approach to identifying and eliminating the risk that our gold production may cause, support, or benefit unlawful armed conflict or contribute to violations of human rights. We assessed the location of our mines against the Heidelberg Institute's Conflict Barometer and our own country risk reports and identified our Mexican operations as being located in conflictaffected regions, due to the high levels of organized crime. However, because we see the importance of identifying and addressing corruption risks, which are high in many of the areas in which we operate, we will be assessing the application of beneficial elements of the standard at other Pan American Silver operations.

To better protect the rights and wellbeing of all communities of interest affected by a security incident, we are introducing an enhanced emergency preparedness and crisis management structure that will facilitate appropriate and effective management of any major incident.

Training of Security Contractors

Security at our operations is generally provided by private security contractors. These contractors have little interaction with community members, and in the event that they

do, our dual priority is the safety of and rights of community members as well as the security of our assets. Our goal is to limit the deployment of armed, private security only where and when it is deemed necessary to protect our people and, at those locations, to reduce access to weapons as much as possible.

Before allowing their employees at our sites, we require companies supplying contract security personnel to provide those personnel with human rights training that is in line with international best practice standards and covers the content of Pan American Silver's Global Human Rights Policy.

In 2020, 100% of Pan American Silver security employees and independent security contractors working at Escobal received human rights training. Training scheduled at La Colorada, and Dolores in Mexico was postponed in 2020 due to COVID-19 restrictions but will be initiated once pandemic-related travel restrictions are relaxed.

Our human rights training incorporates recommendations issued by the UN Human Rights Council, including education on unconscious bias and racism focused on discrimination against Indigenous peoples, the black community, and other vulnerable groups.

- Continue implementing our human rights policy and related programs and training
- Continue implementing our security framework, including the development of a consistent training approach for Pan American Silver security employees and private security contractors



EMERGENCY PREPAREDNESS AND CRISIS MANAGEMENT

WHY IS EMERGENCY PREPAREDNESS AND CRISIS MANAGEMENT IMPORTANT?

For a mining company, an emergency or crisis can stem from operational incidents such as a spill or from external events such as an earthquake, pandemic, or social unrest. Companies must be able to effectively respond to such events if they are to prevent harm to workers, communities and/or the environment. Failure to do so can affect a company's ability to operate by leading to loss of social acceptance, project delays, or reputational damage. Within the industry there is also an expectation that companies will work with local communities to improve their understanding of potential risks from mining activities and align emergency response plans.

For Pan American Silver, emergency preparedness and crisis management are critical components of our approach to business continuity and link directly to social acceptance. We are responsible for managing our impacts on our workforce, local communities, and the environment. We are also responsible for managing the impacts of external events on our operations and workers. Our ability to quickly, effectively, and appropriately manage a major incident also translates directly into respecting the rights and wellbeing of stakeholders affected by an incident.

ANALYST CENTER RELEVANT TOPIC - EMERGENCY PREPAREDNESS AND CRISIS MANAGEMENT

What's included in this section:

· Emergency preparedness and crisis management

SASB indicator: EM-MM-320a.

Prioritized SDGs: 8

Potential Risks and Impacts:

- Harm to workers, local communities, and the environment
- Community opposition to mine operations or development, resulting in project or legal proceedings, production delays, revocation of permits, and/or loss of social acceptance
- Infringement of human rights
- Security risks and the protection of people and assets

OUR APPROACH

We classify an emergency as an incident that may result in substantial harm to stakeholders or damage to property. A crisis stems from an internal or external incident that may have strategic or organisation-wide impacts. Through our risk assessment processes, we have identified a range of potential incidents and events that could manifest in an emergency or crisis. These include virus outbreaks, accidents, fires, spills, security incidents, infrastructure failure, and natural disasters. We develop corporate, regional, and site-level emergency and crisis management plans and conduct training to help us prepare for, respond to, and recover from emergencies or crises that could disrupt our operations. Our site-level community teams participate in emergency response and crisis management simulations and, where relevant, cooperate with local emergency services.

Systems and standards

- TSM Crisis and Communications Planning Protocol – Requires sites and corporate offices to establish crisis management plans and processes, conduct training, and run simulations
- Crisis and Communications Management Guidelines – Set standardized, minimum requirements and procedures for sites to identify, prepare for, and manage emergencies and crises

Programs and initiatives

- Operations-level emergency response plans – Address site-specific risks and lay out emergency response procedures
- Local head office crisis and communications management plans – Set out response procedures that meet both corporate and country-specific requirements

 Country-level risk assessments – Identify a range of risks and their potential to become an emergency or crisis at our operations

Monitoring and evaluation

 TSM Crisis and Communications Planning Protocol self-assessments – Require sites, regional offices, and head offices to conduct annual self-assessments

Accountability

- Operation-level emergency response services, including rescue teams and medical support personnel, directly manage incidents
- Local emergency management teams in each of our jurisdictions are responsible for overall management of crisis response at the divisional level
- The Director of Security and Crisis
 Management oversees implementation
 of the Crisis and Communications
 Management Guidelines and the Business
 Continuity Framework
- The Corporate Crisis Management Team, led by the Chief Operating Officer, oversees crisis management planning and response across the organization

OUR PERFORMANCE

Our emergency preparedness and crisis management response is intended to help us identify, prepare for, and manage crises affecting the Company, our workforce, their families, local communities, and/or the surrounding environment. During 2020, operations, regional offices, and corporate worked hard to complete the implementation of the TSM Crisis and Communications Planning Protocol. This included developing plans, conducting training, and running simulations and tabletop exercises to test crisis preparedness and readiness.

Although all sites met TSM requirements, we identified differences in the interpretation of certain TSM elements, resulting in inconsistencies across sites in the processes. To address this, we updated our Crisis and Communications Management Guidelines to establish and clarify Pan American Silver's minimum requirements for each element of the TSM protocol. The updated Guidelines will be formally rolled out in 2021.

These guidelines are a component of a more structured, uniform approach to business continuity procedures across our operations. This approach further embeds human rights considerations as well. We recognize not only that a security incident can manifest in a crisis, but also that our response to a crisis has the potential to affect human rights. We are therefore expanding our crisis training to incorporate the UN Global Compact's Good Practice Note on Integrating Human Rights into Crisis Planning.

We are also taking steps to improve the connectivity between site-level emergency response, which is a core component of each mine's approach to health and safety, and regional and corporate crisis management. It is important that we have an effective and coordinated response across all three levels of our organization.

EMERGENCY PREPAREDNESS AND CRISIS MANAGEMENT AT PAN AMERICAN SILVER



- Rollout the Crisis and Communications Management Guidelines at operations
- Develop our crisis management training to include the UN Global Compact's Good Practice Note on Integrating Human Rights into Crisis Planning

Crisis Management and COVID-19

When COVID-19 was officially declared as a pandemic, we assessed its potential impact on our operations and our workers. We recognized that because many of our mines are relatively isolated, the chances of avoiding COVID-19 cases was greater. At the same time, the onsite living and working conditions meant that if cases did occur, it would be challenging for us to contain the transmission and manage a quarantine process. To prepare ourselves, we activated a company-wide coordinated crisis response plan aimed specifically at protecting the health and safety of our workforce. The plan designated in-charge personnel and established clear chains of command identifying the authority, responsibility and accountability for executing and evolving the plan. We also developed crisis management training packages to assist our operations in supporting their own workforce.

As the year progressed and the virus spread, circumstances in various regions demanded a crisis management response. For example, midway through 2020, we began seeing higher numbers of positive COVID-19 cases within our mobilized workforces at Huaron in Peru than in any of our other mines. We made the decision to suspend operations at both the Huaron and Morococha mines to stem the transmission of the virus.

With support from our consulting epidemiologist, we developed an extensive pre-mobilization protocol, which included multiple molecular and antibody testing along with off-site controlled guarantines for workers awaiting test results. The enhanced entry screening protocols proved highly effective at virus detection and breaking the chain of transmission, helping to keep our workforces safe. We began disseminating the revised and extensive "operating within a regional epidemic outbreak" protocols across the Company to prepare other operations should they detect COVID-19 outbreak in their areas.



HEALTH & SAFETY

WHY IS HEALTH AND SAFETY IMPORTANT?

Mining, by its nature, has potential hazards that must be carefully managed. On a daily basis, mine workers may be engaged in drilling and blasting rock, operating heavy machinery, handling explosives and chemicals, working with high voltage electricity, working at heights, working with high temperature materials, as well as carrying out other complex and potentially dangerous tasks. Over the years, the mining industry has significantly reduced its overall injury rates through the application of technology, automation, and improved critical controls and procedures. However, when injuries do occur, they tend to be serious. The expectation is for companies to continue to adopt best practices to minimize risk and keep workers safe.

Pan American Silver is deeply committed to protecting the health, safety and well-being of our employees, contractors, suppliers, and community partners. Operating safely is our moral imperative. We believe that operating safe mines and building a culture of safety are directly related to our operational success and our ability to create long-term value for our COIs and society.

ANALYST CENTER MATERIAL TOPIC - HEALTH & SAFETY

What's included in this section:

Safety performance

· Health and safety training

Health and safety audits

GRI indicator: 403-103; 403-9; 404-1

SASB indicator: EM-MM-320a.1

Prioritized SDGs: 3.8

Potential Risks and Impacts:

- Industrial accidents equipment failure
- · Ground falls resulting in worker injuries
- Delayed production
- · Loss of social acceptance

See this data table for additional information: GRI 403-9/ EM-MM-320a.1

OUR APPROACH

Safety is always our priority, with safe, efficient production being the primary goal at all operations. We are continually striving to prevent workplace injuries through improved training, processes, technology, and innovation.

Policy

Health and Safety Policy

Programs and Initiatives

- The Pan American Silver Safety Pledge and Cardinal Rules (Pledge and Rules)
 Set out our fundamental expectations and rules for safety at sites apply to all employees and contractors, and are incorporated into induction training and safety talks
- Serious Incident Reduction Initiative –
 Focuses on preventing serious incidents
 and fatalities through training, culture
 change, site-specific action plans, and
 conducting comprehensive investigations
 of serious incidents
- Health and safety supervisor training program – Provides leadership and technical training for front-line supervisors
- Technical safety training Provides workers with relevant skills and training, including geotechnical and mine rescue training
- Behavior-based safety initiative pilot program – Empowers workers to take a more active role in their own safety

Monitoring and Evaluation

- TSM Health and Safety Protocol

 Requires all sites to conduct annual

 TSM self-assessments and develop action plans to continually improve performance
- Safety audits Are conducted annually at each mine by a corporate safety

department team led by the Director of Health and Safety; high priority findings are elevated to the Chief Operating Officer for immediate action

Accountability

- The Management Safety Committee, Director of Safety, and Safety Coordinator lead the implementation of companywide initiatives identified through our risk assessment process, safety audit programs, and incident investigations
- The Senior Vice President, Technical Services & Process Optimization is responsible for safety across the Company
- The Board's HSEC Committee oversees adherence to the health and safety policy, reviews safety statistics and incident reports, and provides input on the overall safety direction of the Company

OUR PERFORMANCE

Safety Performance

Our focus in 2020 was responding to the COVID-19 pandemic and developing and implementing protocols to protect the health and safety of our workers. All of our operations, with the exception of Timmins, were closed for various periods of time during the year, to reduce the spread of COVID-19.

We recognize that 2020 was an exceptionally challenging year for our workforce, and we are especially proud of the safety achievements at those mines where the accumulated time worked since the last lost time injury exceeded 1 million hours.

Accumulated time worked since the last LTI exceeds 1 million hours

+1.1 Million Hours

La Arena	+2.4 Million Hours	Manantial Espejo	+1.5 Million Hours
Dolores	+4.9 Million Hours	Timmins	+1.8 Million Hours

In 2020, we recorded a record-setting low number of lost time injuries. Even though we had fewer production hours, the decrease in lost time injuries was disproportionate, dropping from 30 in 2019 to 8 in 2020. We attribute this, in part, to our increased focus on workers' safety in the early months of the pandemic. The severity of injuries in 2020, however, increased over 2019.

Safety Performance¹

Huaron

	LTIF ²	LTIS ³
2020	0.35	534
2019	1.04	481
2018	1.41	723
2017	1.26	771
2016	0.74	373

Notes:

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

This good work, however, was undermined by devastating accidents that cost the lives of two of our workers during the year – one at Huaron and the other at La Colorada.

We work hard to create safe work environments, and zero fatal or life disabling accidents has always been our objective. Nothing is more important to us than the safety of our workers, and we are steadfast in our commitment to continuous improvement of our safety measures. When any severe incident occurs, our approach is always to conduct a thorough investigation to determine the root cause and to review and improve our procedures and practices to prevent similar incidents from happening again. While we continue with a detailed investigation into the incident at La Colorada, we are sharing and discussing details of this investigation as well as reviewing other procedures and practices throughout the Company to enhance our best practices for tasks performed routinely at all our operations.

We track all safety incidents, regardless of severity, and address trends identified. The most common lost time incidents tend to be the result of operating machinery, haulage, rock falls, slips and falls, worker error and failure to follow standard operating procedures and controls. We know that most injuries are preventable, but only through constant reinforcement of controls, on-going training, and personal accountability.

One of the ways we are working to prevent serious incidents and improve overall safety performance is by creating a safety culture that supports workers in making safe choices. Timmins has its "Good Catches" program, which encourages employees to flag any potential safety issues, even minor maintenance issues. These catches are

recorded, and issues are addressed.

Our behaviour-based safety program in Peru, focuses on empowering workers to take a more active role in their own safety as well as building a culture that encourages and supports them in consistently making safe choices.

We recognize that the pandemic is creating new and additional stresses on our workforce, resulting from lengthy lockdowns on site, worker shortages, isolation during quarantine, and external pressures, such as those stemming from family or economic challenges. We are monitoring for the impacts of COVID fatigue in our workforce and continuing to provide support to prevent this fatigue from manifesting into greater accident frequencies.

Health & Safety Training

We provide our workforce with the skills and training necessary to perform their jobs safely. In 2020, we delivered fewer hours of training as a result of COVID-related restrictions, the reductions in our workforce, and the temporary pause in operations at some sites.

Type of Training	Hours
General Safety	509,138
Mining Induction	187,788
Geotechnical	9,423
Formal Safety Meetings	116,942
Mine Rescue	20,704
Total	843,995

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

Health & Safety Audits

In 2020, we conducted one health and safety audit at Huaron. All key findings have been remediated. Health and safety audits planned for our other mines during 2020 were

postponed due to COVID restrictions. At the end of the year, operations had remediated all serious findings from previous safety audits and more than 99% of total findings.

Worker health and safety during the COVID-19 pandemic

In response to COVID-19, we developed extensive protocols and processes that changed the way we operate in order to create safe conditions for our workforce and limit the transmission of the virus. These changes included observing social distancing protocols, creating worker pods to limit contact and enable the isolation of workers exhibiting COVID-19 symptoms, and implementing biosafety measures. Mine safety teams were active participants in our response. In Mexico, for example, our mine rescue and emergency response brigades took on the role of screening workers prior to their arrival on site.

From a health and safety perspective, we are concerned about the effects of COVID-19 fatigue in workers and the potential for this fatigue to manifest in safety incidents and accidents. We continue to train workers on our protocols and have taken steps to provide workers with additional wellness supports. Please see for more information on our response to COVID-19 in our COVID-19 section.

- Implement continuous improvements in our safety systems and processes
- Roll out the behaviour-based safety program at our mines in Mexico, Bolivia, and Guatemala

HUMAN CAPITAL DEVELOPMENT

WHY IS HUMAN CAPITAL DEVELOPMENT IMPORTANT?

An engaged, skilled, and stable workforce is key to any organization's success. In the mining industry, competition for skilled workers can make it challenging to recruit and retain a productive workforce. The remoteness of mine sites, local demographics, and cultural traditions can limit the available labour pool. Moreover, increasing automation and the adoption of new technologies is changing the nature of certain jobs and, in turn, the skill sets required to do those jobs. Mining companies must anticipate what skills will be required in their future workforce and make appropriate investments in training and development. At Pan American Silver, we know that our people are critical to our success. We want to be an employer of choice and one that creates value for our stakeholders and the communities in which we operate. This means we have to attract qualified individuals and invest in our employees throughout their careers. As the Company grows and the industry innovates, we will also have to focus on upgrading employees' skills, building bigger pools of skilled workers, and accessing new sources of talent.

ANALYST CENTER MATERIAL TOPIC - HUMAN CAPITAL DEVELOPMENT

What's included in this section:

- Employee attraction and retention
- Employee training and development
- Employee Response Mechanism
- Labour relations

GRI indicator: 102-41; 202-103; 202-2; 401-1; 401-103; G4 MM4

SASB indicator: EM-MM-310a.1; EM-MM-310a.2

Prioritized SDGs: 3; 4; 5; 8

Potential Risks and Impacts:

- Skills shortages and competition for talent
- Shift to automation and high-skilled jobs
- Labour disruptions and work stoppages
- Low productivity and efficiency

See these data tables for additional information: GRI 102-8/EM-MM-320a.1; GRI 102-41/SASB EM-MM-301A.1; GRI 202-2; GRI 401-1

OUR APPROACH

We approach human capital development by offering our employees competitive compensation, quality benefits, opportunities for professional development, and work environments that foster optimal contributions.

Policies

- Global Code of Ethical Conduct
- Board and Senior Management Diversity Policy
- Global Human Rights Policy
- · Inclusion and Diversity Policy

Programs and Initiatives

- Leadership Development Program Focuses on the personal and professional development of current and future leaders
- Site-level training programs Provide necessary skills and development opportunities to meet site-specific current and future needs
- Site-level union agreements Improve safety standards and working conditions
- Whistleblower hotline Allows employees to anonymously report actual or potential breaches of the Global Code of Ethical Conduct via phone or web, in English or Spanish, 24 hours a day, 365 days a year
- PAAS Listens Provides employees with mechanisms to provide feedback or grievances directly to the Company

Monitoring and Evaluation

 Compensation benchmarking – Confirms whether we are compensating employees in line with market trends and complying with local legislation

Accountability

- The Vice President of Human Resources, Operations manages operations-level human resources
- The General Counsel has functional oversight of corporate human resources
- The Human Resources and Compensation Committee of the Board has oversight of the Company's human resources strategy

OUR PERFORMANCE

Talent attraction and retention

To attract and retain skilled and engaged employees, we offer meaningful employment and opportunities for development, and we provide competitive compensation and benefits. We want our employees to feel valued, take pride in our Company, embody the Pan American Silver values, and share in our success.

Our focus in 2020 was on supporting the health, safety and wellness of our workforce during the COVID-19 pandemic while continuing to operate. We faced unprecedented human capital challenges in planning and predicting staffing levels due to:

- High numbers of vulnerable workers unable to be deployed
- An inability to predict the number of workers able to pass our stringent premobilization screenings
- High levels of absenteeism
- Indicators that longer shifts and general COVID-19 fatigue was affecting workers

Training and Development

To retain our workforce and develop internal talent, we invest in our employees. Each operation provides training to both employees and contractors based on the needs and skill requirements of the mine. Our

Leadership Development Program allows us to identify leaders and managers from diverse backgrounds who are in positions that influence business outcomes and who are likely to drive Pan American Silver's future success. This program is designed to develop future leaders by deepening their understanding of the mining industry, our business, and our operations, enhancing their management skills and leadership capabilities and reinforcing both Pan American Silver's leadership competencies and its corporate values. In 2020, this program was placed on hold due to COVID-19 restrictions.

Turnover

Tracking turnover is one way we review our market competitiveness, assess the effectiveness of our hiring practices, and evaluate our performance as an employer. Across the Company, our overall annual turnover rate in 2020 was approximately 8% compared to 11% in 2019. Our turnover rates reflect local labour market competition and industry trends and changes. At the operations level, competitive environments for skilled labour and opportunities at new mines are generally responsible for voluntary turnover. We have worked hard to be a lean and efficient company. This approach has helped us retain our employees through past market fluctuations, and it has benefited us during the pandemic. We incurred very few furloughs or job losses during 2020.

Employee Response Mechanism

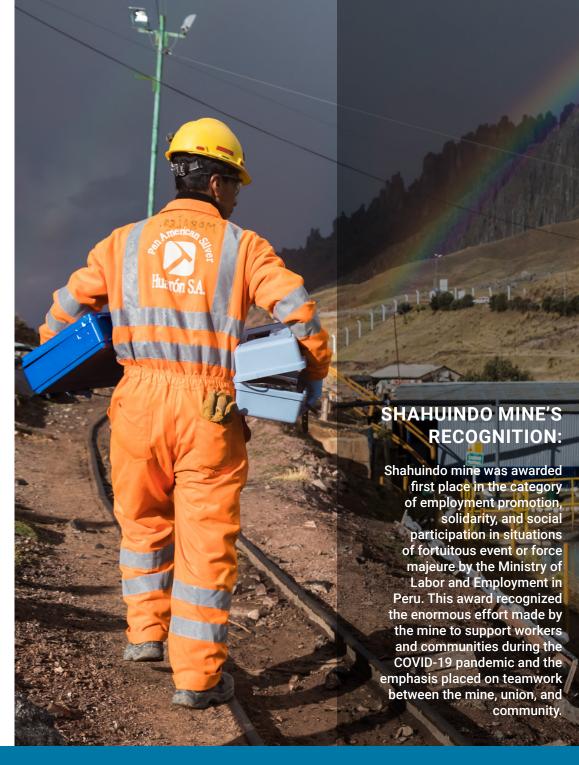
In 2020, we developed PAAS Listens, an employee feedback and grievance mechanism. Employees can now voice concerns, provide feedback, or raise grievances directly to Human Resources. Since launching PAAS Listens, we have received 20 concerns and/or grievances from employees. All grievances are reviewed by the Vice President of Human Resources, Operations.

Labour Relations

Eight of our nine operations have collective agreements with one or more unions, and 54% of our employees are unionized. We respect our employees' right to unionize. Our commitment to recognize the right to freedom of association and collective bargaining is set out in the Global Human Rights Policy.

Labour strikes and work stoppages have the potential to disrupt our operations and reduce production. We endeavour to maintain positive relationships with our unions and with unionized workers. Our approach is to work in partnership with our unions, which furthers the health and safety of our employees, and, in turn, supports the Company as well as local communities. In 2020, we had a 12-day strike at La Arena. We had no other strikes or lockouts that exceeded seven days.

- Continue supporting our workforce's physical and mental health and safety
- Continue managing COVID-19-related uncertainties in planning and predicting our staffing levels
- Continue updating our COVID-19 protocols and implementing new technologies in response to local virus conditions



INCLUSION & DIVERSITY

WHY IS INCLUSION & DIVERSITY IMPORTANT?

There is a growing recognition that a diverse company is a stronger company, and that this diversity can contribute to stronger corporate performance. In the mining industry, however, certain groups, such as women and Indigenous Peoples, have been historically underrepresented. Diversity has been increasingly a focus for investors, governments, civil society, and a new generation of workers. The industry is being challenged to increase diversity and address conditions that have created long-standing barriers to the hiring and retention of diverse groups.

Inclusion and diversity are critical to Pan American Silver's long-term success. We operate mines across the Americas in areas with different cultures, languages, and values. We want our workforce to represent the diversity of the communities in which we operate. We know that having a wide array of experience, knowledge, background, culture, and heritage can lead to innovation, better operations, and improved relationships with communities and other COIs. That is why inclusion and diversity are key components of our human capital strategy. We believe that by building an inclusive organizational culture that sees diversity as the norm, our workers will feel safe, valued, and have equal opportunities to develop and advance.

ANALYST CENTER MATERIAL TOPIC - INCLUSION & DIVERSITY

What's included in this section:

Inclusion and diversity

Non-discrimination and pay equity

GRI indicator: 202-2; 405-1; 405-103; 405-2; 406-1; 406-103

Prioritized SDGs: 5; 8

Potential Risks and Impacts:

- Talent attrition
- Low productivity and efficiency
- Discrimination and lack of equal opportunity

See these data tables for additional information: GRI 202-2; GRI 405-1

OUR APPROACH

The human resources and sustainability functions work together to create programs and processes that enhance our ability both to hire and retain employees who are representative of the local community and to engage local contractors or suppliers. We focus on identifying and addressing actual and perceived barriers to diversity and fostering a culture of inclusion.

