

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

Total number of employees and contractors ¹	Employees ²								Contractors			Total workforce	
	Administration		Geology		Engineering		Labour		Total Employees	Fixed ³	Temporal ⁴		Total Contractors
	Male	Female	Male	Female	Male	Female	Male	Female					
Corporate Office	24	22	6	0	13	1	0	0	66	3	0	3	69
Canada ⁵	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
Mexico ⁵	98	64	23	5	277	20	1,189	74	1,750	933	831	1,764	3,514
Guatemala ⁵	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
Argentina ⁵	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, eg. 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 employees and contractors by region ¹	Pan American Silver Employees					Contractors			
	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 Office ⁵	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 precipitation 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.

2021 GOALS

	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Moroccocha	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% through 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).
	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.
Energy & Emissions									
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 reforest 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 Totorá 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

Mines	Community Investment (\$US) ¹						TOTAL
	Education	Health	Economic Development	Charitable expenses	Infrastructure	Others ²	
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 Pan American Silver - Budget Execution^{1; 2}

Countries	Mines/Office	Executed (\$US)
Peru	Shahuindo	247,350
	La Arena	185,513
	Huaron	179,381
	Morococha	92,756
Mexico	La Colorada	33,129
	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		
UNICEF ¹	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 Engineering - 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 Cape 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 Million)	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 suppliers ¹	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 organization¹

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	Total
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

(GJ)	2020 Total	2019 Total	2019 Silver Segment ²	2018
Diesel	3,651,457	4,131,221	2,414,823	2,249,112
Gasoline/Nafta	47,151	51,548	48,468	50,855
Coal	95	198	198	260
Liquified Petroleum Gas, LPG	148,535	237,784	15,348	17,643
Compressed Natural Gas	43,273	-	-	-
Ammonium Nitrate, ANFO	25,844	31,073	26,350	25,945
Emulsion	28,360	40,757	5,781	4,130
Electricity	2,048,170	2,179,896	1,304,007	1,182,125
Total	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.

(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.

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%

GRI 303-4 Water discharge^{1,2,3}

(m3)	Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Discharged to surface water that does not require treatment	-	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.

(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.

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	2,910	1,691	1,621

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

GHG Emissions

GRI 305-1 Direct greenhouse gas (Scope 1) GHG emissions

GRI 305-2 Energy indirect (Scope 2) GHG emissions

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

(tonnes of CO ₂ -eq)		Timmins	Dolores	La Colorada	Shahuindo	La Arena	Huaron	Morococha	San Vicente	Manantial Espejo	Total
Direct (Scope 1) GHG emissions ¹	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
	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.

(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.

(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 CO ₂ -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) 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 Morococho 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 Morococho 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.	Output Based Pricing System (Federal) Emissions Performance Standard (Provincial)	Zacatecas Eco-tax
List the emission-limiting regulations covering site's Scope 1 emissions		
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

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

(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 accordance 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
<30	Men	38 28.79%	113 42.32%	17 23.29%	5 20.83%	4 20.00%	7 31.82%	2 18.18%	2 18.18%	28 46.67%	6 33.33%	222 34.80%
	Women	8 6.06%	21 7.87%	17 23.29%	3 12.50%	1 5.00%	3 13.64%	2 18.18%	1 9.09%	1 1.67%	1 5.56%	58 10.28%
Between 30 and 50	Men	51 38.64%	119 44.57%	23 31.51%	16 66.67%	14 70.00%	7 31.82%	2 18.18%	6 54.55%	26 43.33%	9 50.00%	267 41.85%
	Women	16 12.12%	9 3.37%	12 16.44%	0 0.00%	0 0.00%	4 18.18%	0 0.00%	1 9.09%	2 3.33%	1 5.56%	51 7.99%
>50	Men	19 14.39%	5 1.87%	3 4.11%	0 0.00%	1 5.00%	1 4.55%	5 45.45%	1 9.09%	3 5.00%	1 5.56%	39 6.11%
	Women	0 0.00%	0 0.00%	1 1.37%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 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
<30	Men	22 3.41%	32 3.78%	13 1.59%	2 0.34%	4 0.66%	1 0.11%	7 0.87%	0 0.00%	6 0.88%	3 1.85%	90 1.35%
	Women	3 0.47%	8 0.95%	5 0.61%	0 0.00%	1 0.16%	1 0.11%	3 0.37%	0 0.00%	1 0.15%	0 0.00%	22 0.28%
Between 30 and 50	Men	53 8.22%	58 6.86%	19 2.32%	28 4.77%	24 3.95%	14 1.55%	29 3.60%	0 0.00%	19 2.78%	9 5.56%	253 3.96%
	Women	9 1.40%	5 0.59%	3 0.37%	2 0.34%	1 0.16%	3 0.33%	4 0.50%	0 0.00%	2 0.29%	0 0.00%	29 0.40%
>50	Men	24 3.72%	8 0.95%	31 3.79%	2 0.34%	5 0.82%	6 0.66%	30 3.73%	0 0.00%	0 0.00%	1 0.62%	107 1.46%
	Women	4 0.62%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	4 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 operations 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 employees per gender and age group	Employees ¹									
	Male				Total male	Female				Total female
	< 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%
Total²	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 per gender and age group ¹	Contractors ²									
	Male				Total male	Female				Total female
	< 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%
Guatemala ⁴	38%	36%	2%	1%	77%	15%	7%	1%	0%	23%
Bolivia	45%	45%	2%	0%	92%	5%	3%	1%	0%	8%
Argentina ⁴	23%	61%	4%	1%	90%	5%	5%	0%	1%	10%
Total³	26%	59%	5%	0%	90%	5%	5%	0%	0%	10%

(1) Information currently not available for Timmins operation in Canada.

(2) The percentages by age and gender in each country and corporate uses the total number of contractors per country and per corporate.

(3) The total percentages per contractors' gender and age group uses the total number of contractors in the company.

(4) Includes Escobal, Alamo Dorado and Navidad.

Percentage of management type per gender	Senior Manager ¹		Manager ²		Superintendent/Assistant Manager ³		Supervisors ⁴	
	Male	Female	Male	Female	Male	Female	Male	Female
Corporate Office ⁵	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 directly 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 men^{1;2}

	Senior Manager ³	Manager ⁴	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 directly 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.