

VOLCAN





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# DISCLAIMER (103-1)

#### **"THIS DOCUMENT CONTAINS ACCURATE AND SUFFICIENT INFORMATION ABOUT VOLCAN COMPAÑÍA MINERA S.A.A.'S BUSINESS ACTIVITIES IN 2019. REGARDLESS OF THE ISSUER'S** LIABILITY, THE UNDERSIGNED ARE RESPONSIBLE FOR THE CONTENT HEREIN, IN ACCORDANCE WITH APPLICABLE LAWS".

Lima, July 16, 2020



José Picasso Salinas Chairman of the Board

# SUSTAINABILITY **REPORT**

#### Juan Ignacio Rosado Gómez de la Torre Chief Executive Officer

# LETTER TO THE SHAREHOLDERS

#### **Dear Shareholders:**

In 2019, the repercussions of trade negotiations between the United States and China rippled across the world's economic activities. A truce reached in December in the form of a preliminary agreement prevented further escalation of the conflict, but the world has yet to return to its original state. Meanwhile, the Brexit process–decided by the United Kingdom in a referendum held in 2016, and to take place originally in March 2019–was postponed three times after failing to reach a deal on the conditions for leaving the bloc.

Affected by the trade tensions between the United States and China, global economy grew by 3.0% in 2019, lower than the 3.6% recorded the previous year. In line with this, China's GDP grew 6.0%, the lowest growth rate in the last 30 years; the United States grew 2.2%, a figure lower than the 2.9% recorded in 2018. The Eurozone's GDP slowed down from 1.9% in 2018 to 1.0% in 2019, further affected by the uncertainty surrounding the Brexit process.

According to the figures released by the European Central Bank, this third consecutive year of poor economic performance by the Eurozone is largely due to the political instability across Europe.

In Latin America, the economy grew by 0.1% owing to a complex political and social environment marked by several protests throughout 2019: Demonstrations in Venezuela started after Maduro was reelected and opposition leader Juan Guaidó declared himself interim president; in Ecuador, people rose against the decision to end fuel subsidies; in Chile (GDP +1%), a subway fare increase sparked a social crisis that turned into a protest to demand a fairer economic model; in Colombia (GDP +3.2%), people rose against the social and economic policies of president Iván Duque; and, in Bolivia (GDP +3.2%), the population opposed the reelection of president Evo Morales, who resigned and sought asylum in Mexico and later in Argentina. Meanwhile, in Argentina (GDP +2.7%), the presidential elections were won by Alberto Fernandez, a Kirchner-supporter and opposition candidate who ran against Macri, the former right-wing president. These demonstrations

# SUSTAINABILITY REPORT

across Latin America expressed the dissatisfaction of the general population, and mostly demanded better social conditions. We should take heed of the discontent in neighbor countries. The many economic and cultural aspects we share in common might lead to radical political and economic stances that already have a history of being detrimental to the world.

In 2019, the Peruvian gross domestic product grew by 2.3%, the lowest growth rate recorded in the last 10 years. The slowdown is explained both by the decreased dynamism of domestic expenditure and lower exports in line with global deceleration.

The national political scenario in 2019 was also marked by several important events. On January 8, 2019, under pressure for removing prosecutors of the Lava Jato special team, Attorney General Pedro Chavarry resigned from his position, and the prosecutors were reinstated. Subsequently, the Lava Jato special team executed a plea bargain with Brazilian company Odebrecht, wherein the company agreed to pay civil damages in the amount of 610 million Peruvian soles. Under this agreement, the awarded whistleblowers agreed to provide the Attorney General's Office with statements regarding their participation in the corruption scheme and the bribes paid to officials and politicians in order to win the tender processes and concessions.

In view of this, the Lava Jato special team recommended in 2019 to provisionally arrest several former presidents and public officials who allegedly favored the Odebrecht company.