Policies

- Global Code of Ethical Conduct
- Global Human Rights Policy
- Board and Senior Management Diversity Policy
- Inclusion and Diversity Policy

Programs and Initiatives

- Building Respect Together Program –
 Promotes a respectful workplace and develops culture that honours inclusion and diversity
- Whistleblower hotline Allows employees to anonymously report actual or potential breaches of the Global Code of Ethical Conduct or other policies via phone or web, in English or Spanish, 24 hours a day, 365 days a year
- PAAS Listens Provides employees with a mechanism to provide feedback or grievances directly to the Human Capital function

Accountability

 The Vice President of Social Sustainability, Inclusion and Diversity and the Vice President of Human Resources, Operations are responsible for inclusion and diversity initiatives and performance The General Counsel has functional oversight of corporate human resources

OUR PERFORMANCE

Inclusion & Diversity

For Pan American Silver, diversity includes gender, ethnicity, age, race, religion, disability, cultural and socio-economic background, nationality, sexual orientation, language, educational background, and expertise. Our objective is to build inclusive work environments in which all are treated fairly and respectfully, have equal access to resources and opportunities, are free from harassment, and can contribute to the success of the organization.

In 2020, we released our Board approved Inclusion and Diversity Policy, which draws on best practices and extensive internal and external engagement. The policy formalizes our commitment to inclusion and diversity and includes:

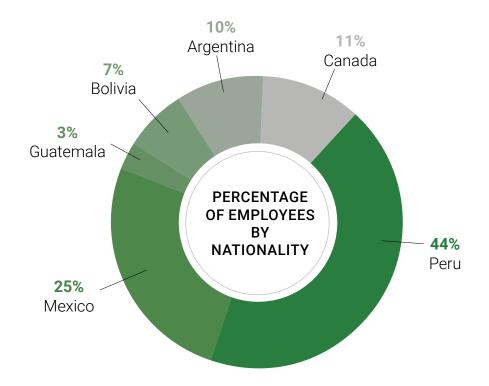
- Providing a safe and healthy work environment free from violence, harassment, intimidation, racism, and discrimination
- Providing equal and fair pay
- Fostering a respectful workplace culture
- Maintaining an employee feedback and grievance mechanism
- Considering diversity when appointing, promoting, or hiring at the board and senior management level

Operation-level inclusion and diversity subcommittees develop and implement inclusion programs to address site-specific inclusion challenges and perceived barriers to hiring and retaining employees who are representative of the local community.

We have mines and offices in six countries.

Our employees represent different cultures, speak different languages and hold different values. Whenever possible, we hire our workers and management from our host communities and countries as a means of contributing to local economic development. Managers who speak the local language and understand the local culture help translate our corporate values into site practices in a way that is appropriate for that site and the local norms. In 2020, 99% of senior management were local ¹⁰ to the countries in which the mine is located.

The COVID-19 pandemic brought to light systemic social inequities across the globe and placed additional pressures on vulnerable and marginalized groups in our workplaces, in the businesses that supply our mines, and in local communities. These groups include women, the elderly, those in poor health, and racialized groups. During 2020, we reinforced our commitment to raising awareness around the challenges experienced by these groups and implemented supports both through community investment initiatives and supportive social programs, such as education



around the issue of family violence. We have also provided employment support. For example, in regions where certain protections were not mandated by government, we implemented protocols, such as work-fromhome orders or alternative work arrangements to protect vulnerable workers.

In 2020, our CEO signed the BlackNorth Initiative's CEO pledge committing us to advancing its seven goals and implementing measurable initiatives to end systemic antiblack racism in corporate Canada. Going forward, we will be working to incorporate these commitments into our Inclusion and Diversity Program.

Gender Diversity

We see women as drivers of positive long-term change for Pan American Silver. Just over 7% of our employees are female, a slight increase from 2019. The majority of these women work in professional, administrative, and support roles. 10% of our contractors are women.

Women Workforce	Total
Employees	7.5%
Contractors	10.2%
Total Women Workforce	

In 2020, we continued to emphasise the recruitment, retention, and promotion of women. We recognize that barriers may limit opportunities for employment with or advancement within our company, as well as opportunities to work with us as contractors or suppliers. At the operational level, each site faces its own set of challenges in hiring more women and is taking steps to address these and create positive workplaces for female workers. Among the obstacles are interconnected and long-standing issues such as cultural beliefs, traditional gender roles, low turnover creating an absence of entrylevel positions, and low numbers of female candidates with technical training. It is not

the role of Pan American Silver to change existing norms or practices in the countries where we operate, but we do collaborate with governments and communities in working toward transformational changes within existing cultural dynamics.

During 2020, operations pledged to take steps to support female workers, both employees and contractors, in light of the challenges presented by the pandemic. Our efforts resulted in retaining 91% of our female workforce. We are currently reviewing maternity leave benefits across the Company to improve support for retention of our female employees.

At the corporate level, both the Board and Senior Management Diversity Policy and the Inclusion and Diversity Policy emphasizes gender diversity as a key consideration when recruiting, hiring, and promoting persons at the Board and senior management levels. Two of our eight Board members are female, one of whom was appointed during 2020¹¹. Four of our 16 vice presidents are women. Currently, we have no senior vice presidents or executive officers who are women. Our objective is to increase the representation of women amongst the Company's leadership.

In 2020, we increased the percentage of women hired from 15% in 2019 to 18%. Of all employees promoted in the company in 2020, 16% were women. The average percentage of female new hires and available promotions filled by women was 17% in 2020, exceeding our goal of 15%.

% WOMEN HIRED & PROMOTED

% Women hired	% Women promoted	% Women hired and promoted
18.2%	16.1%	17.4%

Note: Represents the % of new hires that were women and the % of promotions awarded to female candidates

¹⁰ Includes permanent employees who are either born in or have the legal right to reside indefinitely in the same geographic market as the operation.

[&]quot;Provided all of nominees are elected to the Board at the Annual General and Special Meeting of the Shareholders on May 12, 2021, Pan American Silver will have three female board members.

Our ability to attract qualified female candidates depends, at least in part, on gender representation in career fields related to our business and the number of female job applicants. We contribute to building the candidate pool by:

- Promoting mining as a career prospect to female secondary students and, in some areas, to the community at large
- Providing scholarships to women entering technical programs at universities
- Supporting external programs that are intended to inspire women to enter science and mining-related careers that promote women in mining and, more generally, champion women in leadership roles

We are also leading conversations around the importance of inclusion and diversity in the industry. Through our role in the BC chapter of Women in Mining, we held an executive-level workshop to facilitate dialogue on this topic.

Non-discrimination

We have zero tolerance for any form of discrimination. Our Global Code of Conduct and Global Human Rights Policy prohibit discrimination not only in our workplace, but also against community members and service providers.

Workers can raise allegations of discrimination through the PAAS Listens employee feedback and mechanism or through our Whistleblower hotline. In 2020, two allegations of discrimination were made. The first incident involved a supervisor's discrimination and mistreatment of subordinate workers based on position, education, and gender. We created a remediation plan, which was agreed to by the supervisor, and we continue to monitor behaviour. The second incident related to gender discrimination and a lack of adequate support for a breast-feeding mother who, due

to COVID-19 concerns, was unable to work at a remote mine location. Remediation steps included providing the employee with proper support, such as home office requirements, vacation, and paid leave. Following her maternity leave period, however, the employee resigned from her position.

Pay Equity

At each of our sites, we set salaries based on objective criteria, not gender, and establish salary bands that are externally benchmarked on a regular basis. We are in the process of developing a standardized approach to reporting on pay equity.

Respectful Workplaces Building Respect Together



We believe that respect is the foundation for building an inclusive organizational culture in which diversity is the norm and individuals are safe, valued, treated fairly, and receive equal opportunity to develop and advance. In 2019, we created the Building Respect Together program to help us foster this inclusive culture. The program consists of five modules:

Respect – establishing respectful understanding

Awareness – developing assertiveness and empathy

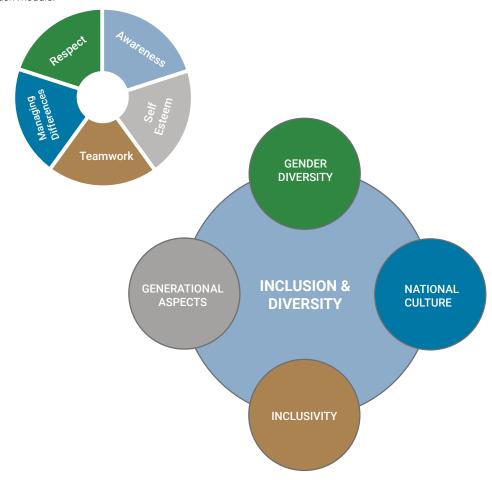
Self-Esteem - understanding who you are

Teamwork – working collaboratively

Managing Differences – communicating effectively

The program is dialogue-based because we believe that open conversations around these topics will foster positive change. The program also includes specific content to promote a greater understanding and protection of and respect for women's rights. Employee volunteers will facilitate the discussions within each module.

Although our planned rollout of the program in 2020 was delayed due to COVID-19, we conducted a campaign to introduce the topics of inclusion and respect in the workplace. We also selected and began training over 200 facilitators from across the Company. Our intention now is to roll out the first two modules in 2021 across our entire operation-level workforce, including contractors, either online or in person.



COVID-19 and Gender Diversity

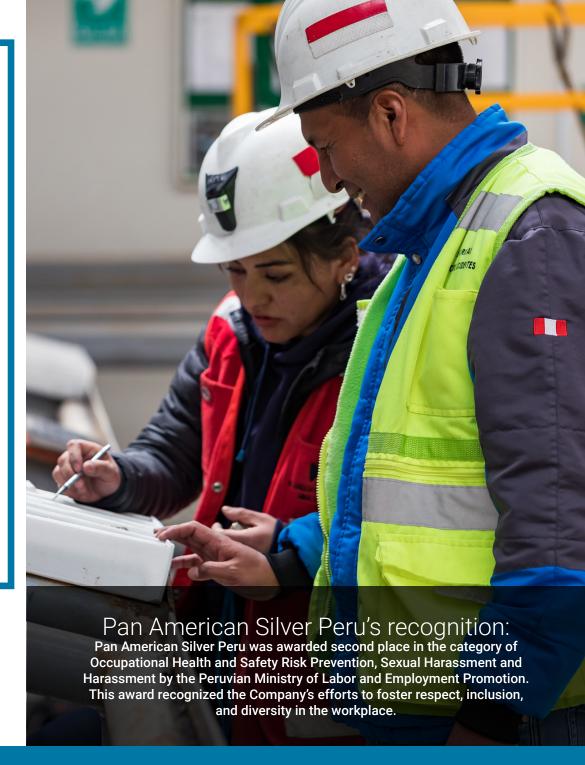
The COVID-19 pandemic has created inequities and placed additional pressures on vulnerable groups in our workplaces, particularly on women. In recognition, our operations committed to supporting and retaining female workers, both employees and contractors. Our efforts entailed implementing work-from home protocols, accommodating personal obligations such as at-home child or elderly care, and establishing social services hotlines lines for workers to raise non-covid related concerns, such as mental health or family issues. We also continue to accommodate employees who have been unable to return to work.

The COVID-19 pandemic has been particularly challenging for female contractors deployed at site. Company protocols or government orders have required extended shifts, lengthy stays on-site, lockdowns and required quarantines, which often conflict with family obligations. In some cases where deployment was not required, we were able to transition female workers to administrative roles or find alternative working arrangements.

In spite of the immense challenges brought about by COVID-19, the pandemic has provided us with an opportunity to increase the number of women in our workforce. In certain regions, job turnover at our sites is low, resulting in a lack of available entry-level positions for women. COVID has created uncertainty around and fluctuations in worker availability, creating a need for additional workers. We see this as an opportunity to attract and develop female talent. During the past year, for example, we have been training women from local communities as equipment operators, with the intent of retaining them as part of our regular workforce once the pandemic is over. Not only is this initiative providing women with economic stability, it is also providing us with new workers to support our operations.

See more information on our response to COVID-19 in our <u>COVID-19 section here</u>.

- · Roll out the first phase of the Building Respect Together program
- · Develop inclusivity and diversity metrics





The acceleration of economic development and population growth over the past century has had a wide range of effects on the earth's natural resources and biosphere. Native animals and plants, rivers, aguifers, and oceans, air quality, and the global climate have been impacted. Entire ecosystems are compromised to unprecedented levels. Despite the COVID-19 pandemic, environmental issues such as climate change and water availability continue to be top of mind concerns for societies around the world. Cleaner air quality, healthier water, effective waste management, and enhanced biodiversity protection not only reduce the vulnerability of communities to pandemics and improve resilience, but also have the potential to boost economic activity, generate income, create jobs, and reduce inequalities12.

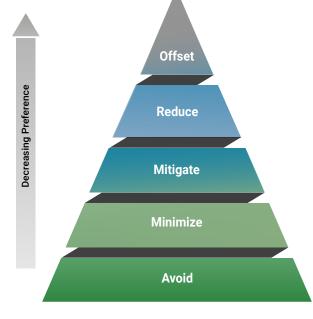
The mining industry has contributed to the environmental crisis and has collectively undergone a process of increased awareness, innovation, and performance improvements over recent decades. The industry also has an important role to play in driving the broader transformation to a global balance between people and the planet. Metals are critical

materials for the renewable energy generation systems, energy distribution, food production, transport infrastructure, and compact, interconnected communities necessary to reach that balance. Mining and mineral processing also provide proven techniques and experience in rebuilding ecosystems, recycling and reusing materials and water resources, and preventing downstream environmental impacts.

At Pan American Silver, our commitments to environmentally sound business practices and sustainable development are among our founding principles and Company vision. We always strive to avoid or minimize the negative impact of our activities then mitigate, rectify or reclaim, and compensate for unavoidable impacts.

We implement projects to maximize the energy and water efficiency of our operations at every site. We work to continually improve the environmental performance of our operating mines and minimize the potential impacts of new projects and closed mines.





¹² http://www.oecd.org/coronavirus/en/themes/green-recovery



MANAGING ENVIRONMENTAL IMPACTS

Environmental stewardship is a management pillar throughout our organization, right from our operators and technicians in their daily work, to our relationships with communities and governments in each country, to our corporate team, Board of Directors, and investors. We work to minimize and mitigate the environmental impacts of our operations in each phase of the mining cycle, from exploration through development, construction, operation, closure, and post-closure. We strive for continual improvement and have voluntarily adopted international performance standards, including the Mining Association of Canada's TSM program, across all our operations.

We recently updated and expanded our Environmental Policy to include more specific information relevant to climate change, energy, water, biodiversity, air quality, and cultural heritage.

ANALYST CENTER RELEVANT TOPIC - ENVIRONMENTAL PROGRAMS & MANAGEMENT

What's included in this section:

- · Significant environmental incidents
- Environmental Audits
- · Non-GHG air emissions

GRI indicator: 413-103; 305-7

SASB indicator: SASB EM-MM-120a.1; EM-MM-160a.1.

Prioritized SDGs: 6; 7; 12; 13

See this data table for additional information: SASB EM-MM-120a.1

OUR APPROACH

Policy

Environmental Policy— An updated and expanded policy was recently approved by our Board to include more specific information relevant to climate change, energy, water, biodiversity, air quality, and cultural heritage

Systems

- Corporate Environmental Standards Our internal standards are Intended to help sites implement and share best practices to manage and mitigate impacts in key areas: tailings and heap leach pads; energy and GHG emissions; biodiversity; and mine closure
- Environmental management systems

 Our internal standards are developed and implemented in alignment with TSM protocols and frameworks, which cover energy and GHG emissions, biodiversity, water stewardship, mine closure, and tailings management

Planning

- Baseline data collection and preconstruction environmental impact assessments – We use these processes to help us plan our work and monitor the ongoing performance of our operations
- Site-level expertise We have strong, reliable teams of professionals and share best practices, as well as challenges, across sites and with our industry peers

Engagement

Environment and community teams – Our site-level teams engage and collaborate with COIs on environmental issues and concerns and respond to feedback provided through our community response mechanisms

Implementation

- Programs and initiatives Our programs are designed to avoid, minimize, or mitigate our impacts on the environment and communities, and to maximize benefits through the exchange of environmental knowledge and expertise with other stakeholders in the regions where we operate
- Internal capacity building We train our local teams on guidelines and procedures to continually improve our environmental management performance

Monitoring and evaluating

- TSM protocols Our sites self-assess their performance against these protocols and develop corresponding action plans for improvement
- Environmental audits We have an annual environmental compliance audit program covering 100% of our operations where our goal is to audit each mine at least every other year to assess facilities, operating procedures, and control systems. Audits are conducted by a team of professionals from our other mines and corporate office. The audit process fosters the sharing of best practices and integration among mines and helps ensure that site-level procedures are consistent with TSM and our corporate standards

Accountability

- Each operation is responsible for the development and implementation of procedures and programs that comply with our Environmental Policy, systems, and corporate initiatives
- Our Vice President, Environment, oversees environmental management for our Company

OUR PERFORMANCE

Despite the potential for increased environmental risks throughout the pandemic-related suspensions, we found that our strong, decentralized management structure and the leadership of our teams at each site were successful in maintaining compliance and on track to meet our goals. We were able to complete the integration of the Gold Segment operations within our Environmental Policy and corporate standards framework, and we made major progress on implementing TSM at all mines during 2020. We also improved internal reporting systems and tracking of progress on environmental goals.

Travel restrictions and mine suspensions led to delays in our corporate environmental audit program in 2020; however, we were able to complete the first remote environmental and tailings audit of our La Colorada mine. Internal tailings audits were also completed at Morococha and San Vicente during the year.

Significant Environmental Incidents (SEIs)

No SEIs occurred at our mines in 2020. We define SEIs as incidents that negatively impact the environment or communities outside of our mines or project sites, including environmental incidents that significantly impact the reputation or community perception of Pan American Silver. The pandemic required subtle adjustments to our normal strategy, with increased focus on preparation for mine suspensions and reliance on site teams for internal auditing, inspections, and monitoring where service providers were unable to access our mines. Our existing environmental management systems were strengthened through further implementation of TSM, and emergency preparedness, including analysis of scenarios at our sites affected by pandemic suspensions or reduced staffing. Our adaptive management strategy was successful helping us avoid SEIs, and we continue to implement new solutions to environmental incident prevention, which streamline our internal processes and reduce risks.

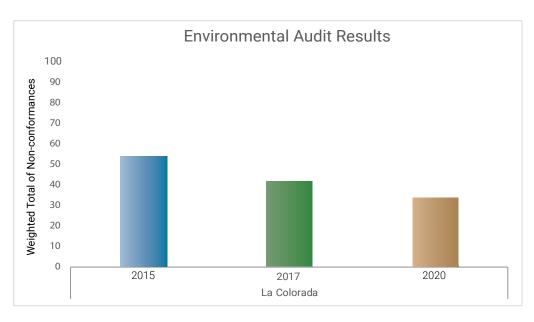
Environmental Audits

In 2020, we were unable to complete the intended corporate environmental audit program due to travel restrictions and mine suspensions that were put in-place to address the Global COVID-19 pandemic. Given the travel constraints, we developed a remote auditing format, which we trialed on internal tailings audits of the San Vicente and Morococha mines using three auditors from different locations for each audit. We then completed a remote combined environmental and tailings audit of La Colorada in November, using seven auditors from Canada, Mexico, Peru and Bolivia. An operations staff member at the mine was assigned to the audit team for site visits using video and a still photo collection. The audit was conducted over a two-week period and included video interviews with operators and mine staff. The flexible format allowed for a deeper analysis of documentation, procedures and management systems with less interruption to the operation itself, as compared to a 3- or 4-day onsite audit. La Colorada improved its overall audit performance from the 2017 audit. The majority of non-conformances were of low severity, such as inconsistencies in written procedures, solid industrial waste management, water management, and housekeeping. Shahuindo and La Arena, which were audited in 2019, had adequately remediated all audit findings by the end of 2020. The 2021 audit plan includes audits at Timmins, San Vicente, Dolores, and Escobal.

Non-GHG Air Emissions

Dust

Dust generated by mining activities such as blasting, crushing, and transport gravel roads can potentially affect air quality if not properly managed. In addition, ore processing and site laboratory activities can emit dust with trace metals and also require management controls. All our operations have dust suppression systems and actively manage dust sources from mobile transport over dirt roadways. In addition, many of our sites' processing and laboratory emission sources have air quality control systems installed. Dust generated by delivery and product truck transportation is a



community concern at times in our La Arena and Shahuindo mines. We continue working with those communities and government authorities to enhance mitigation measures further, including potentially asphalting certain sections of road and using additives that improve road surface stability and reduce water use for dust suppression. Shahuindo is using a molasses-based additive produced from nearby sugar cane plantations to aid in dust suppression and reduce water use.

Other Air Emissions

Mobile and fixed combustion of diesel fuel, LPG and compressed natural gas emits small amounts of carbon monoxide (CO), sulfur and nitrogen oxides (SOx and NOx), particulate matter and volatile organic compounds (VOCs). Explosives used in blasting are also a source of these emissions.

Compliance and Reporting

To ensure compliance with relevant air quality standards, we conduct regular air monitoring around our operations and monitor laboratory and refinery air extraction emissions. In 2020, our sites completed dust, laboratory, and refinery monitoring in accordance with best practices, and the results complied with

relevant air quality regulations.

While non-GHG emissions are not considered a material topic for sustainability reporting, we decided to expand our disclosure in 2020 in response to the SASB reporting framework. In this report we have completed our first estimates of total annual non-GHG emissions for our Timmins operation in Canada, which report to Environment and Climate Change Canada under the National Pollutant Release Inventory (NPRI). This new disclosure is included in the GRI Data Tables. Since our other operations do not have similar standardized emissions estimation regulations, we are in the process of using NPRI methodology to estimate their emissions to the extent that the methodology is relevant. We plan to expand this disclosure further in future sustainability reports.

- Continue implementation of the Towards Sustainable Mining protocols at all sites
- Improve estimation of non-GHG air emissions at all sites



WHY IS WATER MANAGEMENT IMPORTANT?

Access to water and sanitation are recognized by the United Nations as human rights, reflecting the fundamental nature of these basics in every person's life. Lack of access to safe, sufficient, properly managed and affordable water and sanitation and hygiene facilities has a devastating effect on the health, dignity and prosperity of billions of people. It also has significant consequences for the realization of other human rights¹³. Maintaining water flows in certain perennial streams and aquifers is required to protect ecosystems. Water is, however, also a necessary input for mining processes and in some cases groundwater must be extracted to allow safe mining of deeper ore bodies. Mining has the potential to affect both local water quality and quantity. In recent years, the mining industry has emphasized a need to move from site-focused water management to a more holistic, catchment-wide, water stewardship approach in dialogue with COIs.

For Pan American Silver, we recognize that water is essential for health, agriculture, and other industries in the communities near our operations. Effective water stewardship and management is essential to developing access to valuable mineral resources, protecting shared water resources, respecting the rights of other water users, and avoiding impacts that may occur within and beyond our operating boundaries.

ANALYST CENTER MATERIAL TOPIC - WATER

What's included in this section:

Water qualityWater use

GRI indicator: 303-103; 303-3; 303-4

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

Prioritized SDGs: 6

Potential Risks and Impacts:

- · Water scarcity and impacts to water access for local communities
- Water contamination if not managed properly
- New or more stringent water regulations
- Accidental discharges potentially affecting water quality

See these data tables for additional information: GRI 303-3/SASB EM-MM-140a.1; GRI 303-4

OUR APPROACH

Each mine is responsible for the development and implementation of procedures and programs that comply with the water-related aspects of our Environmental Policy, systems, best practices and corporate initiatives. Each assigns accountability for water stewardship to specific managers under the TSM Water Stewardship protocol. Our recently updated Environment Policy includes additional information related to our water management strategy and minimum requirements for all operations.

Policy

Environmental Policy

Programs and Initiatives

- Water baseline studies Used to identify catchment- or district-level water availability and quality prior to mining; studies can identify previously unknown water resources or infrastructure opportunities that improve water availability and management for our COIs during and beyond the mine's operation
- Water balances Track water use, reuse, and discharge at each site; data are reported to site management and corporate office to inform decision making
- Community engagement Involves community representatives in participatory water monitoring; currently in place at our Peruvian and Canadian operations and we are working to implement similar frameworks at our other mines where communities have shown an interest
- Water commitments Established by each mine; commitments may be embodied in environmental permits or set through voluntary agreements with communities and other third parties
- We participate in many multistakeholder

and industry initiatives related to water including local catchment committees, national organizations, the Mining Association of Canada subcommittees and the Silver Institute Sustainability Committee.

Monitoring and Evaluation

- TSM Water Stewardship Protocol Used by sites to self-assess performance and develop continuous improvement plans
- Water quality monitoring Assesses upstream and downstream water quality and identifies water-related impacts, risks, and opportunities to minimize any ecosystems impacts and to ensure that our water use and discharge decisions do not compromise the needs of other users. We monitor the quality of water discharged from our mines' wastewater treatment plants to ensure compliance with the permissible water quality standards defined in our environmental and discharge permits

Accountability

 Our Vice President, Environment, is responsible for water management strategy, water use, managing risks posed by water scarcity, and oversees projects and initiatives related to water

¹³ https://www.unwater.org/water-facts/human-rights/

OUR PERFORMANCE

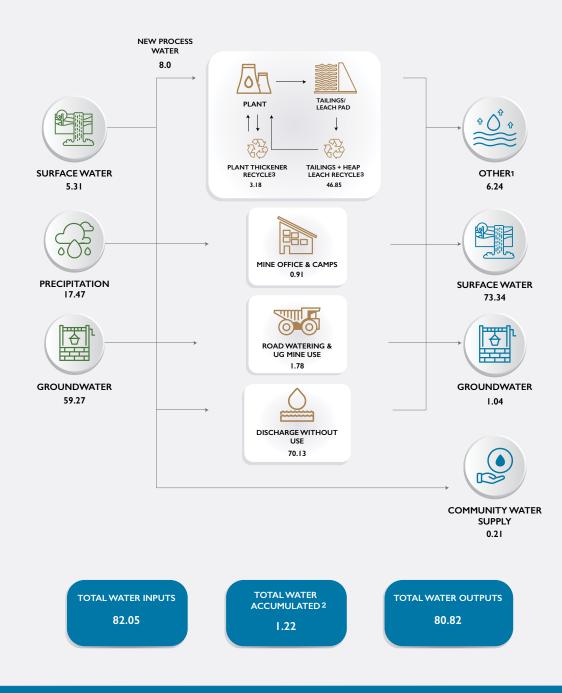
Water quality management

We had no enforcements, penalties or fines related to water management in 2020; however, we have two administrative processes ongoing in Peru for alleged water-related noncompliances at Shahuindo in 2019 and Huaron in 2017. Although both issues were resolved at the time of the Government inspections at each site, administrative delays have prevented final resolution of the processes. We had no incidents or non-compliances that impacted water quality in or around our operations in 2020. We recorded two reportable spills at Timmins and one at Morococha. More details on these spills are included in the GRI & SASB data tables. In all cases the spills were within our operating area and cleaned up immediately. avoiding impacts to water quality.

We invested in improvements to our water and wastewater treatment facilities at La Colorada, Escobal, Shahuindo, Huaron and San Vicente. These improvements increased treatment efficiency and, in some cases, additional treatment capacity, enabling us to ensure discharge compliance now and in the future.

Water is a key issue at our Escobal mine, which is currently on care and maintenance. In 2020, we conducted a full impact analysis of more than 10 years water quality data at Escobal and started an update to the hydrogeological model for the mine. We also updated the site wide surface water management plan and made improvements to surface water infrastructure. At Shahuindo we completed pilot plant trials and recently approved an \$8M investment in a new water treatment plant for the Merinos catchment. Construction of the new treatment plant will start in 2021.

COMPANY-WIDE WATER BALANCE (MILLION m³)



⁽¹⁾ As defined in 'A Practical Guide to Consistent Water Reporting', International Council on Mining and Metals (2017).

⁽²⁾ Reflects additional accumulated/collected in water reservoirs and heap leach pads.

⁽³⁾ Volume of recycled water may be different from data provided on page 111 due to rounding.

Water use

Our Company-wide water balance shows how much water we extract, recycle and discharge. We obtain water through permits both from groundwater, including the dewatering of our mines, and from surface water sources such as lakes or rivers. We use a portion of this water. along with water recycled from our process plants, water treatment plants, tailings facilities, and heap leach pads, for ore processing. Most of the groundwater extracted at our operations is for mine dewatering and is treated and discharged without use into local streams. This water becomes available to other water users and maintains environmental flows. Both new and recycled water is used for drilling. dust suppression, and in our camps. Some of the water that we extract is used to support local agriculture or is provided directly to local communities to help meet their water needs. Water is also evaporated into the atmosphere and/or retained in our tailings or heap leach facilities.

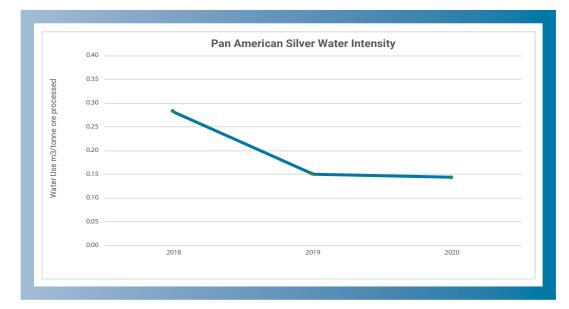
Our sites, with the exception of Dolores, were successful in achieving their 2020 water use goals. Timmins reduced water use for mineral processing in the winter period when freezing occurs in the tailings and water storage ponds, combined with the inability to treat and discharge water when our treatment plant is winterized, which means that minimizing water in the process plant is critical to the site-wide water balance. La Colorada implemented a project to reuse filtration water from the potable water treatment plant, thereby reducing new water consumption. San Vicente continued to reuse effluent from the mine water treatment plant that was upgraded in 2019, realizing a 90% reduction in the freshwater required for mineral processing. The mine also achieved a 72% reduction in water use in the site laboratory through the training of lab staff and improved water reuse. Our four mines in Peru and Manantial Espejo all achieved reductions in water use for dust suppression and camp use, although pandemic-related suspensions drove the magnitude of the decreases more so than actual initiatives at those mines. Dolores was

unsuccessful in reducing water use for truck washing, as upgrades to the facility were not completed due to pandemic-related delays. We expect to complete the upgrades to the Dolores facility in Q2 2021.

Water intensity is a measure of how much fresh water we use in our mines on a unit basis of cubic meters of water per tonne of ore treated. Our water use intensity, shown in the graph below, reduced significantly in 2019 when we acquired Tahoe Resources. This reduction was mainly due to the La Arena and Shahuindo mines in Peru which, similar to Dolores in Mexico, process ores using heap leach pads, which have very low water use per tonne of ore treated.

In 2020, we changed our methodology for water accounting at our Bell Creek mine in Timmins to include consideration of evaporation from our tailings and water storage facilities. We made this decision because accurate evaporation data are available for the site and, without evaporation, our data would overestimate the amount of water accumulated in the tailings facility and ponds during the year. We have restated the Timmins data for 2019 and plan to include evaporation in water balances for our other operations going forward once accurate data are available. Using our new methodology, the combined water use intensity of our operations, exclusive of Huaron and Morococha, was 0.14 m3/tonne of ore processed in 2020, lower than 2019 (0.15 m3/ tonne). This was mainly due to the reduction noted above at San Vicente and reduced irrigation on the leach pad at Dolores in 2020. Other mines had similar water use intensity compared to 2019.

Water use intensity at Huaron and Morococha is greater than the combined average at our other mines. It averaged 3.99 m3/tonne of ore processed in 2020, a slight increase compared to 2019. We report water intensity of those two mines separately since their data would otherwise mask the trends at our other operations. Huaron and Morococha have high water intensity because they are designed with gravity-driven water supply systems



wherein water flows from large lakes through the mineral processing plant, is treated, and is then discharged downstream. Both mines are located in areas with high precipitation, low evaporation, and relatively abundant surface water. The gravity-driven designs reduce energy use and greenhouse gas emissions at both sites by eliminating pumping for water recycling. The additional water and lime in Morococha's tailings facility also provide a net benefit to water quality by helping to neutralize acid drainage from abandoned historic mines and third-party waste piles located upstream.

Our Dolores mine had a water use intensity of 0.16 m3/tonne of ore processed in 2020. The mine is located in the upper catchment of the Yaqui River, which has been identified as a catchment of extremely high water stress by both the World Resources Institute and the World Wildlife Fund for Nature. Dolores is our only operation in a catchment with high or extremely high baseline water stress

and represents 3.5% of our total freshwater withdrawn and 12.9% of our total freshwater consumed for mineral processing. Total water use by the Dolores mine is less than 0.1% of the natural recharge to the Yaqui River catchment. Despite the minimal impact this operation has on water availability, we continue to search for initiatives to reduce our freshwater extraction use at Dolores, as with all our other operations.

- Implement site-specific projects to minimize freshwater extraction use and water use intensity
- Improve water use accounting at all operations
- Improve evaporation measurement and estimation at all operations
- Develope a corporate environmental standard for water management

TAILINGS FACILITIES AND WASTE MANAGEMENT

WHY ARE TAILINGS FACILITIES AND WASTE MANAGEMENT IMPORTANT?

Mining operations generate mineral waste including waste rock, processed ore, and sludges or tailings. Tailings are by-products of precious and base metal ore processing and mineral and metal extracting. During processing, ore is crushed, milled and processed into wet slurry in order to extract the minerals or metals. The residual, non-economic ground rock, is tailings. Tailings are generally stored in above-ground, engineered impoundment facilities, which allow the separation of water for recycling or discharge. Processed ore piles may be stacked for metal extraction through heap leaching. Recent catastrophic failings of tailings dam facilities in the world have demonstrated the potential magnitude of damage to communities, employees, and the environment that can result from a facility failure. This is why safe management of tailings facilities has become a global priority for the mining industry, as well as governments, insurers, investors, and communities.

At Pan American Silver, tailings and heap leach facilities are treated with the utmost importance. Our objective is zero harm to people and to the environment. Responsible management of tailings facilities and heap leach pads, along with management of other mining waste is imperative to maintaining worker, community, and environmental health, and is essential to our social acceptance.

ANALYST CENTER MATERIAL TOPIC - TAILINGS AND WASTE MANAGEMENT

What's included in this section:

- · Tailings and Heap Leach facilities management
- Waste rock management
- Wast
- Spills

GRI indicator: 306-103; 306-2; 306-3; MM3

SASB indicator: EM-MM-150a.1; EM-MM-150a.2; EM-MM-150a.3

Prioritized SDGs: 3, 6, 12

Potential Risks and Impacts:

- Failure or leakages of tailings facilities and heap leach operations resulting in impacts on human and ecosystem health, property, and community livelihoods
- Spills, acid rock drainage, or metal leaching resulting in water and sediment contamination

See these data tables for additional information: GRI 303-3/SASB EM-MM-140a.1; GRI 303-4



OUR APPROACH

We design, build, operate, maintain and close tailings storage facilities, water dams, heap leach pads, and waste stockpiles in accordance with the Towards Sustainable Mining (TSM) Tailings Management Protocol and the Canadian Dam Association (CDA) Guidelines. Our facilities and infrastructure are designed for stability and have capacity to withstand extreme weather, flood or seismic events. We conduct routine inspections, geotechnical and environmental monitoring, safety reviews, risk assessments, audits, and independent reviews of our facilities to continually improve our management systems and minimize the chance of an incident occurring at our facilities.

Policy

Environmental Policy

Systems and standards

- Pan American Silver Tailings, Water Dam, and Heap Leach Facilities Corporate Standard – Incorporates the TSM Protocol and CDA Guidelines and sets out responsibilities and a management framework for planning, implementation, monitoring and surveillance, and review of critical facilities
- Site-specific tailings management systems – Guide each site's approach to incorporating and managing the TSM Tailings Protocol and CDA Dam Safety Guidelines
- Programs and initiatives
- Operational, Maintenance and Surveillance Manuals – Serve as a critical component in meeting performance objectives and managing potential risks
- Site-specific emergency preparedness and response plans - Include provisions for tailings facilities incidents and are linked to the Corporate Crisis and Communications Plan

- Predictive modeling Incorporates geochemical data and studies for acid drainage and metal leaching from tailings, waste rock, and heap leach facilities; Conducted prior to operating and through to closure
- All mines have developed specific waste commitments and operational procedures to address issues related to waste management.

Monitoring and evaluation

- Facility inspections Assess facility conditions; conducted at least monthly by technical staff
- Dam safety inspections Assess the stability and safety of facilities; conducted at least annually by the external Engineer of Record
- Independent tailings storage facilities safety reviews – Assess facility risk and identify improvements; Conducted every five-years by an independent reviewer
- Annual management system reviews Identify opportunities for improvement; conducted in coordination with the VP of Mineral Processing, Tailings & Dams
- Tailings management system audits Assess alignment with the TSM Tailings Protocol
- Water and sediment quality monitoring

 Regular sampling of downstream
 water and sediment quality to ensure
 compliance with predictive models and water quality regulations.

Accountability

 The Process Manager at each site is responsible for overseeing and implementing all aspects of tailings management

- The Vice President of Mineral Processing, Tailings & Dams oversees performance of tailings, water dam and heap leach facilities and is the accountable executive officer
- The Board's HSEC Committee has oversight of matters related to tailings management and mineral waste management, and receives reports on a quarterly basis

Mining Association of Canada Updates Tailings Management Guidance to Align with Global Standard

TSM Tailings Standard Now Meets or Exceeds the Majority of the Standard's Requirements

For more information please click here:

https://mining.ca/press-releases/macupdates-tailings-management-guidance-toalign-with-global-standard/



The Mining Association | L'association minière of Canada | du Canada



OUR PERFORMANCE

Tailings and Heap Leach Facilities Management

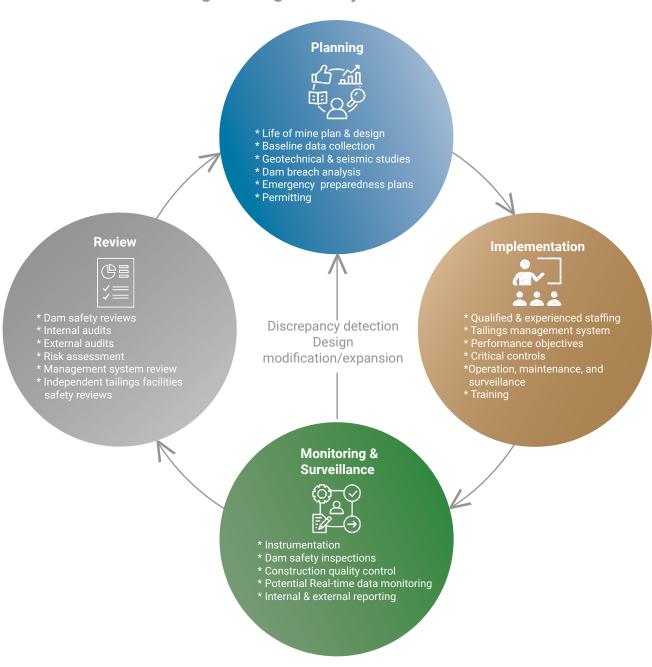
We store tailings and heap leach pads in specialized engineered facilities using construction methods that vary according to the context and local conditions of each operation. During 2020, Pan American Silver managed seven operating tailings facilities, five heap leach pads, one dry stack tailings facility at the Escobal mine, and one large water storage dam at Dolores.

Our focus is on continuous improvement of our management framework, which consists of four phases: planning, implementation, monitoring and surveillance, and reviews and assurance.

In 2020, we were focused on fully implementing the TSM Tailings Protocol at all operations with the objective of achieving of TSM A-level scores at our Silver Segment operations. Each site now has an assigned external Engineer of Record, a tailings facility management system based on the TSM Tailings Management Protocol and CDA guidelines, and an updated risk assessment. In addition, we conducted dam safety reviews at all mines and launched internal audits and tailings management reviews at all Silver Segment operations. Most action plan items were completed in 2020 despite pandemic restrictions, with some follow-ups scheduled for 2021.

We will continue to conduct independent reviews on a five-year basis. Operations have addressed the majority of findings identified in these reviews. Our objective is for outstanding items to be completed in 2021. COVID-19 and restrictions prevented us from completing the independent reviews scheduled in 2020 for Huaron and Alamo Dorado. These have been postponed until 2021.

Tailings management system/framework



Pan American Silver operating tailings storage facilities, dams, heap leach pads

Operating Mine	Type of Facility ¹	Tailings Store Raise Type	Consequence classification
Bell Creek	1 operating subaerial tailings facility	Downstream-Centerline	Low to Significant ²
Shahuindo	1 operating heap leach pad	N/A	N/A
La Arena	1 operating heap leach pad	N/A	N/A
Dolores	1 operating water storage dam and 3 heap leach pads	N/A	N/A
La Colorada	2 operating subaerial tailings facilities	Downstream & Downstream-Upstream-Centerline	Significant ²
Huaron	1 operating subaerial tailings facility	Centerline	Significant ²
Morococha	1 operating subaqueous tailings facility	Downstream	Extreme ²
San Vicente	1 operating subaerial tailings facility	Centerline	Significant ²
Manantial Espejo	1 operating subaerial tailings facility	Downstream	Significant ²

Notes:

¹Sub-aerial: Above ground facilities where tailings may be in the form of slurry, thickened, or paste within an internal pond of clear water or dry stack placement where water is separated out and dry tailings are placed into a stack. Sub-aqueous: Underwater facilities where tailings are entirely submerged within an existing pond.

²CDA Dam Consequence Classification system.

Tailing facilities construction methods

Tailings facilities are most commonly designed as dam structures, intended to store both tailings and water. Tailings dams are constructed using upstream, centerline, or downstream methods, or a combination thereof. All tailings dams begin with a starter dam, which is raised over time as additional tailings are deposited in the storage facility. The construction method depends on the direction in which the embankment crest moves in relation to the original starter dam.

- Upstream construction the dam is raised with the crest moving upstream over the deposited tailings.
- Centerline construction the dam is raised vertically from the starter dam.
- Downstream construction the dam is raised by shifting the crest downstream over structural fill on the downstream face.

We recognize the increased level of stakeholder interest in understanding how we manage and mitigate tailings-related risks. In response to the Investor Mining and Tailings Safety Initiative, co-chaired by the Church of England Pensions Board and the Swedish Council on Ethics for the PA Public Pension Funds, we provide additional information on our facilities in the Public Tailings Facility Database.

We are currently reviewing the Global Industry Standard for Tailings Management (GISTM), which was released in 2020 by the Global Tailings Review as an initiative of the International Council on Mining and Metals, the United Nations Environment Programme, and the Principles for Responsible Investment. We have assessed this standard against the TSM Tailings Protocol and CDA Guidelines and have found minor gaps as well as areas where TSM and CDA requirements exceed those of the GISTM. The Mining Association of Canada, of which Pan American Silver is a member, is currently working to address these gaps and align with the GISTM. We are supporting these efforts through participation in MAC's Tailings Working Group.

Technological innovation

Automation is taking on an increasingly important role in production processes. benefiting competitiveness by improving the stability and safety of production processes, equipment, and facilities. As part of our ongoing work to improve the safety of our tailings, water, and heap leach facilities, we have investigated and developed a reliable system to provide real-time data related to the operating conditions of our critical facilities. In our tailings storage facilities at La Colorada, a real-time monitoring system has been implemented that includes the integration of systems for monitoring geotechnical instrumentation, such as piezometers, inclinometers, drain flows, etc. and settlement monuments by means of an Automatic Mechanical Total Station (ASTM). As a result of this integrated system, the data obtained is processed and managed by a dedicated server that allows the visualization of real time variables, generation of trends, alarms for the control room operator and via e-mail, in

addition to the shared management of the data through the network or different platforms. Our real-time monitoring system can be accessed remotely through the web, allowing responsible engineers to monitor facilities at anytime from anywhere and using real-time data.

We are expanding this technology to other sites. Our hope is that real-time monitoring of critical facilities will allow us to enhance geotechnical stability, improve the longevity of the structures, and to support informed decision-making.

Waste management

Waste rock

The main waste products generated by our mines are non-economic waste rock and tailings residue created by the extraction of our metal and concentrate products from the ore we mine. We strive to maximize the reuse of these materials as backfill in our underground operations and construction materials for surface infrastructure including tailings storage facilities, roads, and platforms for buildings and equipment. In 2020, we were able to reuse 2.5% of the waste rock and 7.1% of tailings residue generated.

Seven of our nine operating mines (78%) generate some waste rock and/or tailings

materials that could potentially generate acid rock drainage. We actively manage these materials to prevent the formation of acid rock drainage where possible. We use active or passive water treatment systems to neutralize acid drainage and prevent metals in downstream catchments wherever necessary at our sites.

Spills

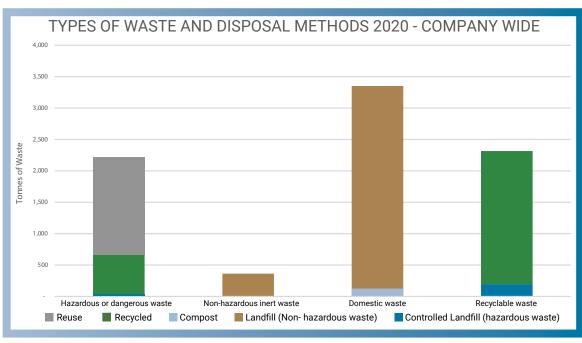
We recorded two reportable spills at Timmins and one at Morococha. These spills are discussed in the <u>Water Section</u> of this report and the <u>GRI & SASB data tables</u>.

Waste management

Our operations generate quantities of hazardous and non-hazardous industrial waste materials that require end-of-life recycling or disposal. When possible, our operations recycle or reuse these products. For example, used oil can become a heating fuel if using equipment that ensures complete combustion and emissions compliance. We recycle or reuse 30% of oil used compared to the total hazardous waste generated. For other waste, we follow local regulations for disposing of these materials, either on site or at local certified disposal facilities.

TYPICAL WASTE TYPES Non-hazardous Waste Tires Used oils and solvents Scrap metal Batteries Domestic waste (food waste, paper and plastics) Reagent packaging Wood waste Lighting standards





In 2020, our mine-level waste management plans and training programs, combined with the pandemic-related temporary suspensions, resulted in reductions of all waste streams including hazardous, non-hazardous, domestic waste, reuse and recycling.

Our four mines in Peru have partnerships with ANIQUEM (Asociacion de Ayuda al Nino Quemado), which helps rehabilitate children suffering from serious burn injuries. The program consists of donations from the commercialization of recyclable waste, with the funds donated to ANIQUEM. In 2020, Pan American Silver Peru supported the recovery of 13 children.

NEXT STEPS

- Conduct independent safety reviews of facilities at Huaron and Alamo Dorado, as well as the heap leach pads at Shahuindo and La Arena
- Update the dam breach analysis for La Colorada and Huaron and continue to implement the recommendations from the internal audits
- Implement site-specific projects to minimize waste generation

	WASTE GENERAT	ION	
(tonnes)	2020	2019	2018
Hazardous or dangerous waste - secured landfill	1,574	1,713	999
Non-hazardous inert waste - landfill	363	468	1,012
Domestic waste to landfill	3,221	3,533	1,712
Reuse	221	58	29
Recycling	2,894	3,257	4,190



BIODIVERSITY

WHY IS BIODIVERSITY IMPORTANT?

Mining activities require the development of infrastructure, which alters the natural features of the local landscape. Open pit mines, processing plants, mine waste rock facilities, ancillary facilities, supporting infrastructure construction and roads can damage habitat, impact individual species, and affect overall ecosystem health. At Pan American Silver we recognise the importance of biodiversity for the preservation of fragile, often remnant, ecosystems at a global and local scale. We strive to minimize the footprint of our operations to avoid biodiversity impacts by design, and actively pursue reclamation and conservation initiatives with a goal of species protection and no net habitat loss.

ANALYST CENTER MATERIAL TOPIC - BIODIVERSITY

What's included in this section:

Biodiversity management

Land use

GRI indicator: 304-103; 304-1; 304-2; 304-3; G4 MM1; G4 MM2

SASB indicator: SASB EM-MM-106a.2; SASB EM-MM.160a.3

Prioritized SDGs: 3

Potential Risks and Impacts:

Potential damage to ecosystem health and loss of biodiversity

See these data tables for additional information: GRI-2; GRI G4 MM1; GRI 304-3; SASR FM-MM-106a 2

OUR APPROACH

Each operation is responsible for the development and implementation of biodiversity procedures and programs that comply with our Environmental Policy, systems, and corporate initiatives. We recently updated our Environmental Policy to include

additional information related to our biodiversity management strategy and set minimum requirements for all our operations.