During the Independence Day speech of July 28, President of the Republic Martín Vizcarra addressed the Congress and made a proposal to bring Election Day forward to April 2020 and put an end to the political confrontation between the Legislative and the Executive Branches. However, through majority of votes, the Congress decided to dismiss the initiative. Subsequently, the Congress attempted to immediately elect the new magistrates of the Constitutional Court, prompting the former Prime Minister Salvador del Solar to call for a vote of confidence. This request aimed at modifying the procedure to elect the members of such constitutional body, and to address the matter before the Congress elected the new members. However, the Congress initiated the process to elect the Constitutional Court's new magistrates. In view of this, President Martín Vizcarra decided to dissolve the Congress on the grounds that the Legislative Branch had denied the vote of confidence when the voting process was disregarded. He then called for elections on January 26, 2020. Since September, while the Congress was closed, President Martín Vizcarra legislated through urgency decrees.

This political turmoil affected internal demand, where the expansion of private consumption slowed down due to the reduced growth of formal employment and the deterioration of the consumers' confidence. Moreover, public investment shrunk due to the lack of progress in budget execution caused by the change of authorities at the regional and local level. On the other hand, public consumption increased from a 0.8% growth in 2018 to 2.0% in 2019, while private investment remained at the same level as in the previous year (4.2%)..

Results per sector showed that metal mining shrunk for the second consecutive year (1.7% in 2018 and -1.3% in 2019), as a consequence of reduced gold production, mainly at Barrick and Buenaventura, lower zinc production at several companies, and reduced iron production. Growth in fisheries slowed down to 18.6% due to lower volumes of anchovy catches. Nonprimary sectors also saw a deceleration, from 4.2% in 2018 to 3.2% in 2019, due to lower dynamism of the manufacturing and construction fields.

Metal prices showed a significant drop of zinc and lead prices. This was mainly due to the decreased demand and increased supply. Moreover, significant price volatility was observed, as a consequence of the uncertainty and speculation caused by the trade war between the United States and China.

The zinc price decreased by 8.7%, from 2,511 USD/MT at year-end 2018 to 2,293 USD/MT at year-end 2019. Similarly, lead price decreased by 4.3%, from 2,009 USD/ MT at year-end 2018 to 1,924 USD/MT at year-end 2019. Meanwhile, copper increased by 3.2% to 6,156 USD/MT; silver increased by 16.7% to 18.05 USD/oz and gold by 19% to 1,523 USD/oz.

The lowest zinc price was recorded in August and December 2019 at 2,275 USD/MT, while lead dropped to 1,817 USD/MT. A significant increase in silver prices was observed during September 2019, which reached 18.17 USD/oz; and gold, which amounted to 1,510 USD/oz.

According to the Fraser Institute's annual ranking, which we have monitored annually, in 2019 Peru fell ten positions in the ranking of attractiveness for mining investment, ranking 24th out of 76 evaluated jurisdictions. However, this annual ranking takes two aspects into account: geological potential and political perception. In geological potential, Peru ranked 12, four positions below 2018. In terms of perception of public and political practices related to the sector, Peru ranked 45th-eight positions below 2018-and it was outranked by Brazil, Argentina, Chile, Botswana, Namibia, among others. We need to place greater emphasis on promoting government policies to take advantage of Peru's mining potential, facilitate investments, and guarantee the start-up of important projects that continue to be stalled, including Tía María (Árequipa), Mina Justa (Ica), Corani (Puno), Cuajone (Moquegua), Quellaveco (Moguegua), Conga (Cajamarca), Río Blanco (Piura), Galeno (Cajamarca), Michiquillay (Cajamarca), La Granja (Cajamarca), among others. Unfortunately, we must mention the case of Minera Las Bambas, permanently affected by social conflict and extremist leftist political interference which have gone so far as to halt operations. It is also important to mention the permanent blockage to the transit of vehicles carrying minerals to the Matarani port (Peruvian Southern Corridor), which represents approximately 30% of Peru's copper production.

The mining sector currently represents 9% of the country's GDP and 61% of total exports. This requires firmer public policies to protect and promote this sector.