Policy

Environmental Policy

Systems and standards

 Biodiversity and Mine Closure Corporate Environmental Standard – Provides best practice guidance for our sites

Programs and Initiatives

- Ecosystem baseline studies Provides detailed flora and fauna baselines and identify potentially sensitive habitats and species prior to commencement of mining. We conduct science-based biodiversity and community impact assessments prior to settling in new areas or developing new projects, including systematic consideration of threats to biodiversity beyond our operations.
- Biodiversity management plans –
 Help sites manage biodiversity during
 construction, operation, and closure.
 Where protected species have been
 identified, we take a precautionary
 approach by implementing detailed impact
 assessments, management plans, and
 conservation strategies

Monitoring and Evaluation

- TSM Biodiversity Conservation
 Management Protocol Used by sites to
 self-assess performance and implement
 action plans to continually improve
 performance
- Biodiversity monitoring Identifies potential new impacts and changes from our baseline studies

Accountability

Our Vice President, Environment, oversees and is responsible for biodiversity management for the Company

OUR PERFORMANCE

Biodiversity management

Potential impacts to biodiversity at our sites include vegetation clearing and habitat loss; vehicle strike on native fauna; noise, lighting and blasting impacts on fauna; hunting; erosion; and impacts to waterways. We mitigate impacts by ensuring that clearing is conducted in surveyed and permitted areas, protecting and relocating plant and animal species in accordance with our biodiversity management plans, monitoring and managing noise and blasting, implementing speed limits, signage and employee training, and fencing high risk areas like water storage ponds to prevent fauna access. Baseline studies and regular monitoring have not identified any significant impacts on biodiversity from our operations.

At some of our sites, ongoing monitoring shows an increase in biodiversity as well as in flora and fauna population densities following years of impacts from agriculture and ranching activities. This occurs where we have purchased and secured large areas of land but require only a small portion for our operations. The remaining unused land is protected from grazing and hunting activities. This has led to significant natural habitat recovery. For example, in Argentina we own more than 57,000 hectares of land outside of our operations that is protected from impacts such as sheep grazing and hunting. Flora and fauna surveys on this land over recent years have shown an increase in abundance and diversity of species in the ecosystem. At our Dolores mine we continue to restore more than 40 hectares of community land that was previously affected by cattle over-grazing and natural erosion in order to provide habitat for native fauna.

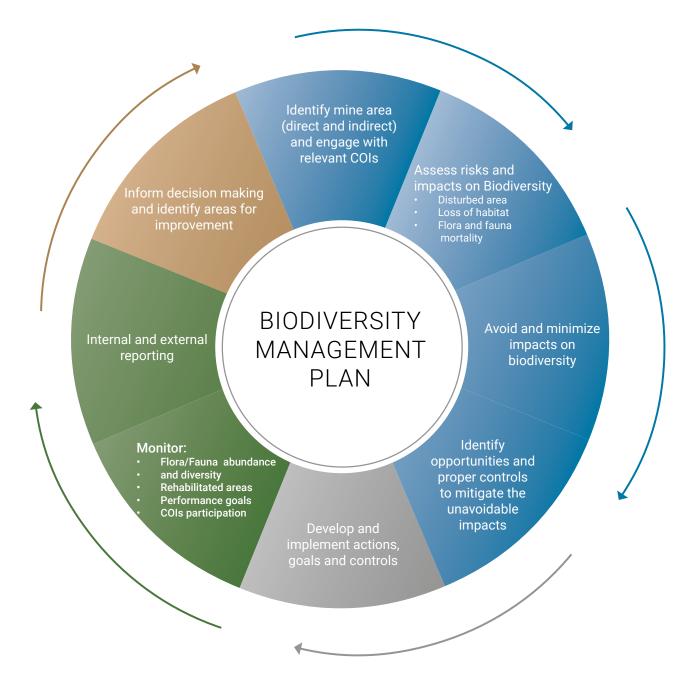
In 2020, implementation of the TSM Biodiversity Conservation Management Protocol resulted in the update of biodiversity management plans at all our sites. This was a positive process and involved dialogue with COIs around each of

our sites. For example, community surveys at our San Vicente mine helped highlight several native plant species with medicinal properties and started conversations around potential joint conservation projects.

None of our mineral reserves are located in or near sites with protected conservation status or endangered species habitat¹⁴. None of our mines are located in areas that are designated as having high biodiversity value as defined by GRI and our extensive baseline and monitoring surveys at each site. Land owned by our Huaron mine in Peru is adjacent to the Huayllay "Stone Forest" National Sanctuary (a natural geological rock formation resembling pillars and other structures). The mine and mineral reserves are located more than 5km from the Sanctuary boundary, and our nearest infrastructure, a camp and water treatment plant, is located 0.7km from the Sanctuary, beside the town of Huayllay. According to WRI's (World Resources Institute) Global Forest Watch tool, 2 of our 9 operating mines (22%), Shahuindo and La Arena, are located in areas considered as having high Biodiversity Significance (see WRI Global Forest Watch tool for definition and limitations of the dataset).

NEXT STEPS

 Continue site-level implementation of the TSM Biodiversity Conservation Management Protocol and our Corporate Environmental Standard on Biodiversity and Mine Closure



¹⁴Areas included in the UNESCO World Heritage List and/or IUCN Green List (categories I to IV), or critically endangered or endangered species on the IUCN Red List.

MINE CLOSURE

WHY IS MINE CLOSURE IMPORTANT?

Mines have finite lifespans, and mining companies are responsible for managing their impacts not only during mine operations, but also after mine closure. This means restoring land to a beneficial state and ensuring no health and safety risks remain from any mining wastes, equipment, and infrastructure left behind.

At Pan American Silver, our desire to leave a positive beneficial legacy in the local environment and in our host communities means that we engage local communities and governments in planning for mine closure before a mine is in operation. We aim to integrate social and environmental considerations in the closure plans for each of our sites.

ANALYST CENTER MATERIAL TOPIC - MINE CLOSURE

What's included in this section:

- Environmental and technical closure
- Social closure

GRI indicator: G4 MM10

SASB indicator: EM-MM-160a.1.

Prioritized SDGs: 3: 8

Potential Risks and Impacts:

 New or unanticipated closure, reclamation and remediation costs, and regulatory requirements

See these data tables for additional information: GRI G4 MM1: GRI 304-3

Our Approach

In mine closure our objective is to return the land disturbed by our activities to as close to its natural and beneficial state as possible and create viable habitats for native species of the local area. We work to make the transition from operations to closure as efficient as possible by starting the planning process early and

collaborating with local communities.

Policy

Environmental Policy

Systems and standards

Biodiversity and Mine Closure Corporate

Environmental Standard – Provides best practice guidance for our sites

Programs and Initiatives

- All our sites set annual goals for progressive rehabilitation of disturbed areas and we disclose performance in this report
- Site-level reclamation plans Include measures to enhance biodiversity conservation and support natural ecosystems by creating viable native habitats and wetlands for long-term protection
- Closure plans Provide detailed closure costs estimates for all mines and projects on an annual basis
- COI engagement Helps us understand and incorporate the expectations of local communities and other COIs into our closure and post-closure plans

Monitoring and Evaluation

Post-closure monitoring and maintenance

 Entails many years of post-closure
 monitoring to ensure reclamation
 objectives are achieved

Accountability

The Vice President, Environment, oversees and is responsible for mine closure and land rehabilitation for our Company

OUR PERFORMANCE

Environmental closure

We conduct progressive closure activities, reclaiming disturbed land and waste rock facilities once they are no longer required by our operations. At the end of the mining lifecycle, we create landforms that integrate back into the natural landscape and provide quality habitat. This requires removing physical

infrastructure and reclaiming remaining waste rock and tailings storage facilities. By the end of 2020, the accumulated area disturbed and not yet reclaimed by all our operations was 3,172 hectares. We reclaimed 126 hectares, primarily at Alamo Dorado

Production at our Alamo Dorado mine ceased in 2017, and we completed the active physical closure process during early 2019. We are now in the post-closure monitoring stage, which entails on-going environmental sampling and analysis to evaluate erosion, revegetation survival, habitat recovery, water quality, biodiversity, and geotechnical and geochemical stability. We currently manage water treatment at the site to mitigate acid rock drainage while passive treatment systems are being established. In 2020 we approved additional investments at Alamo Dorado to improve erosion control on the closed waste rock dumps and expand passive water treatment systems over the next three years.

We continue to apply the lessons learned from the Alamo Dorado closure project to annual closure and decommissioning liability estimates for all our mines and projects. In 2020, we incorporated Escobal into our standard estimating methodology.

This year we have included additional disclosure on our processes related to social closure of our mines in the <u>Community section</u> of this report.

NEXT STEPS

- Continue site-level implementation of the TSM Mine Closure Framework and our Corporate Environmental Standard on Biodiversity and Mine Closure
- Continue post-closure monitoring and maintenance at Alamo Dorado
- Update closure planning for Manantial Espejo and La Arena



IMPLEMENTING THE TCFD RECOMMENDATIONS

Q&A WITH ROB DOYLE, CFO

Why is aligning with the Taskforce on Climate-related Financial Disclosures important for Pan American Silver?

Climate change presents a huge systemic risk to most, if not all, businesses. For this reason it is becoming an increasing focus of the financial markets. In early days, we knew there was reputational value in adopting TCFD to demonstrate to the investment community and other stakeholders that we are taking steps to manage climate risks. But the more we use the framework internally and understand the rational and thinking behind it, the more value we find in it. It has been a driver for meaningful discussions around climate risks and what those risks mean for Pan American Silver It has also been a catalyst for our in-depth review of our risk assessment and decision-making processes and for our ongoing work to improve our governance of climate risks. Having a better understanding of the climate-related risks facing the company means that we can incorporate this knowledge into our strategic planning. This makes us better positioned to identify new opportunities and develop appropriate mitigation strategies.

In terms of externally reporting on TCFD, we recognize that we have more work to do before we are fully aligned with the framework. In the spirit of TCFD, however, we feel it is important to be transparent about where we are in our journey and what gaps remain. That is why I am pleased that we are reporting our TCFD progress for the first time in this sustainability report.

How is Pan American Silver managing climate risks?

At the operations level, our focus has been on climate change mitigation through reducing our emissions. Over the last few years, we have been improving our ability to measure and manage our energy performance and build a complete picture of our climate footprint. We are also building climate risk management into many of our processes. For example, during 2020, we began work to embed climate risk into the operations-level budgeting process by requiring all operations to include energy consumption metrics in their annual budgets. This will help us incorporate a projected energy profile in our long-term plans. Transition risks related to climate change, such as regulatory changes and carbon pricing, are now considered through our country-level risk assessments.

At the corporate level, we are becoming more sophisticated in our understanding and management of climate risk, and the TCFD framework is certainly playing a role in this evolution. Our approach is multidisciplinary. cross-functional, and collaborative. We have expanded the charter of the HSEC Committee of the Board to include oversight of climate risk. Our ESG Committee, which is comprised of cross-departmental, senior-level leadership, oversees implementation of the TCFD recommendations. Very significantly, we have revised our capital allocation process. The nature and purpose of any proposed capital project now determines which individuals or departments are required to review and approve the project. This is allowing us to harness the expertise of our internal subject matter experts and involve those who are primarily responsible for managing risks. In other words, we are conscientiously and proactively addressing climate related risks early in the planning process and consider riskreduction measures, such as alternative energy sources and opportunities to reduce water use.



"We are conscientiously and proactively addressing climate related risks early in the planning process and consider risk-reduction measures, such as alternative energy sources and opportunities to reduce water use."

CLIMATE, ENERGY AND GREENHOUSE GAS EMISSIONS

WHY IS CLIMATE CHANGE, ENERGY AND GREENHOUSE GAS EMISSIONS IMPORTANT?

Climate change driven by carbon emissions is an issue of global concern that will affect society, the environment, and economic development over the coming decades. We recognize that climate change is a potential threat to our business and many of our COIs, and we are committed to action to reduce climate risks through innovative solutions to reducing emissions, transforming energy supply, and optimizing land use.

Mining is an energy-intensive industry, consuming energy through extraction, processing, and transportation of products. Energy use, particularly through fuel combustion and electricity consumption, causes direct (Scope 1) and indirect (Scope 2) GHG emissions, which contribute to climate change. COI expectations around climate action in the mining industry include reducing carbon footprint and responding to potential climate-related risks. For Pan American Silver, innovatively reducing emissions and energy use can provide us with: cost savings; operational efficiencies, including expedited permitting and improved social acceptance; and environmental benefits beyond our operating boundaries, while at the same time contributing to the global response to climate change.

While we have been gradually improving our climate-related disclosure since our Scope 1 and 2 emissions were first publicly reported in 2010, we recently determined that adopting the climate-related recommendations of the Financial Stability Board is the most effective way to drive our strategy and respond to our stakeholders. In 2020, we became supporters of the TCFD reporting recommendations. The following section of this report reflects our first reporting under the TCFD framework. This is the latest step in a continuous process of enhancing insights, information and analysis provided through our public disclosures.

ANALYST CENTER

MATERIAL TOPIC - CLIMATE CHANGE, ENERGY AND GREENHOUSE GAS
EMISSIONS

What's included in this section:

- CEO's statement on climate change and support of TCFD
- Governance and climate change
- Climate risks
- Opportunities and mitigation strategies
- Performance metrics and targets

GRI indicator: 302-1; 302-103; 305-1; 305-103; 305-2; 305-3; 305-4

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

Prioritized SDGs:13

See these data tables for additional information: TCFD physical risks table, GRI 302-1/ SASB EM-MM-130a.1; GRI 305-1; GRI 302-2; SASB EM-MM-110a.1

"The priority for all our sites is reducing their emissions footprint. We have been facilitating the sharing of best practices across operations, and this has led to the identification of energy-saving initiatives. We will also continue working with mine management and technical teams to provide them with the information and tools they need to develop meaningful emission reduction targets and initiatives."

Steve Busby, Chief Operating Officer

CHIEF EXECUTIVE OFFICER'S STATEMENT

Taking Action on Climate Change at Pan American Silver

Climate change is a threat to the global environment, society, our stakeholders and our business. We are committed to action to ensure an orderly transition to a prosperous low-carbon world.

As one of the largest primary producers of silver in the world, sustainable solutions to climate change are embedded in our purpose as a company. The silver we produce is a key material in solar energy applications and other carbon-efficient energy solutions.

We recognize that mining is an energy-intensive activity that generates GHG emissions and we are committed to doing our part to reduce our GHG emissions by setting realistic short and medium term reduction targets. Our strategy also includes improving our existing public disclosure, ensuring that physical and transition climate risks are considered in our strategic long-term plans, conducting stakeholder engagement on climate change, increasing our use of renewable energy, and supporting research and climate action both near our operations and globally. Our executive team, and each of our operations, are responsible for implementing this climate action strategy.

We support the approach presented in the TCFD recommendations, and have signed on as a supporter of the TCFD. We will also continue to report on our emissions, reduction targets, climate risks and climate action in our annual Sustainability Reports.

The Climate Change, Energy and Greenhouse Gas Emissions section is structured to follow TCFD recommendations and includes: Governance; Climate Risks, Opportunities and Mitigation Strategies; Performance - Metrics and Targets; and Next Steps.



GOVERNANCE

Board level

The structure of our Board of Directors and committees is described in the <u>Sustainability Governance and Management section</u> of this report. Our Board is advised on climate-related issues by its HSEC Committee and directly by management. The Board and HSEC Committee review energy and emissions performance against targets, climate-related risks and opportunities, and overall climate policy and strategy on a quarterly and annual basis.

Management level

We formed a Climate Change Committee with senior management in 2019 to oversee implementation of the TCFD recommendations.

In 2020, the Company expanded this Committee and re-formed it as the ESG Committee, as described in the <u>Sustainability Governnace and Management section</u> of this report.

The ESG Committee directs policy and standards for our management of climate change matters affecting our business, reviews the results of our current performance, evaluates risks and strategy, and agrees on metrics and targets.

Our management approach involves all levels of the organization as we continually search for ways to improve energy efficiency at our operations and development projects. Interactions between our Corporate Environmental team and the respective country and environmental leadership at each site, help identify and define priority projects to address energy use and climate change issues.

Affiliations and memberships

We strive to align our Company climate

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

- Supporter of TCFD
- Member of World Economic Forum (WEF)
 Alliance of CEO Climate Leaders
- Member of UN Global Compact
- Member of Mining Association of Canada
- Participant in Peru Carbon Footprint program

CLIMATE RISKS, OPPORTUNITIES, AND MITIGATION STRATEGIES

Climate change is a global challenge that may have both favorable and adverse effects on our business in a range of possible ways. As part of our adoption of recommended TCFD disclosure, we have started developing a framework to identify these risks and opportunities, and where possible, determine mitigation strategies to ultimately ensure the resilience of our business to climate change. This includes physical and transitional risks and opportunities with their associated potential to impact the financial results of our business.

As part of our strategic review, we have also started evaluating our short (1 - 5 years), medium (5 - 10 years) and long (10+ years) term strategy relative to our assessment of risks and opportunities, which is further described in the sub-sections below. This is a dynamic process that continues to develop over time, as described in the "Next Steps" subsection below.

Pan American Silver's approach to risk management is constantly evolving in order to adapt to a dynamic environment. In addition to the standardized country risk assessment processes discussed in the Sustainability Risk

Management section of this report, we view each manager, whether in operations or at the corporate office, to be a risk manager. We have clear lines of communication whereby risks and opportunities are identified and properly reported up through management and ultimately to the Board of Directors. This process has served as well over the years, empowering our employees and providing the base for our success.

Climate change is an emerging area within our risk management framework, and the preliminary analysis around risks and opportunities was tasked to a group within management's ESG Committee. Over recent years, this interdisciplinary and interjurisdictional group has been engaged in developing the Company's climate change risk and opportunity registry with its findings described in detail below. These have been discussed and evaluated with our senior leadership and form the basis for our ongoing short, medium, and long-term strategic scenario analysis.

Based on the Company's climate-related risks, opportunities, and vulnerability assessments to-date, we believe that the most relevant risk and opportunity categories that could potentially impact our business are as follows:

Physical Risks and Opportunities

In 2019 and 2020, we conducted a study to evaluate the potential physical risks of climate change on our operations due to extreme weather events, impacts on water availability or scarcity, and changes in rainfall and temperature patterns. The study was completed in-line with TCFD scenario analysis recommendations, and considered a range of scenarios for each of our current operations and projects. The climate model scenarios considered in our study included: a Paris agreement-aligned two degree change scenario (International Panel on Climate Change (IPPC) Representative Concentration Pathways(WCP) 2.6); and an extreme case six degree change

scenario (IPCC, RCP 8.5).

The primary conclusion derived through analysis of regional climate estimates is that temperatures have been generally increasing at all our sites, except for the San Vicente Mine, where temperatures have shown no trend over the last 80 years, and the Timmins and Bell Creek operations, where temperatures have been historically high over the last 20 years but with a decreasing trend. Climate change projections based on modelling indicate that temperature increases are expected in the future at all mines. Such increases will likely result in an increase in evaporation and a net reduction of future water availability, although this will depend on future precipitation conditions, which are highly uncertain. Given this uncertainty, the projections of future water decreases, and their quantification, are highly indeterminate. Only the San Vicente operation in Bolivia currently operates with any reliance on external water supply and is therefore potentially exposed to water supply risks. All our other operations are supplied from mine dewatering or secure, adaptable water supplies within our sites. Nonetheless, even at San Vicente, any changes in climate conditions during the current mine-life are expected to be minor. Since existing operational mine water management plans already account for annual and seasonal variability within the current climate, any future changes should not pose a notable risk to our mines during operations.

There is limited information available regarding the prediction of future extreme weather events. As a result, at the time of mine closure. information available at that time should be used to complete additional analysis to assess the potential for increased extreme precipitation and associated design flows well into the future. If no or very limited extreme precipitation information is available, Engineers and Geoscientists of British Columbia (EGBC) recommends adopting an increase in design flood magnitude of between 10% and 20% (APEGBC, 2012)¹⁵. This approach is generally consistent with current standard industry practice and reflects the large uncertainty associated with projections of future changes

¹⁵ APEGBC (APEG, 2012). Professional Practice Guidelines - Legislated Flood Assessments in a Changing Climate in BC, June 2012.

to extreme precipitation patterns. We have adopted this approach at our closed Alamo Dorado mine and conducted sensitivity analysis of water management structures for 15% increases in design flood magnitude. We will continue to monitor the performance of surface water management structures and the site water balance over the post-closure period. The table below summarizes the physical risks to our mines and the regions where we operate. The full table of modelling results is included in the appendix under TCFD physical risks table.

Transition Risks and Opportunities

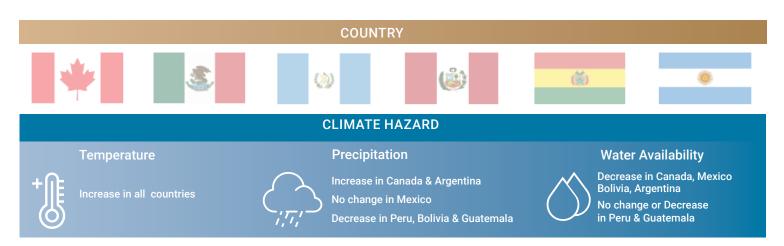
As defined by TCFD, transitional risks arise from policy, regulatory, legal, technological, reputational, and market changes to address mitigation and adaptation requirements to transition to a low carbon economy. These may have varying levels of adverse financial and reputational impacts to the Company.

Regulatory risk

Government policy and regulation is expected to be a primary driver for decarbonization around the world. All the countries in which we operate are signatories of the 2015 United Nations Framework Convention on Climate Change on climate change mitigation, adaptation and finance (the "Paris Agreement"), which aims to limit the increase in global average temperatures to below two degrees Celsius above that of pre-industrial levels.

Signatory countries have agreed to reduce GHG emissions and announced Nationally Determined Contributions (NDC) to that effect. Many countries have already started instituting new policies and regulations expected to limit harmful emissions and promote adaptation to climate change. As the world transitions to a low carbon economy and countries deliver on their respective NDCs, there will be new financial and reputational risks to businesses. With the expected increase in policy and regulation, increased legal related risks are also anticipated, as Companies are held responsible

Pan American Silver's Physical Risks







for any actual or perceived shortfalls in their performance related to mitigating climate change.

We have identified the following key regulatory, policy and legal related risks to Pan American Silver:

- Regulatory change that results in increased costs and/or constrains on our operating activities. In particular, we see the widespread introduction of carbon pricing as a likely driver of increasing costs. Two jurisdictions in which we operate have already introduced environmental taxes related to carbon emissions
- Climate-related legal claims against us or our stakeholders could result in compensation claims for damages
- Required permitting and licenses may become more difficult to obtain as regulations and/or COI expectations around extractive industries become more onerous, which could adversely impact our future mine plans at existing operations, and the successful progression of our exploration and development stage properties
- Changes in regulations that impact past and future closure and reclamation activities, which result in increased closure and decommissioning liabilities

As a Company we have identified and started implementing the following mitigation strategies to enhance our resilience to these potential regulatory, policy and legal risks:

 Strive to reduce our carbon emissions, replace direct fuel consuming activities with electric grid-connected systems, and transition energy supply to renewable sources, where appropriate. We have secured power contracts from renewable energy providers at two of our operations and are evaluating them elsewhere

- Our diversified portfolio and decentralized organizational structure enable us to make well-informed decisions and manage legal and policy risks
- We continuously engage with local and federal governments in all jurisdictions we are active in, and ensure we are aware, to the best extent possible, of any potential regulatory or policy changes and their impacts to our business
- We continue to increase management resources and processes, including but not limited to our standardized country risk assessments, to assess and address climate-related risks

Market risks and opportunities

Climate change will impact markets in unpredictable ways, including potential disruptions to supply chains, changes in consumer choices, and impacts to capital markets upon which the Company relies. The changes to both the supply and demand equilibrium for goods and services the Company depends on for its production processes as well as for the commodities that we produce may have material impacts to the Company's cost structure, the value or recoverability of its reserves, and revenue potential. The Company may benefit from increased prices for the metals it produces that are used in low-carbon technologies, as further described in the section on technology opportunities below. This could drive changes to the value of the Company's assets and liabilities, ability to deliver in its long-term plans, and ultimately the value of its shares.

In addition to the potential risks to input and output prices described above, the Company has identified the following risks related to market changes:

Competition for renewable energy is likely to increase, which would impact costs and/or reduce our ability to procure energy from such sources. Further, we depend on

our host countries investing in renewable power generation, which may ultimately limit our ability to switch to low-carbon energy supply. With that said, supply of renewable energy is expected to grow and could result in reduced costs of procuring renewable energy as we have seen in the last several years

- Capital markets are increasingly directing money towards low carbon-intensity businesses, which creates a risk of reduced access, or increased costs, to finance, investment, and insurance services
- Supply of labor may be impacted by changing demographics related to climate conditions
- Logistical complications may arise due to physical impacts on infrastructure not controlled by us such as roads, ports and downstream smelting and refining facilities

As a Company we have identified and commenced enacting mitigation strategies to enhance our resilience to market changes:

- We constantly monitor global markets, update our forecasts, and engage with stakeholders
- We calculate and disclose our annual Scope 1, 2 and 3 emissions to ensure that we are aware of the scale and sources of our direct and indirect supply chain emissions
- Our planning and approval processes incorporate an assessment of climaterelated impacts of each investment we make
- We proactively pursue energy supply contracts from renewable sources where available

Reputational risks and opportunities

Climate change has been identified as a

potential source of reputational risk tied to changing stakeholder perceptions of an organization's contribution to or detraction from the transition to a lower-carbon economy. Shifts in perceptions and preferences could result in the stigmatization of the mining sector, increased stakeholder concern or negative stakeholder feedback. This in turn could make it more difficult to obtain and maintain our social acceptance at existing sites or in developing new projects. Further, it may result in a reduced talent pool from which to recruit. Conversely, as further described below, the opportunity for the metals that we produce to play an integral part of technologies deployed to combat climatechange can enhance our reputation and related business opportunities.

Our strategy in mitigating these risks and actualizing opportunities is to continue to value and prioritize regular and open dialogue with all our stakeholders on ESG matters, including climate change. This helps us better understand what stakeholders want and expect related to these critically important issues. We also mitigate reputational risks through partnerships with industry organizations like the Silver Institute and the Mining Association of Canada. We are striving to continually improve and expand our engagement and ESG reporting and intend this to be a dynamic process with an open feedback loop.

Technological risks and opportunities

New technologies can be disruptive in nature, and have the potential to dramatically alter the landscape of our industry, which is highly capital intensive. Through our strategic focus on innovation, we are constantly evaluating new proven technologies to ensure that we are capturing the benefits of technological advancements in our industry. We see the adoption of new proven technologies and enhancing energy efficient operations as an opportunity to improve productivity and to find solutions to carbon emission reduction challenges, such as ventilation in the deeper underground operations and equipment selection for upgrades and new projects. The incorporation of innovative technological

solutions into our new projects can also facilitate streamlined permitting processes and social acceptance.

In addition to changing the production process, new technologies may have an unpredictable impact on the demand for the commodities we produce. It is expected that limiting rising temperatures will require significant investments in low-carbon technologies, which are often metal-intensive. According to the World Bank report from 2017 on "The Growing Role of Minerals and Metals for a Low Carbon Future", demand for silver, copper, zinc and lead, are all expected to increase materially should the world achieve the objectives of the Paris Agreement. This provides significant opportunity to the Company, as nearly 68% of the Company's reserves by value (as referenced in the Company's 2020 Annual Report) is represented by these metals.

Silver will play an increasingly important role in the energy transition away from fossil fuels. Silver paste is a key ingredient of photovoltaic cells used in solar panels. 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. We are working with the Silver Institute on a new study to assess and communicate on silver's unique role in low-carbon energy solutions.

Silver is a critical element for reducing global carbon emissions and thus plays a key role in limiting climate change. However, the carbon benefits generated by our products do not in any way reduce our commitment to minimize the direct and indirect carbon footprint of our activities. We will continue to build and adapt our climate strategy to contribute to achieving the goals of the Paris Agreement, net zero emissions, and a sustainable low carbon economy. We constantly assess opportunities to make our energy use more efficient, reduce GHG emissions, and minimize the use of water and other resources in our processes, with associated financial benefits.

Short-term Strategy

In order to establish appropriate and realistic medium and long-term climate-related strategic objectives, we will first quantify our water, energy and carbon footprints under various strategic business scenarios. We have commenced, and will continue to progress, the integration of ESG and climate-related risks into our strategic planning.

Highlights of this integration include: enhanced climate-related risk assessments; incorporating climate-related targets into our annual budgets; including climate-change considerations into our capital budgeting process; investigating the inclusion of ESG metrics into future financing arrangements, and, developing life of mine (LOM) energy profiles for each of our operations to determine baselines for future scenario analysis. These planning strategies will enhance our ability to quantify the longer-term climate change impacts on each of our assets, which will enable us to develop specific long-term climate-change goals.

Risk Assessments

We plan to continue developing our climate-related risk and opportunity assessments. Physical risk assessments will be updated as new climate models become available and individual mines approach closure. We will continue to focus on risks related to extreme weather events, precipitation, temperature and water scarcity. Transition risks and opportunities are continually evolving and we plan to develop more detailed assessments for each of our operating jurisdictions to support expanded TCFD disclosure over the next three years.

Annual Budget Plans

We started developing ESG goals as part of our annual budget preparation and approval process in 2017. Many of our annual ESG targets are relevant to climate change including: energy use, GHG emissions, water use,

biodiversity, and waste management, Annual budgets and targets are developed between August and November each year and approved by our Board of Directors in December. We report on targets and progress in annual sustainability reports published in May. This process builds meaningful targets organically from the operators and supervisors at our sites, right through the entire organization. Targets are derived from real, viable projects and initiatives generated through the creativity and innovation of our teams. Over the past few years, the quality and traceability of our targets have gradually improved and we will continue to implement this system going forward. 2020 performance and 2021 targets are discussed in our Goals and Performance Section

Capital Budgeting Process

Our internal process for preparing requests for funding, the approval of such requests and the ongoing monitoring of approved spending has been designed with our ESG values in focus. Our decentralized organizational structure and delegated authority facilitates our decision-making process. The purpose, rationale and magnitude of any proposed spending establishes the required approvals from subject matter experts within our organization. This decentralized approach brings many benefits, including high degrees of understanding of and commitment to the Company's policies and values.

We have established rigorous monitoring and oversight mechanisms to ensure that our approval process is operating as designed and that approved spending is expended within acceptable parameters and that our objectives are achieved. These oversight mechanisms include monthly reporting and quarterly reviews by a committee of senior management.

Specific to climate change related projects, the process described above requires review and approval from environmental experts at each level of the Company, beginning with those tasked with the execution and implementation of such projects. In this manner, climate

change initiatives are constantly being generated from both a bottom-up and a top-down perspective. Environmental projects of significant magnitude require approval of and regular reporting to our Board of Directors.

Last year we implemented a new set of metrics, based on our SPIs, within the funding approval process where all new projects must estimate their potential impact on energy use, GHG emissions, water use, and biodiversity. This new process allows deeper evaluation of the potential climate effects of new projects within our existing decision-making framework.

Energy Profile Assessments

In addition to reporting GHG emissions setting goals through our annual budget process, we have begun a process to estimate our energy demand profiles for all mines based on current life of mine plans. This process will provide a baseline for our future energy consumption in a business as usual scenario. With this exercise, we will be able to accurately estimate the future financial impact of the various risks and opportunities described in this document, as well as establish meaningful and specific GHG emissions reduction goals compared to this baseline scenario.

The life of mine of our assets ranges from as few as three years to as many as fifteen plus years. We expect that the impact to our business from climate change will increase over the longer term outlook, and as such, not all of our mines will be affected in the same rate from the transitional risks to a low carbon economy. In future TCFD reports, we expect to be able to determine the financial impact of various future scenarios, with varying levels of potential decarbonization at our operations.

Medium & Long-Term Strategy

We plan to develop medium-term climate and GHG emission reduction targets based on the energy profile and transition risk assessments described above. We expect to set science-based targets for the year 2030 based on that evaluation of our assets and the potential availability of renewable energy through the

transition to a low-carbon economy in the countries where we operate. Longer term goals such as net zero emissions in our industry are, at this time, highly dependent on the emergence of new technologies, carbon capture use and storage (CCUS), and valid, transparent carbon offsets. While we fully support and are committed to advancing efforts towards the global achievement of net-zero carbon emissions, we recognize that many of these factors are beyond the control of our Company and are highly uncertain. We will continue to monitor the development of technological and offset solutions to climate change with the intention of reaching net zero emissions in 2050 or much earlier

PERFORMANCE - METRICS AND TARGETS

We use energy to mine, move, and process ore and waste rock as well as for mine ventilation and dewatering. The type and quantity of emissions from our operations are determined by the energy source and the nature of the way we mine and process ores that is largely dependent on the geology and mineralogy of the deposits. The energy used at our sites comes principally from diesel fuel for powering heavy mobile mine equipment and in some limited cases electrical power generation or purchased electricity from regional or national power supply grids. The grid energy we use is becoming cleaner and more efficient each year since the jurisdictions where we operate increase renewable energy generation. Grid electricity has a lower carbon footprint than onsite electricity generation.

2020 Highlights

 Obtained renewable energy certification for our purchased electricity at our Morococha mine, making Morococha our

- first mine to operate on 100% renewable purchased electricity
- Achieved 35% reduction in electrical energy consumption for freshwater pumping and 27% reduction in gasoline consumption at San Vicente mine
- Installed national electricty grid connection of remote equipment at La Arena and Shahuindo
- Developed our Energy, Emissions and Climate Change Standard (the "EECC Standard"). The EECC Standard covers activities potentially affecting energy use and emissions at all our operating mines, advanced projects, and closed mines
- Our Timmins operation has a dedicated Energy Manager who leads energy efficiency and GHG emission reduction programs at that operation and maintains our participation in provincial energy incentive programs
- Shahuindo is the only mine to receive the third star from the Peruvian Government's voluntary Carbon Footprint program for its 2018-2019 "reduction report". We are one of 13 companies in the program to get the third star and the only mine to achieve such recognition in Peru

Greenhouse gas emission trends for our operations generally track our energy use. However, in periods such as 2017-2018, when we connected the Dolores mine to the national grid and supplemented the La Colorada electrical supply connection, we experienced a decrease in total GHG emissions as direct (Scope 1) emissions were transferred to cleaner grid electricity (Scope 2). Our total energy use and GHG emissions increased in 2019 following the acquisition of Tahoe Resources and the addition of three operating mines. In 2020 our

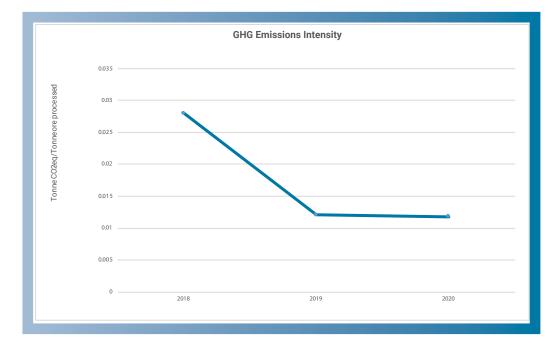
GHG Emissions (Tonnes CO₂eq)	2020	2019	2018
Scope 1- Direct	274,522	313,361	164,726
Scope 2- Electricity	111,895	143,863	123,880
Total Scope 1 and 2	386,418	457,224	288,606
Scope 3-Value Chain	618,332	668,098	

Scope 1 and 2 GHG emissions declined relative to 2019 due to reduced energy use during the pandemic-related mine suspensions.

We commenced using the Quantis Scope 3
Evaluator tool in 2019 to estimate part of our
Value Chain (Scope 3) emissions. This tool is in
accordance with the Greenhouse Gas Protocol's
Corporate Value Chain (Scope 3) Accounting
and Reporting Standard. We use this tool for all
15 categories except downstream processing
of metal concentrates, which we found to be

underestimated by the Evaluator. We instead obtain direct emissions data from our partner smelters in Peru and Mexico that process zinc and lead concentrates from our mines. These data allowed us to calculate more accurate downstream emissions for processing of our metal concentrates sold (69,232 tonnes CO2eq for 2020), which was used to complete the Scope 3 estimate.

We track GHG emissions intensity at our sites as a useful metric to assess ongoing



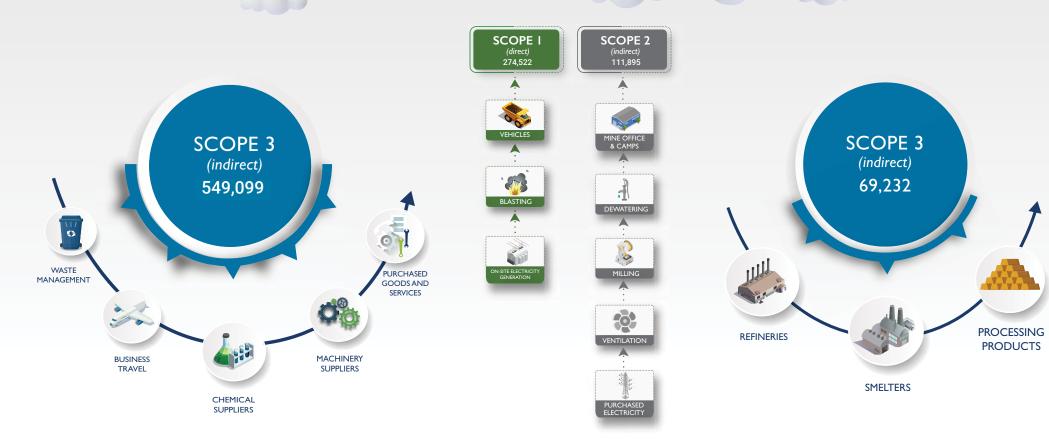
Notes:

- (1) Pan American Silver used National Inventory Report Canada 2020 to calculate Direct (Scope 1) GHG emissions. The global warming potential (GWP) used for calculations is based on the information provided by the Government of Canada. Emissions from purchased electricity have been calculated according to the GHG Protocol. The location-based method uses the IEA 2020 tool for all mines. Gases included in this calculation are CO2, CH4 and N2O.
- (2) The GHG Protocol purchased IEA tool 2020 for energy indirect (Scope 2) GHG emissions. Gases included in this calculation are CO2, CH4 and N2O.

 (3) Where available, the market-based method uses supplier specific emission factors. The difference in market- and location-based is mainly attributed to the purchase of hydroelectric power at our Morococha operation. Unless otherwise noted, all scope 2 emissions refer to the market-based method. A residual mix is not available to account for voluntary purchases and may result in some double counting among consumers.
- (4) We have restated the 2019 and 2018 GHG emissions based on minor adjustments on explosives and electricity data from Morococha and La Arena, and inclusion of COSE and Joaquin 2019 site data within the Manantial Espejo usage.

SCOPE 1,2 AND 3 GREENHOUSE GAS EMISSIONS

(CO₂, CH₄, N₂O)



Upstream Activities



Downstream Activities

performance. In general, the more ore we process at our sites, the more energy we use. Also, as our mines become deeper and spatially more distant, more energy is required for mine ventilation and dewatering, and more fuel is required to haul ore and waste rock over greater vertical and horizontal distances. We measure GHG emissions intensity (tonnes of Scope 1 and 2 CO2 equivalent per tonne of ore processed) to help us understand the energy efficiencies of our processes and the effects of using cleaner grid energy although it is also very important for us to assess the amount of waste mined, underground development meters advanced and distances we move material. These factors and overall mine sequencing can result in significant variability to our annual emissions and emission intensities.

In 2020 our GHG emission intensity was essentially flat compared to 2019, reflecting slight increases in non-productive energy use during the COVID 19 pandemic related mine suspensions that were offset by increased efficiency at our mines during the operating period.

2021 Targets

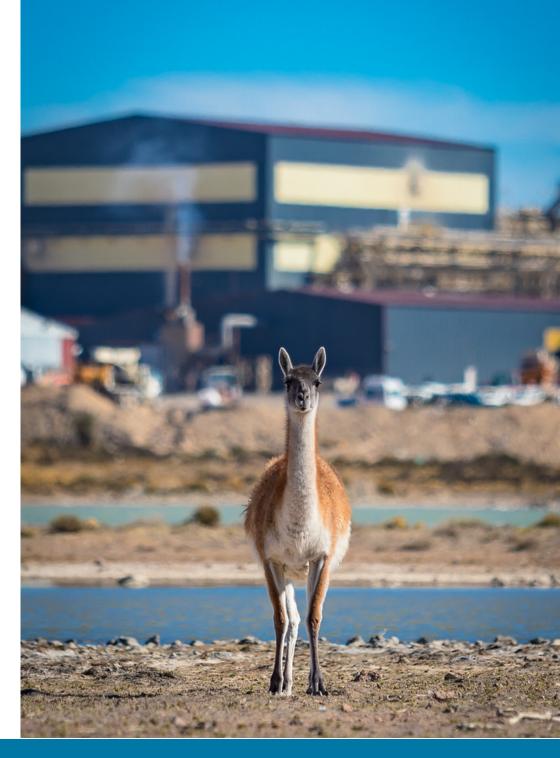
Our targets for 2021 were developed through our annual budget development process described above:

- Reduce GHG emissions by 11% compared to the 2021 base case (2021 base case defined in the <u>Goals and Performance</u> section)
- Reduce energy use by 0.3% compared to the 2021 base case
- Reduce water use by 6% compared to 2021 base case

NEXT STEPS

We will continue our efforts to ensure climaterelated issues receive the appropriate attention from our Board and management so that an effective strategic response can be established and implemented accordingly, and sufficient, transparent and timely climate-related disclosures can be made to our stakeholders. Over the next twelve months, we will focus on the following key next steps to improve how we address climate-change and related disclosures:

- Continue to monitor the development of long-term climate models as part of our ongoing physical risk assessments
- Completing our long-term energy profile quantification, and setting targeted medium-term emissions reductions
- Preparing a scenario analysis along with financial impact sensitivity analytics on contemplation of the quantified energy profile targets and different climate change scenarios
- Performing a comprehensive jurisdictional and operation specific climate change vulnerability and risk assessment to inform our iteratively established mitigation strategies
- Define Pan American Silver's Climate Change Policy Statement
- Investigate, and where appropriate include, ESG performance metrics into future financing arrangements, and into our key stakeholder agreements
- Continue monitoring our scope 1, 2 and 3 emissions yearly and improving on our target setting
- Continue to implement our Energy,
 Emissions and Climate change Standard
- Work with the Silver Institute to improve the general understanding of silver's role in the transition to a low-carbon economy
- Publish a stand-alone TCFD climate change report which, where available and appropriate, will include disclosures on our progress on the aforementioned next steps





BUSINESS ETHICS

WHY IS BUSINESS ETHICS IMPORTANT?

The mining industry operates in a complex and demanding legal and regulatory environment under cyclical market conditions. Moreover, mining operations are often located in emerging and/or politically unstable countries, which can be prone to levels of economic and regulatory uncertainty. Such circumstances can create conditions for corruption in the form of bribery, collusion, influence peddling, and the like. Corruption can affect host communities by redirecting funds that could otherwise support social services or local infrastructure development. This concern is driving industry initiatives to increase transparency on payments made to governments. Globally, the industry is also experiencing increased pressure from the public, governments, and other stakeholders to address not only its own impacts, but to identify and manage those risks stemming from its supply chain, including those related to corruption, human rights abuses, or negative impacts on the environment.

As a Canadian company listed on the TSX and NASDAQ stock exchanges, Pan American Silver must comply with securities regulations and exchange rules as well as requirements designed to protect investors and the integrity of financial markets. We must also adhere to applicable legislation in the jurisdictions where we operate. Because we operate predominately in Latin America, where political and economic conditions can be complex and challenging, it is imperative that we conduct our activities ethically, transparently, and apply industry best practices across all our operations. In addition, we choose suppliers that also adhere to ethical business practices. These practices are fundamental to managing risk, building trust with our communities of interest, and maintaining social acceptance.

ANALYST CENTER MATERIAL TOPIC - RESPONSIBLE SUPPLY CHAIN **RELEVANT TOPICS - BUSINESS ETHICS & ANTI-CORRUPTION; CYBERSECURITY**

What's included in this section:

- Anti-corruption
- Responsible supply chain
- Tax transparency
- Cybersecurity

GRI indicator: 102-9; 102-10; 205-1; 205-103: 205-3

SASB indicator: EM-MM-510a.1; EM-MM-510a.2

Prioritized SDGs:12

Potential Risks and Impacts:

- Fines, penalties, sanctions for non-compliance
- Unanticipated changes to laws or regulations
- Corruption inside our business or by third parties
- Reputational damage from actual or perceived impropriety

OUR APPROACH

Pan American Silver adheres to the highest standards of corporate governance, ethics, and transparency in the conduct of our business. Our Global Code of Ethical Conduct and related policies and guidelines provide the foundational tenets of ethical business practices, set corporate expectations, and lay the path for operational consistency in terms of responsibility and compliance with applicable laws, rules, and regulations. In operating jurisdictions where the risk of corruption is high,16 we take additional measures to manage these risks.

Policy

- Global Code of Ethical Conduct (the Code)
- Global Anti-Corruption Policy (the Policy)
- Gifts and Hospitality Guidelines (the Guidelines)
- Supplier Code of Conduct (Supplier Code)
- Global Human Rights Policy

Programs and initiatives

- Training Provided to employees in procurement, government relations and other roles that may be exposed to corruption risks
- Whistleblower hotline Allows directors. officers, and employees to report actual or potential breaches of the Code or Policy via phone or web, in English or Spanish, 24 hours a day, 365 days a year. The hotline is managed by an independent service provider
- Supply chain due diligence system -Allows us to identify and manage supply chain risks

Monitoring and compliance

- All directors, officers, and employees are required to comply with our Code, Policy, and Guidelines and report any actual or potential unethical or illegal activity
- The Board, officers, executives, and all senior management¹⁷ certify compliance with the Code and the Policy annually
- The legal and compliance teams review and investigate all complaints made through the Whistleblower hotline; an independent audit is conducted annually
- The Board's Nominating and Governance Committee provides oversight with respect to compliance with the Code
- Accountability
- The Compliance Officer manages anticorruption programs and practices
- The General Counsel oversees legal compliance and anti-corruption practices and reports on these matters to the Board's Audit Committee
- The Board provides oversight of the Code. Policy, and Guidelines and updates these as necessary to meet evolving good governance and ethics practices

OUR PERFORMANCE

Anti-corruption

Following the acquisition of Tahoe Resources in 2019, we assessed all operations for risks related to fraud and corruption. Through this assessment, we identified our most significant potential corruption-related risks as: fraud perpetrated by (or in collusion with) third-party contractors/suppliers; raw materials or supply inventory theft; and government transactions and corruption. To address these risks, we have been focused on standardizing controls and processes across all operations. This effort includes employee training and the introduction

¹⁶Guatemala, Bolivia, and Mexico are in Transparency International's 2019 Corruption Perception Index, as being at higher risk for corruption. ¹⁷Includes executive officers, vice presidents, country managers, directors, operation and unit managers.

of procedures to address country-specific risks where needed.

All new employees receive the Code and Policy upon commencement of employment. We also provide additional training for employees in roles that may be exposed to corruption risk. During the year, we conducted online training to elevate employees' understanding of our anticorruption program and processes. 98% our mid- and senior-level management participated in this training. We also delivered anti-money laundering courses at our Shahuindo and La Arena operations in Peru.

In addition, we strengthened our operation-level donations policy. As a result, any donation now requires management approval to confirm that the purpose of the donation aligns with our values and that the Company derives no direct benefit.

Whistleblower hotline

Our whistleblower hotline service enables directors, officers, and employees to anonymously and confidentially report any actual or suspected unethical or illegal activity or violations, including violations of the Code or other policies. Non-employees can submit complaints of an ethical, accounting, or audit nature by mail, marked "private and confidential," to Pan American Silver's General Counsel. Every report received is reviewed by the General Counsel and the compliance team. When applicable, an investigation is conducted and appropriate actions are taken. Our process is independently audited on an annual basis.

In 2020, no confirmed incidents of corruption were reported through the Whistleblower hotline, and no employee or contractor was dismissed for corruption incidents.

Responsible supply chain

Supplier risk management

Being a responsible business also requires us to identify and mitigate supply chain-

related risks, including those corresponding to corruption, environment, and human rights. In 2019, to better manage these risks, we developed our Supplier Code. The Code establishes our expectations and requirements for suppliers, along with their contractors and subcontractors, to:

- · Comply with applicable laws
- Conduct business in an ethical and environmentally responsible manner
- Respect the rights, cultural diversity, and customs of local communities and Indigenous peoples
- Comply with Pan American Silver's Global Anti-Corruption Policy, Gifts and Hospitality Guidelines, and Global Human Rights Policy

Our main corruption risk lies with our thirdparty contractors and suppliers. In 2020, we engaged with and educated suppliers and procurement teams in each jurisdiction on the Code's requirements. We also launched the implementation of a third-party supplier due diligence system, which is designed to help us screen and monitor both new and existing suppliers for compliance with our Supplier Code as well as for a range of risks. This includes annual due diligence reviews of a supplier's record on environmental, human rights, and ethical compliance, as well as on-going monitoring. This system will help us determine whether suppliers meet or exceed our minimum standards

The due diligence system is currently being used to screen high-risk suppliers¹⁸ in Peru. We have begun implementation of this platform in Mexico, Guatemala, Argentina, and Bolivia. Going forward, we will roll out the program in Canada as well as expand the scope of supplier screening.

For high-risk suppliers, complying with our Code and meeting a minimum scoring threshold are pre-conditions to working with Pan American Silver. If a supplier does not meet the threshold or if certain risk factors are triggered, we conduct additional due diligence to better understand the risk and determine whether the risk factor is still outstanding. We have reserved the right in the Supplier Code to terminate contracts with suppliers that pose significant risks or fail to abide by the Supplier Code. For certain high-risk contracts, we incorporate specific anti-corruptions provisions into the contract terms.