As we said years ago, it is our responsibility to stimulate the country's development, since opportunities don't come about every day, and we must remember that we have to compete around the world to attract new investments that ultimately go to countries offering the best conditions. We have observed that neighboring countries without a tradition of mining such as Ecuador, Colombia, Brazil and Argentina, are beginning to position themselves better to attract investors who will take advantage of their mining potential.

It is also important to reiterate that excessive pressure in terms of taxes and labor, environmental, and social issues have limited the opportunities for developing the major potential of the country's mining industry. This, in addition to the damage caused by the Law of Prior Consultation and inefficient use of mining royalties, which should be distributed more efficiently in line with the needs of each region, has resulted in social conflicts



# SUSTAINABILITY REPORT

that have yet to be resolved. The result is delayed private investment and higher costs faced by local mining companies. The Executive Branch has not taken any step towards any reform to reduce the excessive bureaucratic procedures that are currently required of the mining sector for exploration and project start-up, which are a setback to investment in the country.

In 2019, Volcan's production reached 239,000 FMT of zinc and 15.6 million ounces of silver. These represent decreases of 0.8% and 8.7%, respectively, as compared to 2018. Lead production grew by 4.6% and reached 49,000 FMT. This is mainly explained by suspended production at some operating units to improve safety standards. At the oxides plant, ore with lower silver

grade, but higher gold grade was treated (on-site oxides).

It is important to mention that the Company continues to focus on cost control and reduction in all operating units. As a result, unit cost in 2019 was 45.2 USD/MT, 3.1% lower than the 46.6 USD/MT seen in 2018.

Investment in our operating units increased 2.6%, from USD 175 million in 2018 to USD 180 million in 2019. This increase is mainly due to investments in mine infrastructure. Investments in growth projects grew from USD 2.8 million to USD 7.8 million, while investments in regional explorations increased from USD 3.5 million to USD 4.2 million, and decreased in the energy business from USD 3.8 million to USD 2.5 million. In 2019, total investment amounted to USD 194 million, a 4.9% increase as compared to USD 185 million in 2018.

In 2019, net sales totaled USD 744 million, 4.1% lower than the USD 775 million seen in 2018. The Company's gross margin decreased from 31% in 2018 to 20% in 2019, as a consequence of lower metal prices, which were partially offset by hedge results, lower sales adjustments and negative final settlements (USD -56.4 million in 2018 vs USD 10.5 million in 2019). EBITDA rose to USD 244 million, as compared to USD 289 million in 2018; while net loss before exceptional items totaled USD 22 million and the final annual net loss totaled USD 70 million in the Statement of Financial Position of Volcan Compañía Minera and subsidiaries.

Volcan holds 354,000 hectares of mining concessions for the development of exploration activities and mining projects. An estimate of total reserves at Volcan was made using best industry practices and international standards established in the JORC CODE and also adapted to guidelines established by the technical area of Glencore (Glencore Technical Services).

In 2019, as part of the brownfield mining development strategy, a diamond drilling program of 6,735 meters extracted first-order blanks from Andaychagua, Ticlio and San Cristóbal mines.

Volcan also carried out explorations at four projects already underway: Romina, Carhuacayán, Palma and Zoraida. The diamond drilling program consisted of nearly 54,294 meters. At Romina, significant zinc, lead and silver mineralization has been defined, and extensive explorations were carried out in the Puagjanca body. In the surrounding area, mineralization was defined in the Andrea, Adriana and Esperanza bodies and mantles. At Carhuacayán, significant mineralization has been defined in the La Tapada body with zinc, lead and silver. Both projects, Romina and Carhuacayán, will produce ore to be treated in the Alpamarca plant, estimated to begin production in 2023. At Palma, a greenfield project, a significant mineralization of zinc, lead and silver has been defined; massive geological potential was observed along a 7 km corridor in the Kenita, Palma, Santa Lidia and Palmeron areas, which are sufficient to begin a mining project separate from the other units.