We have also begun the process of evaluating our operations against the World Gold Council Conflict-free Standard. This process is helping us screen for additional risks related to corruption and organized crime at our Latin American operations.

Customer risk management

Although the risk is lower, we recognize the existence of corruption risks stemming from our relationships with some of our customers, which include refineries, bullion banks, and traders. We have therefore taken steps to develop risk criteria for screening customers and will be expanding our work in this area going forward.

Transparency

Pan American Silver pays taxes on taxable income generated through operations. Our approach to tax matters is aligned with the principles set out in our Code. In all jurisdictions in which Pan American Silver operates, we:

- Comply with local tax laws and regulations, including filing appropriate tax returns and related reports on a timely basis. We ensure that tax returns and other filed reports are accurate and complete
- Seek to maintain a good working relationship with local tax authorities.
 We respond to all requests for additional information in a timely, transparent, and accurate manner. If disputes arise, we

- work with the tax authorities to resolve them in an efficient and fair manner
- Undertake tax planning to support the growth and development of the business in accordance with all applicable laws and regulations

We have an offshore financial entity that provides insurance against certain risks at our worldwide mining operations. The activities of this entity are fully disclosed, as required, under the tax laws and regulations of the jurisdictions in which we operate.

We engage in numerous inter-company transactions, executing all such transactions using arm's length transfer prices. In accordance with the Organization of Economic Co-operation and Development (OECD) Principles of Corporate Governance, we make every effort to ensure that these arm's length transfer prices are supported by the necessary contemporaneous documentation.

Pan American Silver does not make any political donations or contributions in any of our host countries. We comply with the Canadian Extractive Sector Transparency Measures Act (ESTMA), which requires public reporting of payments to governments over \$100,000CDN. Our ESTMA reports can be accessed from our website. In the interest of transparency, operations report all payments made to governments, regardless of the amount, to the Vice President of Accounting – Operations. In Peru and Argentina, we publicly disclose payments in accordance with the Extractive Industries Transparency Initiative (EITI).

Cyber Security

Information and cyber security are critical to our business. In the ordinary course of our business, Pan American Silver and our business partners collect and store sensitive data, including employee information and proprietary or confidential business information relating to the Company, our customers, suppliers, investors and other stakeholders. With our increasing dependence and interdependence

¹⁸ High-risk is defined after assessing factors including transaction amounts, the nature of goods or services supplied, and/or exposure to corruption risks.

on electronic data communication and storage, including the use of cloud-based services and personal devices, we are exposed to evolving technological risks. These risks include targeted attacks on our information technology (IT) systems or the systems of our business partners, and failure of our IT systems. Any data breach or improper use of our information could damage our reputation, compromise our network or systems, and result in a loss of sensitive information, incidents of fraud, or operational disruptions.

Information and cyber security risks is an important component of our business continuity. Currently, cyber security is managed both at the country and corporate levels. We are working to formalize and centralize our approach and processes. Our cyber security measures include:

- Systems to monitor and detect potential threats
- Annual penetration testing at all operations and corporate office locations
- Phishing tests and training to raise employee awareness
- System audits, including an internal audit-led assessment of the design and operating effectiveness of our cybersecurity risk management program and controls

NEXT STEPS

- Further standardize our supplier program and reinforce controls in all countries
- Conduct further corruption and money laundering risk assessments in all jurisdictions
- Conduct in-person business ethics and anti-corruption training for employees





TCFD Glossary

CLIMATE-RELATED OPPORTUNITY refers to the potential positive impacts related to climate change on an organization. Efforts to mitigate and adapt to climate change can produce opportunities for organizations, such as through resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organization operates.

CLIMATE-RELATED RISK refers to the potential negative impacts of climate change on an organization. Physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (e.g., cyclones, droughts, floods, and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (e.g., sea level rise). Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses, and reputational considerations.

SCOPE 1 refers to all direct GHG emissions

SCOPE 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam.

SCOPE 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include: the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal.

PUBLICLY AVAILABLE 2°C SCENARIO refers to a 2°C scenario that is (1) used/referenced and issued by an independent body; (2) wherever possible, supported by publicly available datasets; (3) updated on a regular basis; and (4) linked to functional tools (e.g., visualizers, calculators, and mapping tools) that can be applied by organizations.

SCENARIO ANALYSIS is a process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. In the case of climate change, for example, scenarios allow an organization to explore and develop an understanding of how the physical and transition risks of climate change may impact its businesses, strategies, and financial performance over time.

TCFD - Physical Risks Table

MODELLING PREDICTED CHANGES TO TEMPERATURE AND PRECIPITATION - POST CLOSURE SCENARIOS

			Olimanta		Developed		Matau Diala Atla a Danalta	Estimated.			
Facility	Country	Current Water Requirement	Climate Change Scenario	Year	Predicted Change in Temperature	Predicted Change in Precipitation	Water Risk Atlas Results (Projected Change in Water Supply from Baseline)	Estimated Future Water Availability	Information Source	Comments	Management Strategy
			RCP 2.6		+1.8 °C	+5%	-				
Timmins West and Bell Creek	Canada	Surplus	RCP 4.5	2080's	+3.1 °C	+7%	-	Decrease	OCDP Online Tool		Conduct a sensitivity analysis of plus 10-20%
			RCP 8.5		+5.4 °C	+13%	-				on the design flood
		Balanced.	-	2030	-	-	Near Normal to a 1.2x Decrease		WRA Tool		magnitude for mine closure planning.
		though a surplus	-	2040	-	-	1.2x Decrease	_	WRA Tool		Constantly monitor
Dolores	Mexico	is expected with the growth of the	RCP 2.6		+1.0 °C		-	Decrease		Estimates of Tempera-	water availability and water use reduction
		leach pad	RCP 8.5	2100	+5.0 °C	Little to No Change	-		IPCC 2014 Chapter 26 - North America	ture and Precipitation are based on interpreta tion of IPCC figures	and recycling opportunities where drought is an issue.
			-	2030	-	-	1.2x Increase to Near Normal	Decrease	WRA Tool		Support water availability and
Alamo Dorado	Mexico	Mine is Closed	-	2040	-	-	Near Normal to 1.2x Decrease		WRA Tool		use infrastructure development and
7 11411110 2 01440			RCP 2.6		+1.0 °C		-	200.000	IPCC 2014 Chapter	Estimates of Tempera-	enhanced responsible management
			RCP 8.5	2100	+5.0 °C	Little to No Change	-		26 - North America	ture and Precipitation are based on interpreta tion of IPCC figures	programs in all regions of our business.
			-	2030	-	-	Near Normal to 1.2x Decrease		WRA Tool		Update physical risk assessments for our sites when mine
La Colorada Mexico	Mexico	Surplus	-	2040	-	-	1.2x Decrease	Decrease	WRA Tool	Estimates of Tempera- ture and Precipitation	closure plans are updated, new climate
			RCP 2.6	01.00	2100 +1.0 °C	IPCC 2014 Chapter	are based on interpreta- tion of IPCC figures	models emerge, or at			
			RCP 8.5	2100		-		26 - North America	tion of IPCC figures	least every five years.	

Facility	Country	Current Water Requirement	Climate Change Scenario	Year	Predicted Change in Temperature	Predicted Change in Precipitation	Water Risk Atlas Results (Projected Change in Water Supply from Baseline)	Estimated Future Water Availability	Information Source	Comments	Management Strategy		
			-	2030	-	-	Near Normal	Little to no	WRA Tool				
			-	2040	-	-	Near Normal	change	WRA Tool				
Escobal	Guatemala	Surplus	A1B	2100	+3 °C to +5 °C	-5 mm/day , while another model notes the change to be around -10% to -30%	-	Decrease	IPCC 2014 Chapter 27 - Central and South America		Conduct a sensitivity analysis of plus 10-20% on the design flood		
			A2		+3 °C to +6 °C	24% to -48%	-				magnitude for mine closure planning.		
			-	2030	-	-	1.2x Increase	- Increase	WRA Tool		Constantly monitor		
		Deficit, though	-	2040	-	-	1.2x Increase	increase	WRA Tool		water availability and water use reduction		
Shahuindo	Peru	a surplus is expected with the growth of the leach pad	A1B	2100	+2.0°C to +4.5°C	-20% to -30%, while another model suggests +1 mm to +3 mm/day	-	Little to no change IPCC 2014 Chapter 27 - Central and South America			Little to no 27 Control and		and recycling opportunities where drought is an issue.
			A2		>3°C	-10% to -30%	-		South America		Support water availability and		
			-	2030	-	-	1.2x Increase	Incresses	WRA Tool		use infrastructure development and		
			-	2040	-	-	1.2x Increase	Increase	WRA Tool	The IPCC report	enhanced responsible		
La Arena	Peru	Surplus	A1B	2100	+2.0°C to +4.5°C	-20% to -30%, while another model suggests +1 mm to +3 mm/day	-	Decrease	IPCC 2014 Chapter 27 - Central and South America	presents contradictory results for precipitation under the A1B scenario, with one referenced	management programs in all regions of our business. Update physical risk assessments for		
			A2		>3°C	-10% to -30%	-			report presenting a decrease and another	our sites when mine		
			-	2030	-	-	1.2x Increase to 1.4x Increase	Increase	WRA Tool	presenting an increase.	closure plans are updated, new climate models emerge, or at		
			-	2040	-	-	1.4x Increase		WRA Tool		least every five years.		
Huaron	Peru	Surplus	A1B	2100	+2.0°C to +4.5°C	-20% to -30%, while another model suggests +1 mm to + 3 mm/day	-	Decrease	IPCC 2014 Chapter 27 - Central and South America				
			A2		>3°C	-10% to -30%	-						
Morococha	Peru	Surplus	-	2030	-	-	Near Normal	Little to no	WRA Tool				
— MOTOCOCHA	reiu	Surpius	-	2040	-	-	Near Normal	change	WRA Tool				

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Facility	Country	Current Water Requirement	Climate Change Scenario	Year	Predicted Change in Temperature	Predicted Change in Precipitation	Water Risk Atlas Results (Projected Change in Water Supply from Baseline)	Estimated Future Water Availability	Information Source	Comments	Management Strategy
Morococha	Peru	Surplus	A1B	2100	+2.0°C to +4.5°C	-20% to -30%, while another model suggests +1 mm to + 3 mm/day	-	Decrease	IPCC 2014 Chapter 27 - Central and South America		
			A2		>3°C	-10% to -30%	-	-	Codin America		
			-	2030	-	-	Near Normal to 1.2x Increase	Increase	WRA Tool		Conduct a sensitivity analysis of plus 10-20%
			-	2040	-	-	Near Normal to 1.4x Increase	llicrease	WRA Tool		on the design flood magnitude for mine
San Vicente	Bolivia	Deficit	A1B	2100	+2.0°C to +4.5°C	-20% to -30%, while another model suggests +1 mm to + 3 mm/day	-	Decrease	IPCC 2014 Chapter 27 - Central and South America		closure planning. Constantly monitor water availability and water use reduction
			A2		>3°C	-10% to -30%	-	-	Godin / Whened		and recycling
			-	2030	-	-	1.2x Decrease		WRA Tool		opportunities where drought is an issue.
		Deficit during	-	2040	-	-	1.2x Decrease		WRA Tool		Support water
Navidad	Argentina	construction, then the mine is expected to operate in a surplus	A1B	2100	+2 °C to +4 °C	+20 % to +30% while another mod- el suggests +0.3 mm/day to +2.0 mm/day	-	Decrease	IPCC 2014 Chapter 27 - Central and South America	i	availability and use infrastructure development and enhanced responsible management
			A2		+3 °C to +4.5 °C	+0.5 to +1 mm/day	-				programs in all regions of our business. Update physical risk
			-	2030	-	-	1.2x Decrease	D	WRA Tool		assessments for
			-	2040	-	-	1.2x Decrease	Decrease	WRA Tool		our sites when mine closure plans are
Manantial Argentina Espejo Argentina	Argentina	Surplus	A1B	2100	+2°C to +4 °C	+20 % to +30% while another mod- el suggests +0.3 mm/day to +2.0 mm/day	-	Increase	IPCC 2014 Chapter 27 - Central and South America		updated, new climate models emerge, or at least every five years.
		A2		+3 °C to +4.5 °C	-	-		South America			

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GRI & SASB DATA TABLES

GRI 102-13 Memberships of associations

Canada and USA

Mining Association of Canada

Women in Mining

Women Who Rock

The Silver Institute

Prospectors and Developers Association of Canada (PDAC)

Northwest Mining Association

Engineers Without Borders

UNICEF Canada

Ontario Mining Association

United Nations Global Compact

Northern Industrial Electricity Rate Program

The Viola Desmond Chair in Social Justice at Cape Breton University

Peru

Patronato de la Plata

Instituto de Minas del Perú

Sociedad Nacional de Minería, Petróleo y Energía

EITI Perú

Senati

Sencico

CETEMIN

La Cámara de Comercio Canadá Perú

Colegio de Ingenieros del Perú

ALOXI (Alianza para Obras por Impuestos)

Mexico

Centro Mexicano Para la Filantropía (CEMEFI)

Fundación del Empresariado Chihuahuense (FECHAC)

Cámara Minera de México (CAMIMEX)

La Cámara de Comercio del Canadá en México, A.C. (CANCHAMM)

Asociación Mexicana en Dirección de Recursos Humanos, A.C. (AMEDIRH)

Clúster Minero de Chihuahua (CLUMIN)

Clúster Minero de Zacatecas (CLUSMIN)

Clúster Minero de Sonora

Cruz Roja Durango

Argentina

Cámara Argentina de Empresas Mineras (CAEM)

CADIM (Colegio Argentino de Ingenieros en Mineras)

CEADS (Consejo Empresario Argentino para el Desarrollo Sostenible)

Green Cross

Fundación LOGRAR (local development)

CABB, Confederación Argentina de Basquet

Fundación FLOR (Fundación Liderazgos y Organizaciones Responsables)

Fundación Codo a Codo (education initiatives at Gobernador Gregores)

Bolivia

Asociación de Mineros Medianos

Amcham Cámara Americana de Comercio

Colegio de Geólogos de Bolivia

Cámara de Comercio de Bolivia

Confederación de empresarios privados de Bolivia

Cámara de Exportadores de Bolivia

Cámara de Comercio Boliviano Canadiense

Club de Minería

Guatemala

Cámara de Comercio Guatemalteco Americana (AMCHAM)

Cámara de Industria de Guatemala (CIG)

Cámara de Comercio de Guatemala (CCG)

Cámara de Comercio Guatemalteco Canadiense (CANCHAM)

Gremial de Recursos Naturales Minas y Canteras (GreNat)

GRI 102-8 Information on employees and other workers EM-MM-000.B Total number of employees, percentage contractors

					Employees ²			Contractors						
Total number of	Administration		Geol	ogy	Engin	eering	Labo	our	Total	Fixed ³	Tomporel4	Total	Total	
employees and contractors ¹	Male	Female	Male	Female	Male	Female	Male	Female	Employees	rixea	Temporal ⁴	Contractors	workforce	
Corporate Office	24	22	6	0	13	1	0	0	66	3	0	3	69	
Canada ⁶	98	41	7	4	4	1	481	26	662	205	0	205	867	
Peru	265	89	38	9	206	7	2,391	26	3,031	1,356	1,978	3,334	6,365	
Mexico⁵	98	64	23	5	277	20	1,189	74	1,750	933	831	1,764	3,514	
Guatemala⁵	36	26	1	0	2	0	106	4	175	0	1,004	173	348	
Bolivia	51	13	8	1	91	7	271	6	448	0	172	172	620	
Argentina⁵	112	37	5	2	109	6	424	21	716	144	1	145	861	
Total	684	292	88	21	702	42	4,862	157	6,848	2,641	3,986	5,796	12,644	

- (1) Data per country includes mines, offices, exploration and project sites.
- (2) Includes permanent employees only.
- (3) Includes contractors with fixed term employment and whose activities are non core of the business, but are needed to operate, eg. catering, security, housing, cleaning, fuel supply, etc.
- (4) Includes contractors who are hired to perform a temporary activity, and whose contract has a beginning and an end date, eq. project construction, drilling, sampling for temporary exploration.
- (5) Includes Escobal, Alamo Dorado and Navidad.
- (6) Due to the nature of contract, Timmins has only fixed contractors

Total number of		Pan Americ	an Silver Emp	loyees		Contractors					
employees and contractors by region	Direct Influence area ²	Indirect Influence area ³	National Influence area ⁴	Foreign	Total	Direct Influence area	Indirect Influence area	National Influence area	Total		
Corporate Office⁵	43	23	0	0	66	2	1	0	3		
Canada ⁷	644	16	2	0	662	N/A	N/A	N/A	205		
Peru	1,025	972	1,034	0	3,031	1,173	1,019	1,142	3,334		
Mexico ⁶	841	660	246	3	1,750	1,020	585	159	1,764		
Guatemala ⁶	84	22	66	3	175	91	35	47	173		
Bolivia	223	96	129	0	448	48	37	87	172		
Argentina ⁶	368	240	106	2	716	49	89	7	145		
Total	3,228	2,029	1,583	8	6,848	2,383	1,766	1,442	5,796		

- (1) Data per country include mines, offices, exploration and project sites.
- (2) Direct influence area refers to the personnel who reside near the operation units.
- (3) Indirect Influence area refers to the personnel who reside in the same state or department in which the operating unit is located, but are not in the direct influence area.
- (4) National influence area refers to the personnel residing in other states or departments within the country from where the unit is located.
- (5) At the corporate level, direct influence area includes personnel who reside in Canada, and indirect influence area includes personnel who report to a manager or senior manager from corporate, but work from outside of Canada.
- (6) Includes Escobal, Alamo Dorado and Navidad.
- (7) We do not track contractors by region in Canada.

2020 PERFORMANCE

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo
Water	Implemented water management initiatives and reduced water use ratio for mill operations to 1.0 in Q1 compared to 1.2 in 2019 Q1.	Completed evaluation of water conservation projects and set measurable future target. Achieved 8.8% reduction in water use for washing of heavy machinery.	Completed evaluation of water conservation projects and set measurable future target. Eliminated reject water effluent from the potable water treatment plant.	Reduced water use for camp and road dust suppression.	Reduced water use for camp and road dust suppression.	Reduced water use for camp and road dust suppression.	Reduced water use for camp and road dust suppression.	Reduced freshwater withdrawal for processing by 90% and 72% for the laboratory. Water use for road dust suppression and camp use was not reduced due to low preciptation and increased hygiene practices for COVID-19.	Reduced water use for road dust suppression, camp, and process water by 10%.
Energy	Achieved 4,100 MWh of electricity savings, associated with 1,000 tonnes of CO2-eq carbon emissions, through implementation of energy saving projects.	Completed evaluation of energy conservation projects and set measurable future target. Achieved 3.3% reduction in electrical energy consumption for the offices.	Completed evaluation of energy conservation projects and set measurable future target. Was unable to reduce energy use through construction of a new ore pass to reduce energy use for ore transport. (Progress at 95% due to pandemic restrictions).	Implemented the energy efficiency management plan. Completed employee and contractor training on energy conservation. Reduced energy use in camps. Received the 3rd star of the Peruvian Government's Carbon Footprint program for the verified reduction in carbon emissions.	Implemented the energy efficiency management plan. Completed employee and contractor training on energy conservation. Reduced energy use in camps. Received the 2nd star of the Peruvian Government's Carbon Footprint program through external verification of its annual emissions.	Implemented the energy efficiency management plan. Completed employee and contractor training on energy conservation. Reduced energy use in camps. Received the 2nd star of the Peruvian Government's Carbon Footprint program through external verification of its annual emissions.	Implemented the energy efficiency management plan. Completed employee and contractor training on energy conservation. Reduced energy use in camps. Received the 2nd star of the Peruvian Government's Carbon Footprint program through external verification of its annual emissions.	Achieved 35% reduction in electrical energy consumption for freshwater pumping and 27% reduction in gasoline consumption, resulting in 15% reduction in total GHG emissions.	Achieved fuel consumption in power generation of 0.26 L/kWh.
Biodiversity	On target to implement the TSM Biodiversity Protocol to Level A by end of 2021.	Achieved 95% of implementation of TSM Biodiversity Protocol to Level A. On track to complete implementation in 2021.	Achieved Level A performance on TSM Biodiversity Protocol.	On target to implement the TSM Biodiversity Protocol to Level A by end of 2021.	On target to implement the TSM Biodiversity Protocol to Level A by end of 2021.	Achieved Level A performance on TSM Biodiversity Protocol.	Achieved Level A performance on TSM Biodiversity Protocol.	Achieved Level A performance on TSM Biodiversity Protocol.	Achieved Level A performance on TSM Biodiversity Protocol.

				20	21 GOALS				
	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo
Water	Conduct internal analysis to optimize freshwater use for domestic purposes. Maintain zero use of freshwater for the mill through expansion of the polishing pond.	Reduce freshwater use by 26% through installation of a water treatment system in the underground mine.	Reduce water use by 1% through optimization of the light vehicle washing system.	Reduce freshwater use by 8% through implementation of dust control project and reuse of treated wastewater.	Reduce freshwater use by 5.5% by using treated water for the preparation of reagents for the mine water treatment plant.	Reduce freshwater by 1.5% though increased reuse of reverse osmosis reject water and water from the mine.	Reduce freshwater by 1.6% by implementing projects to optimize water use in the underground mine.	Reduce freshwater withdrawal by 17% by recycling water for the potable water treatment plant and the camps.	Reduce water consumption ratio by 7%. (0.40 m3/tonne processed).
Energy & Emissions	Reduce 0.5% of energy use through implementation of mill, CNG, and ventilation projects.	Reduce energy use by 0.3% through installation of frequency inverters in the mine ventilation system. Reduce carbon emissions by 14% by switching to a renewable energy supply contract.	Conduct technical study to evaluate fuel consumption reduction strategies. Reduce carbon emissions by 43% by switching to a renewable energy supply contract.	Reduce energy use and carbon emissions by 3% by connecting camp and water pumps to the grid and changing lighting to LED.	Reduce energy use by 0.63% through digitalization of the ore transport system. Reduce 2.75% of carbon emissions by connecting the water treatment plants to the grid and reducing of energy use.	Reduce energy use by 0.18% and carbon emissions by 2% through implementation of the renewable energy project at the tailings dam.	Reduce energy consumption by 1.2% through better maintenance of compressed air lines and inefficient pumps. Reduce 1.08% of carbon emissions by implementing energy use optimization projects and improving management.	Reduce electrical energy consumption by 2.4% through reduction in freshwater pumping, replacement of lights, optimized use of compressors and fans, and automated pumping of treated water.	Maintain the optimized fuel consumption rate for the on-site generator of 0.261 L/KWh.
Biodiversity	Zero disturbances while rehabilitating 2 hectares of disturbed land.	Rehabilitate a total of 26 hectares of disturbed land. Perform bioremediation on hydrocarbon contaminated soil with aerobic bacteria.	Rehabilitate a total of 3 hectares of disturbed land.	Rehabilitate an additional 3 hectares of disturbed land. Execute the rescue and relocation plan for sensitive fauna and flora.	Rehabilitate 11.6 hectares and reforastate of 180 hectares in the Sanagorán district.	Rehabilitate an additional 0.5 hectares of disturbed land	Rehabilitate an additional 0.03 hectares and implement conservation project for the Totora plant at the tailings dam.	Rehabilitate a total of 26 hectares. Continue the production of plants in the forest nursery to be used for future revegetation.	Reclaim a total of 17 hectares of disturbed land.

GRI 102-41 Collective bargaining agreements¹

SASB EM-MM-310a.1 Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Workers covered by collective bargaining agreements	0	593	659	336	298	485	570	316	426	3,683
Total % of employees	0%	70%	81%	57%	49%	54%	71%	76%	65%	54%

⁽¹⁾ Unionization is free and voluntary. Pan American Silver respects freedom of association.

Economic Performance

GRI 201-1 Direct economic value generated and distributed

	Community Investment (\$US)¹											
Mines	Education	Health	Economic Development	Charitable expenses	Infrastructure	Others ²	TOTAL					
Timmins ³	5,695	13,618	3,990	15,439	33,481	1,891,583	1,963,806					
Dolores	19,000	-	108,000	-	150,000	836,073	1,113,073					
La Colorada	1,000	3,085		11,787	362,413	3,200	381,485					
Shahuindo	1,223,328	343,000	401,700	290,857	180,000	1,287,190	3,726,075					
La Arena	45,915	49,721	770,837	132,294	482,749	244,520	1,726,035					
Huaron	113,674	1,131	10,296	91,865	14,538	16,872	248,377					
Morococha	39,763	13,179	10,036	99,543	-	29,643	192,164					
San Vicente	361,923	491	74,584	61,819	5,402	-	504,219					
Manantial Espejo	251,588	326,579	-	-	-	-	578,167					
TOTAL (\$US)	2,061,886	750,804	1,379,444	703,604	1,228,583	4,309,081	10,433,402					

⁽¹⁾ Only operating mines are included in this table.

⁽²⁾ In order to respect indigenous people and community agreements, "others" category includes payments of land agreements and ad hoc activities.

(3) Timmins includes Timmins and Bell Creek.

COVID-19 Fund For F	an American Silver	- Budget Execution1; 2
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Countries	Mines/Office	Executed (\$US)				
	Shahuindo	247,350				
Doru	La Arena	185,513				
Peru	Huaron	179,381				
	Morococha	92,756				
Marrian	La Colorada	33,129				
Mexico	Dolores	9,826				
Argentina	Manantial Espejo	122,380				
Canada	Timmins/ Bell Creek	71,762				
Bolivia	San Vicente	45,646				
Guatemala	Escobal	77,048				
Canada/Vancouver Office	Corporate	35,000				
TOTAL		1,099,791				

⁽¹⁾ Early in the pandemic, we created a COVID-19 fund and committed \$2 million towards food, hygiene and medical supplies, and personal protection equipment in support of local communities. By the end of the year, we had invested nearly \$1.1 million into initiatives supporting 104 local communities. We anticipate investing the remaining COVID-19 Fund during 2021.
(2) Escobal and the corporate office funds are included in this COVID-19 budget execution. Navidad funds is not included in this table.

Corporate Giving Committee Donations	(\$ US)	(\$ CAN)
Organization		
UNICEF1	1,500,000	
Paws for Hope		5,000
PAS Scholarships		4,000
Hockey Helps the Homeless		10,000
CIM Silver Level Sponsorship and Capital Projects		6,500
UBC Mining Enginerring - Canadian International Student Mine Rescue Competition		7,000
Vancouver Symphony Orchestra		5,269
Canadian Cancer Society Daffodil Ball		6,500
Society of Economic Geologist Foundations		13,000
The Viola Desmong Chair in Social Justice at Capte Breton University		80,000
Covenant House		20,000
Shorts 4 St. Paul's (St. Paul's Maternity Ward)		1,000
Pacific Salmon Foundation - Bronze Level and Gala		17,000
BabyGoAround		10,000
Vancouver Food Runners Society		35,000
Laurentian University		5,000
Minerva Foundation		20,000
Polytechnique Montreal University - Canada Mining Games		1,000
Total	1,500,000	246,269

(1) To support the well-being and rights of children, we entered into a 3-year \$1.5 million partnership commitment with UNICEF Canada, to provide health and education to vulnerable children and families in the Latin American countries where we operate. This commitment will continue post pandemic with a primary focus on hygiene and sanitation in schools.

MARKET PRESENCE

GRI 202-2 Proportion of senior management hired from the local community

	Canada	Peru	Mexico	Guatemala	Bolivia	Argentina	Total
Senior Management ¹	100%	100%	99%	95%	100%	99%	99%
Total Employees ²	100%	100%	100%	98%	100%	100%	100%

⁽¹⁾ Includes executive officers, vice presidents, country managers, directors, operation and unit managers.

⁽²⁾ Includes permanent employees who are either born in or have the legal right to reside indefinitely in the same geographic market as the operation.

Procurement Practices

GRI 204-1 Proportion of Spending on Local Suppliers

		Timmins	Dolores	La Colorada	Escobal	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Spend for goods and services (\$US Mill	on)	116.1	163.7	55.8	13.3	87.6	84.8	39.6	40.8	14.4	56.9	673.1
Proportion spent on local and regional s	uppliers1	84%	46%	24%	96%	13%	22%	92%	96%	20%	21%	47%

⁽¹⁾ Local and regional suppliers include those located in communities within the direct area of influence, and those located in surrounding regions within the indirect areas of influence. Local procurement varies by region depending on the availability of local suppliers and the proximity of the mine to major economic centers such as Lima and Guatemala City.

Energy

GRI 302-1 Energy consumption within the organization

SASB EM-MM-130a.1 (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Diesel (m3)	6,849	30,815	3,331	12,612	18,336	1,185	1,914	1,126	18,233	94,401
Gasoline/Nafta (m3)	71	1,037	178	-	-	-	-	74	-	1,360
Coal (tonnes)	-	-	-	-	-	2	-	1	-	3
Liquified Petroleum Gas, LPG (m3)	5,016	59	280	115	143	90	115	-	-	5,818
Compressed Natural Gas (m3)	1,162,325	-	-	-	-	-	-	-	-	1,162,325
Ammonium Nitrate, ANFO (tonnes)	4	7,584	591	-	1,534	86	439	821	178	11,237
Emulsion (tonnes)	2,094	170	425	2,602	6,138	404	248	58	193	12,330
Electricity (MWh)	196,376	96,173	65,205	31,490	26,115	71,541	61,043	20,993	-	568,936

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Tota
Diesel (GJ)	264,933	1,191,928	128,854	487,818	709,223	45,848	74,048	43,554	705,251	3,651,457
Gasoline/Nafta (GJ)	2,461	35,955	6,161	-	-	-	-	2,575	-	47,151
Carbon (GJ)	-	-	-	-	-	55	-	40	-	95
Liquified Petroleum Gas, LPG (GJ)	128,058	1,496	7,156	2,945	3,655	2,298	2,927	-	-	148,535
Compressed Natural Gas (GJ)	43,273	-	-	-	-	-	-	-	-	43,273
Ammonium Nitrate, ANFO (GJ)	9	17,444	1,359	-	3,528	198	1,009	1,888	409	25,844
Emulsion (GJ)	4,817	390	978	5,986	14,117	929	570	134	444	28,360
Electricity (GJ)	706,954	346,224	234,740	113,364	94,013	257,549	219,754	75,574	-	2,048,170
Total	1,150,505	1,593,437	379,248	610,112	824,535	306,877	298,308	123,765	706,104	5,992,886

(0	6J)	2020 Total	2019 Total	2019 Silver Segment ²	2018
Di	iesel	3,651,457	4,131,221	2,414,823	2,249,112
G	asoline/Nafta	47,151	51,548	48,468	50,855
C	oal	95	198	198	260
Li	quified Petroleum Gas, LPG	148,535	237,784	15,348	17,643
C	ompressed Natural Gas	43,273	-	-	-
Aı	mmonium Nitrate, ANFO	25,844	31,073	26,350	25,945
Er	mulsion	28,360	40,757	5,781	4,130
El	ectricity	2,048,170	2,179,896	1,304,007	1,182,125
To	otal	5,992,887	6,672,477	3,814,974	3,530,071

⁽¹⁾ The measurement methodology to collect the information is inventory control. Pan American Silver used TSM - Energy and Greenhouse Gas Emissions Management Guide 2014, Orica and conversion tools to transform the units to GJ.

SASB EM-MM-130a.1 (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

Percentage of energy it consumed that is renewable energy	Morococha	Total
Hydro (MWh)	61,043	61,043
Geothermal (MWh)		0
Wind (MWh)	0	0
Solar (MWh)	0	1
Biomass (MWh)	0	0
Total Renewable (MWh)	61,043	61,043
% of total energy consumption ¹	4%	4%

⁽¹⁾ The percentage is calculated as renewable energy consumption divided by total energy consumption.
(2) Morococha is the only mine that has a certified renewable energy provider according to the IEA (International Energy Agency) definition. The tables below also report non-certified renewable energy consumed through grid supply at our operations.

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total	%
Total MWh	196,376	96,173	65,205	31,490	26,115	71,541	61,043	20,993	-	568,936	
Non-renewable	12,915	84,200	57,087	-	9,179	25,145	-	13,592	-	202,118	36%
Renewable	69,128	10,075	6,831	31,490	16,936	46,396	61,043	7,400	-	249,299	44%
Nuclear	114,333	1,899	1,287	-	-	-	-	-	-	117,519	21%

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total	%
Total GJ	706,954	346,224	234,740	113,364	94,013	257,549	219,754	75,574	-	2,048,170	
Non-renewable	46,493	303,119	205,515	-	33,043	90,522	-	48,933	-	727,624	36%
Renewable	248,861	36,270	24,591	113,364	60,970	167,027	219,754	26,641	-	897,477	44%
Nuclear	411,600	6,835	4,634	-	-	-	-	-	-	423,069	21%

⁽²⁾ For comparison with prior years.

⁽³⁾ We have restated the 2019 and 2018 data based on minor adjustments on explosives and electricity data from Morococha and La Arena, and inclusion of COSE and Joaquin 2019 site data within the Manantial Espejo usage. (4) 2020 data was corrected in July 2021 due to fuel consumption at Timmins which was not accounted for in the original version of this report.

Water

GRI 303-3 Water withdrawal¹

SASB EM-MM-140a.1 (1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

(m3)	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente ²	Manantial Espejo	Total
Total Water Withdrawal ³										
Mine dewatering	1,330,363	-	4,108,034	-	1,300,751	24,326,576	24,001,840	721,321	922,760	56,711,645
External Sources	-	-	-		-	-	-	47,685	-	47,685
Ground Water	4,619	-	-	522,181	105,187	-	-	-	-	631,987
Surface Waterbody	4,413	-	-	227,256	-	3,170,660	1,289,233	-	-	4,691,561
Precipitation	2,499,883	-	214,498	702,743	2,698,535	501,469	8,789,361	48,605	113,056	15,390,864
Water Withdrawal from areas with	water stress³;5									
Mine dewatering	-	1,262,318	-	-	-	-	-	-	-	1,262,318
External Sources	-	-	-	-	-	-	-	-	-	-
Ground Water	-	378,887	-	-	-	-	-	-	-	378,887
Surface Waterbody	-	565,892	-	-	-	-	-	-	-	565,892.
Precipitation⁴	-	601,312	-	-	-	-	-	-	-	601,312
Total Water Withdrawal										
New water for mineral processing	463,940	1,021,020	410,016	1,088,010	800,639	2,380,295	1,216,962	160,613	353,767	7,895,262

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente ²	Manantial Espejo	Total
Recycled process water (m3)	1,754,467	10,904,303	1,422,560	14,956,039	18,021,512	137,794	210,181	628,440	2,010,778	50,046,074
% Recycled process water ⁶	79%	91%	78%	93%	96%	5.5%	15%	80%	85%	86%

⁽¹⁾ Each site follows local regulations regarding water withdrawal.

⁽²⁾ While San Vicente is not in an area classified as water stressed according to the World Resources Institute, we recognize that the mine is a water scarce region and continually work to reduce our water use from external sources.

⁽³⁾ All water is Freshwater ≤ 1000 mg/L total dissolved solids.

⁽⁴⁾ Water from precipitation captured in tailings facilities, large water ponds and heap leach pads.

⁽⁵⁾ Areas with water stress were assessed by using the World Resources Institute, Aqueduct Water Risk Atlas project.

⁽⁶⁾ The percentage of recycling water is calculated by the total recycled water divided by the total water used in mineral processing.

GRI 303-4 Water discharge1;2;3

(m3)	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Discharged to surface water that does not require treatement	-	1,262,318	-	-	-	-	-	-	-	1,262,318
Discharged to groundwater	-	-	-	-	-	-		-	-	-
Discharged to treatment facilities, ponds and then discharged to the environment	682,901	-	3,632,314	-	413,255	28,100,845	1,242,701	539,844	249,686	34,898,001
Discharge of rainwater	1,039,208	-	-	213,356	3,399,402	501,469	8,789,361	-	-	13,168,474
Water discharged/distributed to third-parties (eg.communities)	-	182,456	15,555	14,640	2,265,081	-	24,001,840	747	-	24,215,237

⁽¹⁾ The treatment and volume measurement may vary across the sites, depending on local regulations. Each site uses the most appropriate methodology to conduct analysis and ensure compliance with local regulations.

Biodiversity

GRI MM1 Amount of land (owned or leased, and managed for productive activities of extractive use) disturbed or rehabilitated GRI 304-3 Habitats protected or restored

(ha)	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Total land disturbed	363	876	195	443	569	307	65	64	436	3,318
Land disturbed in 2020	4	5	-	53	21	-	-	-	-	83
Total land rehabilitated	-	48	4	13	73	-	0.2	0.7	8	146
Land rehabilitated in 2020	-	3	2	5	3	-	-	0.5	8	20
Total land not yet rehabilitated	363	828	191	431	497	307	65	64	428	3,172

(ha)	2020 Total ¹	2019 Total	2019 Silver Segment	2018
Total land disturbed	3,508	3,425	2,128	2,010
Total land newly disturbed	83	188	118	89
Total land rehabilitated	535	515	437	389
Total land newly reclaimed	20	126	48	89
Total land disturbed and not yet rehabilitated	3,172	2910	1,691	1,621

⁽¹⁾ Totals in this table differ from the previous table because they include non-operating assets such as Alamo Dorado

⁽²⁾ The discharge amount in this table does not consider wastewater, water used for drilling, losses and evaporation. The company wide water balance considers all kinds of discharge, whereas the 306-1 table follow GRI requirements.

⁽³⁾ The water stress area is the same reported in 303-3. In 2020 we did not have any incidents of non compliance with discharge limits of any substances of concern.

GHG Emissions

GRI 305-1 Direct greenhouse gas (Scope 1) GHG emissions
GRI 305-2 Energy indirect (Scope 2) GHG emissions
SASP EM MM 1100 1 Cross global Scope 1 emissions

SASB EM-MM-110a.1 Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations

(tonnes of CO2-eq)		Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
	Diesel	18,539	83,406	9,017	34,135	49,628	3,208	5,182	3,048	49,350	255,512
	Gasoline/Nafta	175	2,560	439	-	-	-	-	183	-	3,357
	Carbon	-	-	-	-	-	5	-	3	-	8
Direct (Scope 1) GHG emissions ¹	Liquified Petroleum Gas, LPG	7,746	91	433	178	221	139	177	-	-	8,985
	CNG	2,206	-	-	-	-	-	-	-	-	2,206
	Ammonium Nitrate, ANFO	1	1,433	112	-	290	16	83	155	34	2,124
	Emulsion	396	32	80	492	1,160	76	47	11	37	2,331
Indirect (Scope 2) GHG emissions ²	MWh	5,302	43,884	29,753	6,235	5,171	14,165	-	7,385	-	111,895
Total		34,365	131,405	39,833	41,040	56,470	17,610	5,488	10,786	49,420	386,418

⁽¹⁾ Pan American Silver used National Inventory Report Canada 2020 to calculate Direct (Scope 1) GHG emissions. The global warming potential (GWP) is based on the information provided by the Government of Canada. Gases included in this calculation are CO2, CH4 and N2O. The GHG protocol and B.C. Methodological Guidance for Quantifying Greenhouse Gas Emissions are used as reference.

(3) 2020 data was corrected in July 2021 due to fuel consumption at Timmins which was not accounted for in the original version of this report.

(tonnes of CO2-eq)		2020 Total	2019 Total	2019 Silver Segment ¹	2018
Direct (Scope 1) GHG emissions	Diesel	255,512	289,328	169,121	157,516
	Gasoline/Nafta	3,357	3,697	3,476	3,647
	Carbon	8	17	17	22
	Liquified Petroleum Gas, LPG	8,985	14,416	930	1,070
	CNG	2,206	-	-	-
	Ammonium Nitrate, ANFO	2,124	2,553	2,165	2,132
	Emulsion	2,331	3,349	475	339
	Total Scope 1 GHG Emissions	274,522	313,361	176,185	164,726
Indirect (Scope 2) GHG emissions	MWh	111,895	143,863	126,739	123,880
	Total Scope 1 and Scope 2	386,418	457,223	302,924	288,606

⁽¹⁾ For comparison purpose with prior years.

⁽²⁾ Emissions from purchased electricity calculated according to GHG protocol using the IEA 2019 tool for all the mines except Timmins. Emission factor for Timmins provided by the Independent Electricity System Operator (IESO) in Ontario. Gases included in this calculation are CO2, CH4 and N2O.

⁽²⁾ We have restated the 2019 and 2018 data based on minor adjustments on explosives and electricity data from Morococha and La Arena, and inclusion of COSE and Joaquin 2019 site data within the Manantial Espejo usage.

GHG Emissions (Tonnes CO2eq)	2020	2019	2018
Scope 1 - Direct	274,522	313,361	164,726
Scope 2 - Electricity	111,895	143,863	123,880
Total Scope 1 and 2	386,418	457,223	288,606
Scope 3 - Value Chain	618,332	668,098	-

We have restated the 2019 and 2018 data based on minor adjustments on explosives and electricity data from Morococha and La Arena and inclusion of COSE, and Joaquin 2019 site data within the Manantial Espejo usage.

Emissions from purchased electricity have been calculated according to the GHG Protocol. The location-based method uses the IEA 2020 tool for all mines. Gases included in this calculation are CO2, CH4 and N2O.

Where available, the market-based method uses supplier specific emission factors. The difference in market- and location-based is mainly attributed to the purchase of hydroelectric power at our Morococha operation. Unless otherwise noted, all scope 2 emissions refer to the market-based method. A residual mix is not available to account for voluntary purchases and may result in some double counting among consumers.

		Timmins	La Colorada
	Percentage of Scope 1 GHG emissions covered under regulation	100%	100%
Percentage of Scope 1 GHG emissions covered under a government emission limiting regulation or program that is intended to directly limit or reduce emissions.	List the emission-limiting regulations covering site's Scope 1 emissions	Output Based Pricing System (Federal) Emissions Performance Standard (Provincial)	Zacatecas Eco-tax
	Are there any material HFCs, PFCs, SF6, NF3 emissions at the mine site?	No	No

AIR QUALITY

SASB EM-MM-120a.1 Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)¹

Emissions of air pollutants, in metric tons per pollutant, that are released into the atmosphere

tonnes	Timmins
Carbon monoxide, CO	37.92
Oxides of nitrogen, Nox	10.46
Oxides of sulfur, Sox	0.06
Particulate matter, PM10	39.99
Lead and lead compounds, Pb	0.14
Mercury and mercury compounds, Hg	-
Non-methane volatile organic compounds, VOCs	4.17
If any of the above are not material, include calculation/explanation to reach this conclu	sion -

⁽¹⁾ Our Timmins operation reports annually to the National Pollutant Release Inventory (NPRI) air emissions above the set threshold. Parameters like CO, NOx, SOx, PM, and VOC's have been calculated in acccordance with Environment Canada's annual reporting requirements and does not consider non-GHG emissions from mobile combustion. Non-Canadian operations are not required to report non-GHG emissions to authorities.

TAILINGS AND WASTE

GRI 306-2 Waste by type and disposal method SASB EM-MM-150a.2 Total weight of mineral processing waste, percentage recycled

Total - All Mines (tonnes)	Reuse	Recycled	Compost	Landfill (Non- hazardous waste)	Controlled Landfill (hazardous waste)	Total waste	% Recycled	% Reused	Total
Hazardous or dangerous waste	21	643	-	-	1,574	2,238	29	1	2,238
Non-hazardous inert waste	-	-	-	363	-	363	-	-	363
Domestic waste	-	-	130	3,221	-	3,352	-	-	3,352
Recyclable waste	200	2,121	-	-	-	2,320	91	9	2,320
Total	221	2,764	130	3,584	1,574	8,273	33	3	8,273

GRI 306-3 Significant spills

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo
Number of Significant (Reportable) Spills ¹	2	-	-	-	-	-	1	-	-
Volume of liquid or pulp (m3)	38	-	-	-	-	-	42	-	-

(1) Significant spills defined as reportable spills according to local regulations

Total - All Mines	2020	2019	2018
Number of Significant Spills	3	3	1
Volume of liquid or pulp (m3)	80	51	10

GRI G4 MM3 Total amounts of over burden, rock, tailings, and sludges SASB EM-MM-150a.1 Total weight of tailings waste, percentage recycled

SASB EM-MM-150a.2 Total weight of mineral processing waste, percentage recycled

(tonnes)	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total	% Recycled
Tailings not used as hydraulic backfill (dry tonnes)	1,643,062	-	387,114	-	-	442,956	306,281	282,484	604,729	3,666,626	
Tailings used as hydraulic backfill (dry tonnes)	119,492	-	83,556	-	-	61,751	17,164	-	-	281,963	7%
Waste rock not used as backfill	109,361	25,227,352	-	9,833,445	20,520,916	114,855	86,904	4,172	-	55,897,005	
Waste rock used as backfill	408,941	-	423,212	-	124,286	50,451	189,874	247,147	-	1,443,911	2.5%
Water treatment sludge not reused or recycled	-	5	432	297	100,913	18,095	2,242	1,859	-	123,843	
Water treatment sludge reused or recycled	-	-	-	-	-	-	-	-	-	-	

EMPLOYMENT

GRI 401-1 New employee hires and employee turnover

New Employees Hires ^{1,2,3}		Timmins ⁴	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Escobal	Total
	Men	38	113	17	5	4	7	2	2	28	6	222
<30	ivieri	28.79%	42.32%	23.29%	20.83%	20.00%	31.82%	18.18%	18.18%	46.67%	33.33%	34.80%
\ 30	Maman	8	21	17	3	1	3	2	1	1	1	58
	Women	6.06%	7.87%	23.29%	12.50%	5.00%	13.64%	18.18%	9.09%	1.67%	5.56%	10.28%
	Men	51	119	23	16	14	7	2	6	26	9	267
Between 30 and 50	ivieri	38.64%	44.57%	31.51%	66.67%	70.00%	31.82%	18.18%	54.55%	43.33%	50.00%	41.85%
Between 30 and 50	Women	16	9	12	0	0	4	0	1	2	1	51
	vvorrien	12.12%	3.37%	16.44%	0.00%	0.00%	18.18%	0.00%	9.09%	3.33%	5.56%	7.99%
	Man	19	5	3	0	1	1	5	1	3	1	39
>50	Men	14.39%	1.87%	4.11%	0.00%	5.00%	4.55%	45.45%	9.09%	5.00%	5.56%	6.11%
>50	Women	0	0	1	0	0	0	0	0	0	0	1
	vvorrien	0.00%	0.00%	1.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%

- (1) Data includes permanent employees only.
- (2) Data does not include projects or exploration totals.
- (3) The factors to calculate these percentages changed in 2020. The percentages in each operation is calculated against the total of new employees hires in each corresponding operation.
- (4) Timmins data includes Timimns and Bell Creek employees.

Employee Turnover ¹ ; ² ; ³		Timmins ⁴	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Escobal	Total
	Men	22	32	13	2	4	1	7	0	6	3	90
<30	ivieri	3.41%	3.78%	1.59%	0.34%	0.66%	0.11%	0.87%	0.00%	0.88%	1.85%	1.35%
<30	Women	3	8	5	0	1	1	3	0	1	0	22
	vvoirieii	0.47%	0.95%	0.61%	0.00%	0.16%	0.11%	0.37%	0.00%	0.15%	0.00%	0.28%
	Men	53	58	19	28	24	14	29		19	9	253
Between 30 and 50	Men	8.22%	6.86%	2.32%	4.77%	3.95%	1.55%	3.60%	0.00%	2.78%	5.56%	3.96%
between 30 and 30	Women	9	5	3	2	1	3	4	0	2	0	29
	vvornen	1.40%	0.59%	0.37%	0.34%	0.16%	0.33%	0.50%	0.00%	0.29%	0.00%	0.40%
	Men	24	8	31	2	5	6	30	0	0	1	107
>50	ivieri	3.72%	0.95%	3.79%	0.34%	0.82%	0.66%	3.73%	0.00%	0.00%	0.62%	1.46%
>50	Maman	4	0	0	0	0	0	0	0	0	0	4
	Women	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%

- (1) Data includes permanent employees only.
- (2) Data does not include projects or exploration totals.
 (3) The percentages in each operation is calculated against the total of employees in each corresponding operation.
 (4) Timmins data includes Timimns and Bell Creek employees.

SASB EM-MM-210b.2: Number and duration(# of days) of non-technical production delays1

	Timmins	Dolores	La Colorada	Escobal ²	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo
Days of non-technical production delays	0	57	49	365	61	61	147	163	74	45

- (1) Due to the COVID-19 pandemic, most of our operatins were suspended after obligatory lock-downs by the jurisdictions where we operate.
- (2) Escobal is on care and maintenance pending the completion of an International Labour Organization (ILO) 169 consultation process mandated by the Constitutional Court of Guatemala.