Regarding our corporate policy on safety, in 2019, emphasis was placed on controlling the following fatal hazard protocols: rock mass fault, working at heights, energy isolation, electrical safety and mobile equipment.

Even though we reduced the number of disabling accidents by 27% over 2018, we are deeply sorry to report an accident with a fatal outcome. Investigations were carried out to determine the causes of the incident and corrective measures were taken with an emphasis on supervision, training, and evaluation to strengthen oversight.

At year-end 2019, Volcan's energy business consists of 13 hydroelectric plants, 350 km of transmission lines and 26 electrical substations. Energy generation in 2019 was 387 GWh, reflecting a 26% increase over the prior year, explained by the restart of operations at the Rucuy hydroelectric plant on June 1, 2019. The energy generated by this plant during the year totaled 68 GWh.

Energy consumption rose to 756 GWh, up 6% over the previous year. This slight increase is mainly explained by the 10% growth in treated ore volumes. Energy generation represented 51% of total energy consumption.

With respect to Volcan corporate social responsibility and care for its surroundings, the Company seeks to engage in dialog and strengthen its relations with community leaders, key authorities and social organizations to generate a positive impact on the development of the communities within its direct sphere of influence. Toward that end, in 2019 the Company invested over USD 5

# INVESTMENTS TOTALED USD IN 2019. USD 191.5 MM MADE IN THE MINING UNITS AND USD 2.5 MM IN ENERGY BUSINESS INVESTMENTS



million in agreements with 60 communities in their area of influence. Through the Public Works and Tax Credit Program, the Company finalized the New Chancay Food Market Project, with more than 650 stands and a PEN 22 million investment. This is a very important project for the city of Chancay, where we are building the new Chancay port, and it will benefit 85 thousand people.

In January 2019, in Davos (Switzerland), the Company signed agreements with the Chinese company Cosco Shipping Ports Limited (CSPL) for the development of the Chancay port. The event was attended by the Vice-President of Peru, Mrs. Mercedes Araoz, and the highest authorities of the Chinese government. Also in attendance were the Chairman of the Board of Cosco Shipping Group, Mr. Hu Lirong; the Chairman of the Board of Cosco Shipping Ports Limited, Mr. Zhang Wei; and Managing Director, Mr. Zhang Dayu. This project is located 80 km north of Lima. In May 2019, in a ceremony held in the Government Palace, attended by President Martin Vizcarra Cornejo, the Minister of Transports and Communications, Ana Jara, and other ministers of the State; the Chairman of the Board of Cosco Shipping Group, Mr. Hu Lirong; and the Chairman of the Board of Cosco Shipping Port Ltd., Mr. Zhang Wei; Volcan executed the definitive partnership agreement whereby CSPL joined Terminales Portuarios Chancay (TPCH) as shareholder, owning 60% of representative shares of the capital stock. Volcan will maintain 40% shares in TPCH.

CSPL is a subsidiary of Chinese company Cosco Shipping Corporation Ltd., the largest transnational company in the world in the integrated port, shipping and shipyard business, with USD 130 billion in assets. It holds first place globally in container management, with 110 million TEUs per year, and more than 60 ports operating in Asia, America, Europe and the Middle East. This group also owns the Company COSCO SHIPPING LINE, the largest shipping company in the world, with 1,300 vessels, forming the Ocean Alliance together with Evergreen, CMA-CMG and OOCL shipping companies (40% of total global freight).

The first stage of construction of the Chancay port, with an estimated investment of USD 1.3 billion includes



the entrance complex, the underground viaduct tunnel and port operating zone, which also includes four docks: the container terminal with two docks and the bulk loading, general loading and mobile loading terminal with two more docks. This amount of USD 1.3 billion includes the contribution already made by Volcan and the CSPL contribution of USD 225 million for 60% of shares. The rest of the investment will be financed by debt. The process is well underway and it will allow the construction of the Port's main facilities.