OCCUPATIONAL HEALTH & SAFETY

GRI 403-9 Work-related injuries

EM-MM-320a.1. (1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees

2020 Safety Performance	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Lost time injury frequency ¹	-	-	0.67	0.27	-	0.92	0.85	0.75	-	0.35
Lost time injury severity ²	-	-	2,021	15	-	2,771	41	10	-	534

- (1) Lost time injury frequency is calculated as the number of lost time injuries, including fatalities, in the exposure period multiplied by 1 million hours and divided by the total number of hours worked in that period.
- (2) Lost time injury severity is a measurement of the seriousness of injuries and is calculated as the number of workdays lost due to lost time injuries multiplied by 1 million and divided by the total exposure hours. We count 6,000 lost workdays in the event of a fatal accident.

Historical Safety Performance ¹	2020	2019	2018
LTIF Frequency ²	0.35	1.04	1.41
LTIS Severity ³	534	481	723
Fatalities	2	2	1

- (1) Includes Contractors.
- (2) Lost time injury frequency is calculated as the number of lost time injuries, including fatalities, in the exposure period multiplied by 1 million hours and divided by the total number of hours worked in that period.
- (3) Lost time injury severity is a measurement of the seriousness of injuries and is calculated as the number of workdays lost due to lost time injuries multiplied by 1 million and divided by the total exposure hours. We count 6,000 lost workdays in the event of a fatal accident.

DIVERSITY & EQUAL OPPORTUNITY

GRI 405-1 Diversity of governance bodies and employees

	· · · · · · · · · · · · · · · · · · ·										
	Percentage of					Employee	es¹				
employees per gender			Male	е		Total male		Female			Total female
	and age group	< 30	30-50	> 50	> 60		< 30	30-50	> 50	> 60	
	Corporate Office	5%	33%	17%	11%	65%	6%	21%	8%	0%	35%
	Canada	15%	49%	17%	8%	89%	3%	6%	1%	0%	11%
	Peru	12%	70%	12%	2%	96%	1%	3%	0%	0%	4%
	Mexico ³	25%	58%	7%	1%	90%	3%	6%	0%	0%	10%
	Guatemala ³	16%	58%	7%	2%	83%	4%	13%	1%	0%	17%
	Bolivia	7%	76%	10%	1%	94%	1%	4%	1%	0%	6%
	Argentina ³	20%	62%	8%	1%	91%	1%	7%	1%	0%	9%
Ī	Total ²	16%	64%	10%	2%	92%	2%	5%	1%	0%	8%

- (1) The percentages by age and gender in each country and corporate uses the total number of employees per country and per corporate.
- (2) The total percentages per employees' gender and age group uses the total number of employees in the company.
 (3) Includes Escobal, Alamo Dorado and Navidad.

Percentage of	Contractors ²									
contractors per gender	Male			Total male		Female			Total female	
and age group ¹	< 30	30-50	> 50	> 60		< 30	30-50	> 50	> 60	
Corporate	0%	33%	0%	33%	67%	0%	33%	0%	0%	33%
Peru	24%	62%	5%	0%	91%	4%	5%	0%	0%	9%
Mexico ⁴	25%	57%	6%	0%	88%	5%	6%	1%	0%	12%
Guatemala⁴	38%	36%	2%	1%	77%	15%	7%	1%	0%	23%
Bolivia	45%	45%	2%	0%	92%	5%	3%	1%	0%	8%
Argentina⁴	23%	61%	4%	1%	90%	5%	5%	0%	1%	10%
Total ³	26%	59%	5%	0%	90%	5%	5%	0%	0%	10%

- Information currently not available for Timmins operation in Canada.
 The percentages by age and gender in each country and corporate uses the total number of contractors per country and per corporate.
 The total percentages per contractors' gender and age group uses the total number of contractors in the company.
 Includes Escobal, Alamo Dorado and Navidad.

Percentage of management type per	Senior Manager ¹		Manager ²		Superintende Mana		Supervisors ⁴	
gender	Male	Female	Male	Female	Male	Female	Male	Female
Corporate Office⁵	83%	17%	70%	30%	0%	0%	0%	0%
Canada	60%	40%	67%	33%	94%	6%	84%	16%
Peru	100%	0%	71%	29%	92%	8%	92%	8%
Mexico	89%	11%	84%	16%	91%	9%	91%	9%
Guatemala	100%	0%	85%	15%	87%	13%	92%	8%
Bolivia	100%	0%	100%	0%	92%	8%	92%	8%
Argentina	90%	10%	67%	33%	100%	0%	90%	10%

- (1) Senior Manager include country managers, directors, and every employee who reports directly to a country manager. It also includes operations managers and/or general manager at the mine site.
- (2) Managers include any employee who reports direcly to a senior manager, but it does not include country managers.
- (3) Superintendent / Assistant Manager includes head of departments (mine managers, process managers, security managers, mine superintendent, maintenance superintendent, etc.) who report directly to operations manager or its equivalent.
- (4) Supervisors include employees who have at least one person they supervise, ei. maintenace supervisor, head guard, etc.
- (5) In the corporate office, senior management include executives, vice presidents, senior vice presidents and the C-level executives. Managers include directors and managers.

GRI 405-2 Ratio of basic salary and remuneration of women to men¹;²							
	Senior Manager ³	Manager⁴	Superintendent/ Assistant Manager ⁵	Supervisors ⁶	Professionals	Technical Employees	Laborers
Ratio	0.9:1	1:1	0.9:1	0.9:1	0.9:1	1.1:1	0.9:1

- (1) Data per country includes mines, offices, exploration and project sites. Includes Escobal, Alamo Dorado and Navidad.
- (2) Includes permanent employees only.
- (3) Senior Manager include country managers, directors, and every employee who reports directly to a country manager. It also includes operations managers and/or general manager at the mine site. In the corporate office, senior management include executives, vice presidents, senior vice presidents and the C-level executives. Managers include directors and managers.
- (4) Managers include any employee who reports direcly to a senior manager, but it does not include country managers.
- (5) Superintendent / Assistant Manager includes head of departments (mine managers, process managers, security managers, mine superintendent, maintenance superintendent, etc.) who report directly to operations manager or its equivalent.
- (6) Supervisors include employees who have at least one person they supervise, ei. maintenace supervisor, head guard, etc.

GRI & SASB INDEX

GRI Indicator Number	GRI Indicator Name	SASB Metals & Mining Sustain- ability Accounting Standard	Reference	Omissions/ Comments				
General Disclosures								
102-1	Name of the organization		About Pan American Silver					
102-2	Activities, brands, products, and services	SASB EM-MM-000.A: Production of (1) metal ores and (2) finished metal products	Company at a Glance					
102-3	Location of headquarters		Company at a Glance					
102-4	Location of operations		Company at a Glance					
102-5	Ownership and legal form		Annual Information Form					
			Company at a Glance					
102-6	Markets served		Annual Information Form					
102-7	Scale of the organization		Annual Report					
102-8	Information on employees and other workers	SASB EM-MM-000.B: Total number of employees, percentage of contractors	GRI & SASB Data Tables					
102-9	Supply chain		Business Ethics - Our Performance					
			Annual Information Form					
			Company at a Glance					
102-10	Significant changes to the organization and its supply chain			There were no significant changes to the Company or its key suppliers in 2020.				
102-11	Precautionary principle or approach		Sustainability Governance and Management					
102-12	External initiatives		GRI & SASB Data Tables					
102-13	Membership of associations		Commitments and Memberships					
			GRI & SASB Data Tables					
		Strategy						
102-14	Statement from senior decision maker		<u>Chairman's Letter</u>					
			President's Letter					

102-15	Key impacts, risks and opportunities		Annual Information Form	
			Goals and Performance	
			GRI & SASB Data Tables	
			<u>Human Rights – Our Performance</u>	
			Sustainable Development Goals	
		Ethics and Integrity		
102-16	Values, principles, standards, and norms of behaviour		Commitments and Memberships	
			Sustainability Governance and Management	
		Governance		
102-18	Governance structure		Sustainability Governance and Management	
		Stakeholder Engageme	ent	
102-40	List of stakeholder groups		Engaging with Communities of Interest	
102-41	Collective bargaining agreements	SASB EM-MM-310a.1 - Percentage of active workforce covered under collective	GRI & SASB Data Tables	
		bargaining agreements, broken down by	Human Capital Development –	
		U.S. and foreign employees	Our Performance	
102-42	Identifying and selecting stakeholders		Engaging with Communities of Interest	
102-43	Approach to stakeholder engagement		Engaging with Communities of Interest	
102-44	Key topics and concerns raised		Engaging with Communities of Interest	
		Reporting Practice		
102-45	Entities included in the consolidated financial statements		Annual Report	
102-46	Defining report content and topic bound-		About this Report	
	aries		Materiality	
102-47	List of material topics		Materiality	
102-48	Restatements of Information		About this Report	
102-49	Changes in reporting		About this Report	
102-50	Reporting period		About this Report	
102-51	Date of most recent report		About this Report	
102-52	Reporting cycle		About this Report	
102-53	Contact point for questions regarding the report		About this Report	

102-54	Claims of reporting in accordance with the GRI Standards	About this Report
102-55	GRI content index	GRI Index
102-56	External assurance	About this Report
	Ecoi	Economic nomic Performance
201-103	Management Approach Disclosures	Socio-Economic Contributions – Our Approach
201-1	Direct economic value generated and distributed	GRI & SASB Data Tables We currently do not breakdown EVG&D by country. We do not separate out wages, oper ating costs, or community investments from total economic value distributed
201-2	Financial Implications and other risks and opportunities due to climate change	Climate Change, Energy and Emissions — Climate Risks, Opportunities and Mitigation Strategies We currently do not report the financial implications of climate risks or the costs of actions taken to manage these risks.
	N	Market Presence
202-103	Management Approach Disclosures	Inclusion & Diversity - Our Approach
		Socio-Economic Contributions – Our_ Approach
202-2	Proportion of senior management hired from the local community	GRI & SASB Data Tables Inclusion & Diversity – Our Performance
	Indire	ect Economic Impact
203-103	Management Approach Disclosures	Socio-Economic Contributions — Our Approach
203-1	Infrastructure investments and services supported	Socio-Economic Contributions - Our Performance
203-2	Significant indirect economic impacts	Socio-Economic Contributions – Our Performance
		Sustainable Development Goals
		curement Practices
204-103	Management Approach Disclosures	Socio-Economic Contributions – Our Approach
204-1	Proportion of spending on local suppliers	GRI & SASB Data Tables
		Socio-Economic Contributions - Our Performance

		Anti-Corruption		
205-103	Management Approach Disclosures	EM-MM-510a.1: Description of the management system for prevention of corruption and bribery throughout the value chain	Business Ethics – Our Performance	
205-1	Operations assessed for risks related to corruption		Business Ethics – Our Performance	
205-3	Confirmed incidents of corruption and actions taken		Business Ethics- Our Performance	
		EM-MM-510a.2: Production in countries that have the 20 lowest rankings in Transparency Interna- tional's Corruption Perception Index	Business Ethics – Our Approach	
		Energy		
302-103	Management Approach Disclosures		Climate, Energy and Greenhouse Gas Emissions – Governance	
302-1	Energy consumption within the organization	SASB EM-MM-130a.1: (1) Total energy consumed; (2) Percentage grid electricity; (3) percentage renewable	GRI & SASB Data Tables	
		Water		
303-103	Management Approach Disclosures		<u>Water – Our Approach</u>	
303-3	Water withdrawal	SASB EM-MM-140a.1: (1) Total fresh water withdrawn, (2) total fresh water consumed	GRI & SASB Data Tables Water - Our Performance	
303-4	Water discharge		GRI & SASB Data Tables	
		EM-MM-140a.2: Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Water - Our Performance	
		Biodiversity		
304-103	Management Approach Disclosures		Biodiversity - Our Approach	
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Biodiversity – Our Performance	
304-2	Significant impacts of activities, products and services on biodiversity		Biodiversity – Our Performance	

304-3	Habitats protected or restored		Biodiversity - Our Performance	
			GRI & SASB Data Tables	
G4-MM1	Amount of land (owned or leased, and managed for production activities or ex-		Biodiversity – Our Performance	
	tractive use) disturbed or rehabilitated		GRI & SASB Data Tables	
G4-MM2	Total sites requiring biodiversity management plans		Biodiversity - Our Performance	Under the TSM Biodiversity Protocol all our sites are required to have biodiversity management plans.
		SASB EM-MM-160a.1: Description of environmental management policies and	Biodiversity - Our Approach	
		practices for active sites	Biodiversity - Our Performance	
		EM-MM-160a.2: Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2)	Tailings and Waste Management – Our Performance	
		actively mitigated, and (3) under treatment or remediation		
		EM-MM-160a.3: Percentage of (1) proved and (2) probable	Biodiversity - Our Performance	
		reserves in or near sites with protected conservation status or endangered species habitat		
		Emissions		
305-103	Management Approach Disclosures		Climate, Energy and Greenhouse Emissions – Governance	
305-1	Direct (Scope 1) GHG emissions	EM-MM-110a.1: Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations Quantita-	Climate Change, Energy and Emissions – Performance – Metrics and Targets	
		tive Metric tons (t) CO -e, 2 Percentage (%)	GRI & SASB Data Tables	
305-2	Energy indirect (Scope 2) GHG emissions		Climate, Energy and Greenhouse Emissions – Performance – Metrics and Targets	
			GRI & SASB Data Tables	
305-3	Other indirect (Scope 3) GHG emissions		Climate, Energy and Greenhouse Emissions – Performance – Metrics and Targets	
			GRI & SASB Data Tables	
			<u> </u>	<u> </u>

305-4	GHG emissions intensity		Climate, Energy and Greenhouse Emissions – Performance – Metrics and Targets	
		EM-MM-110a.2: Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Climate Change, Energy and Emissions — Climate Risks, Opportunities and Mitigation Strategies	
		EM-MM-120a.1: Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N20), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	GRI & SASB Data Tables	
		Effluents & Waste		
306-103	Management Approach Disclosures		Tailings Facilities and Waste Management Our Approach	
306-2	Waste by type and disposal method	SASB EM-MM-150a.2 Total weight of mineral processing waste, percentage recycled	GRI & SASB Data Tables Tailings Facilities and Waste Management Our Performance	
306-3	Significant spills		GRI & SASB Data Tables Tailings Facilities and Waste Management Our Performance	
G4-MM3	Total amounts of over burden, rock, tailings, and sludges	SASB EM-MM-150a.1: Total weight of tailings waste, percentage recycled SASB EM-MM-150a.3: Number of tailings impoundments, broken down by MSHA hazard potential	GRI & SASB Data Tables Tailings Facilities and Waste Management - Our Performance	We reference the Canadian Dam Association (CDA) Dam Consequence Classification system when classifying each of our tailings facilities. We find this is more aligned to the context of our operations.
		Labour Practices and Decer Employment	nt Work	
401-103	Management Approach Disclosures		Human Capital Development – Our Approach	
401-1	New employee hires and employee turnover		GRI & SASB Data Tables Human Capital Development – Our Performance	
		Labour/ Management Rela	ations	

G4-MM4	Number of strikes and lockouts exceeding one week's duration, by country	SASB EM-MM-310a.2 Number and duration of strikes and lockout	Human Capital Development – Our Performance	
	one weeks duration, by country	Occupational Health and S		
403-103	Management Approach Disclosures		Health & Safety - Our Approach	
403-9	Work-related injuries	EM-MM-320a.1: (1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	GRI & SASB Data Tables Health & Safety - Our Performance	We do not currently report the number and rate of high-consequence work-related injuries. Data on near-miss incident reporting is currently unavailable.
		Training and Educatio	n	
404 -103	Management Approach Disclosures		<u>Human Capital Development – Our Approach</u>	
404 -1	Average hours of training per year per employee	EM-MM-320a.1: (4) Average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	Health & Safety – Our Performance	We report total hours of health and safety training provided to our workforce. We do not currently report average safety training hours for or separate data between employees and contractors. Company-wide data for other types of training is currently unavailable.
		Diversity and Equal Oppor	tunity	
405-103	Management Approach Disclosures		Inclusion & Diversity — Our Approach	
405-1	Diversity of governance bodies and employees		GRI & SASB Data Tables Inclusion & Diversity – Our Performance	
405-2	Ratio of basic salary and remuneration of women to men		GRI & SASB Data Tables	We do not currently provide a separate ratio for all countries in which we operate.
		Non-Discrimination		
406-103	Management Approach Disclosures		Inclusion & Diversity - Our Approach	
406-1	Incidents of discrimination and corrective actions taken		Inclusion & Diversity – Our Performance	
		Freedom of Association and Collect	tive Bargaining	
407-103	Management Approach Disclosures		Human Capital Development – Our Approach Human Rights – Our Approach	

407 -1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Human Capital Development – Our Performance As of December 31, 2020, the right to exercise freedom of association and collective bargaining was not a significant risk for any of our operations or high-risk suppliers.
		Child Labour
408-103	Management Approach Disclosures	Business Ethics - Our Approach
		Human Rights - Our Approach
		Social Acceptance - Our Approach
408-1	Operations and suppliers at significant	Business Ethics – Our Performance As members of MAC, we have committed
	risk for incidents of child labour risk	to respecting the rights of our workers and not engaging in or supporting the practice of
		child labour. Social Acceptance – Our Performance
		As of December 31, 2020, child labour was not a significant risk for any of our operations or our high-risk suppliers.
	Forced	or Compulsory Labour
409-103	Management Approach Disclosures	Business Ethics - Our Approach
		Human Rights - Our Approach
		Social Acceptance - Our Approach
409-1	Operations and suppliers at significant	Business Ethics – Our Performance As members of MAC, we have committed
	risk for incidents of forced or compulsory labour	to respecting the rights of our workers and not engaging in or supporting the practice forced labour.
		Social Acceptance - Our Performance
		As of December 31, 2020, forced labour was not at a significant risk for any of our operations or high-risk suppliers.
	s	ecurity Practices
410-103	Management Approach Disclosures	Human Rights - Our Approach
410-1	Security personnel trained in human rights policies or procedures	Human Rights – Our Performance Company-wide data is currently unavailable.
	Ir	digenous Rights

411-103	Management Approach Disclosures		Human Rights – Our Approach Social Acceptance – Our Approach	
			Social Acceptance - Escobal Project	
411-1	Incidents of violations involving rights of Indigenous Peoples		Human Rights - Our Performance	
G4-MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities		Human Rights – Our Performance Social Acceptance – Our Performance	
		EM-MM-210a.1: Percentage of (1) proved and (2) probable reserves in or near areas of conflict		This data is not currently available. We have started applying the World Gold Council Conflict Free Standard. We assessed the location of our mines against the Heidelberg Institute's Conflict Barometer and our own country risk reports. We identified our Mexican operations as being located in conflict-affected regions and identified our Guatemala operations as also being at higher risk.
		EM-MM-210a.2: Percentage of (1) proved and (2) probable reserves in or near indig- enous land	Human Rights – Our Performance	Our Timmins operation is located 100% in or near indigenous land. Data is not available to calculate this requirement for our Escobal mine and Navidad project. We have a deposit Loma La Plata as part of Navidad which is located near to Blancuntre indigenous community.
		EM-MM-210a.3: Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Human Rights – Our Performance Social Acceptance – Escobal Project	There were no audits conducted on the human rights policy during the reporting period, due to COVID-19.
		Local Communities		
413-103	Management Approach Disclosures		Human Rights – Our Approach	
			Managing Environmental Impacts	
			Social Acceptance - Our Approach	
			Socio-economic Contributions – Our Approach	

413-1	Operations with local community engagement, impact assessments, and develop-		Social Acceptance- Our Performance	
	ment programs		Socio-economic Contributions- Our Performance	
413-2	Operations with significant actual and potential negative impacts on local communities		All material topics disclosed in this report	
G4-MM6	Numbers and description of significant disputes relating to land use, customary rights of local communities, and indigenous people		Human Rights – Our Performance Social Acceptance – Our Performance	
G4-MM7	Grievance mechanisms used to resolve disputes relating to land use, customary rights of local communities, and indigenous people		Social Acceptance - Our Performance	
		SASB EM-MM-210b.1: Discussion of process to manage risks and opportunities associated with community rights and interests	Business Ethics – Our Performance Human Rights – Our Approach Social Acceptance – Our Performance	Instead of applying the International Finance Corporation framework, we are currently im- plementing the Towards Sustainable Mining performance system to drive sustainable performance and manage risk.
			Socio-economic Contributions – Our Performance	
		SASB EM-MM-210b.2: Number and duration (# of days) of non-technical production delays	GRI & SASB Data Tables Social Acceptance – Escobal Project	
		Artisanal and Small-Scale	Mining	
G4-MM8	Number and percentage of company operating sites where artisanal and small-scale mining takes place on, or adjacent to, the site		Human Rights – Our Performance	
		Relocation		
G4-MM9	Sites where resettlement took place, the number of households resettled in each, and how their livelihoods were affected in the process			We did not undertake any community reset- tlements in 2020
		Closure Planning		
G4-MM10	Number and percentage of operations with closure plans		Annual Report	
		l .	Mine Closure – Our Performance	l .

FORWARD-LOOKING STATEMENTS

This document contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995, and "forward-looking information" within the meaning of applicable Canadian provincial securities laws. All statements, other than statements of historical fact, are forward-looking statements or forward-looking information. Forward-looking statements or information in this document relate to, among other things: whether our approach to sustainability will be successful, and whether we will be able to achieve our goals and objectives related to, among other things, sustainable development, safety, social performance, stakeholder engagement and relationships, diversity, environmental and tailings facility management, and mitigation of climate change (including with respect to green house gas emissions and water management); the ongoing impact of COVID-19 on our operations and other activities and our ability to manage the impacts of the pandemic should the situation continue indefinitely or change; our ability to ensure that that third parties adhere to our policies and/or meet our expectations and our ability to enforce the same; that our compliance, safety, environmental and other risk management programs will continue to be effective, or that any of our programs will be as effective as anticipated at eliminating risks related to our business; the duration and effect of the license suspensions and road blocks relating to the Escobal mine, as well as the constitutional court-mandated ILO 169 consultation process in Guatemala, and the timing and successful completion thereof; our future expectations with respect to climate and the environment, and the potential future impacts on our mines and other activities, including as it relates to water availability and usage.

These forward-looking statements and information reflect the current views of Pan American Silver with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by Pan American Silver, are inherently subject to significant operational, business, economic and regulatory uncertainties and contingencies, and such uncertainty generally increases with longer-term forecasts and outlook. These assumptions include: COVID-19 is managed and the duration and extent of the coronavirus pandemic is minimized or not long-term; assumptions related to the global supply of COVID-19 vaccines and the roll-out in each country, and the effectiveness and results of any vaccines, the lessening or increase in pandemic-related restrictions and impacts, and the anticipated rate and timing for the same; future changes in the environment and climate that may be unanticipated and the impacts on our business, including with respect to water availability and usage; currency exchange rates remaining as estimated; availability of funds for Pan American Silver's projects and future cash requirements; capital, decommissioning and reclamation estimates; prices for energy inputs, labour, materials, supplies and regulatory approvals for our operations are received in a timely manner; our ability to secure and maintain title and ownership to properties and the surface rights necessary for our operations and activities; and our ability to comply with environmental, health and safety, and other laws. The foregoing list of assumptions is not exhaustive.

Forward-looking statements and information involve many known and unknown risks, uncertainties and other factors that could cause actual results or performance to be materially different from the results or performance that are or may be expressed or implied by such forward-looking statements or information, including, but not limited to, factors, such as: the duration and effects of COVID-19 and any other pandemics on our operations and workforce; metal price fluctuations, fluctuation in the costs of energy, labour, materials and other inputs, fluctuations in currency markets and exchange rates, operational risks and hazards inherent with the business of mining (including environmental accidents and hazards, industrial accidents, and severe weather events); risks relating to the credit worthiness, financial condition or business practices of suppliers, refiners and other parties with whom Pan American Silver does business; inadequate insurance, or inability to obtain insurance, to cover these risks and hazards; employee relationships with, and claims by, local communities and Indigenous peoples; our ability to obtain all necessary permits, licenses and regulatory approvals in a timely manner; changes in laws, regulations and government practices, as well as other legal or economic developments, in the jurisdictions where we may carry on business, including legal restrictions relating to mining; risks relating to the constitutional court-mandated ILO 169 consultation process in Guatemala; and those factors identified under the heading "Risks Related to Our Business" in Pan American Silver's most recent Form 40-F and Annual Information Form filed with the U.S. Securities and Exchange Commission and with Canadian provincial securities regulatory authorities, respectively. Pan American Silver has attempted to identify important factors, but there may be other factors that cause results not to be as anticipated, estimated, intended or described. Investors are cautioned against attributing undue certainty or reliance on forward-looking statements and information. Pan American Silver does not intend, nor assume, any obligation to update or revise forward-looking statements and information except to the extent required by applicable law.