The development of the Chancay port represents a major opportunity for economic development in Peru through a new network of connectivity made up of maritime and terrestrial economic trade routes between China and the rest of the world. The exceptional characteristics of the Chancay port will enable this to become the integrated port and logistical hub in the Pacific region in the medium term.

The construction of the Chancay port represents a major opportunity for the economic development of Peru through a new connectivity network made up of maritime and terrestrial economic routes between China and the rest of the world. Due to its outstanding features, it is expected to become the integrated port and logistical hub of the Pacific region in the medium term.

# SUSTAINABILITY REPORT

Finally, I would like to take this opportunity, on behalf of our Board of Directors, to thank all of our employees, executives and partners for their hard work, dedication, and commitment to the Company's objectives. It's also important to mention that we now have a history of seven decades of investment in mining development in our country's central highlands, with a commitment to sustainable growth in harmony with surrounding communities and the environment. This hasn't been an easy undertaking, however. There have been numerous challenges, and thanks to the hard work of our founders and those who have enabled the Company to continue to grow-workers, engineers, executives and directors-we have successfully overcome them.

Finally, I would like to thank you, our shareholders, for your confidence, support and interest in Volcan's activities.

**José Picasso Salinas** Chairman of the Board of Directors

# IMPORTANT INDICATORS AND SIGNIFICANT CHANGES IN 2019





EBITDA:



**FINANCIAL** 

# (102-7) Net sales: **USD 744 MM**

In 2019, the implementation of the environmental management system reached 71% completion, exceeding the result obtained in 2018 by 5%,.



**The Critical Environmental Risks**, standards were updated and disseminated in the second edition of Volcan's "Green Book".

In 2019, the environmental-legal audit was performed by an external consulting firm and the results **exceeded** those obtained in 2018 by 3%.

+3%

71% of Critical Environmental Risks (RCA) were implemented, exceeding the result obtained in 2018 by 5%. +5%

**USD -22 MM** Net loss: **USD -70 MM** 

Net loss before exceptional items:

**USD 244 MM** 

Total assets: **USD 2,165 MM** 





# **ENVIRONMENTAL**

**3,090** direct employees: 2,908 men and 182 women. (102-7, 102-8)



**7,437** employees with specialized companies.

**39%** of our employees are union members (workers and employees). (102-8)







**79** subcontractors.

### Community investment: **USD 5.4 MM**

The partnership between Volcan and Enseña Perú had a direct . impact on more than 830 students at the Yauli, Chungar and Cerro units.

Volcan ranked **third among mining companies** cfor projects awarded under the Public Works Tax Credit Program (Obras por Impuestos)..

#### SIGNIFICANT CHANGES (102-10)

#### **OPERATIONAL ASPECTS**

There have been no changes in the location of Volcan operations or its suppliers during 2019. The structure of the supply chain and aspects related to selection or termination of contracts have remained the same as the previous year.

#### **CHANCAY PORT**

In 2019, the Company executed agreements with China's Cosco Shipping Ports Limited (CSPL) to build the Chancay Port. Through this agreement, Cosco Shipping will join Terminales Portuarios Chancay (TPCH) as a shareholder owning 60% of representative shares of the capital stock. Volcan will own the remaining 40% of TPCH capital stock.

CSPL is a subsidiary of Chinese company Cosco Shipping Corporation Ltd., the largest transnational company in the world in the integrated port, shipping and shipyard business; it holds first place globally in container management, with 110 million TEUs per year, and more than 60 ports operating in Asia, America, Europe and the Middle East. It is important to note that this group also owns COSCO SHIPPING LINE, the world's largest shipping company, forming the Ocean Alliance together with Evergreen, CMA-CMG and OOCL shipping companies.

The first stage of construction of the Chancay port with an estimate investment of USD 1.3 billion includes the entrance complex, the underground viaduct tunnel and port operating zone, which also includes the container terminal with two docks and the bulk loading, general loading and mobile loading terminal with two more docks. This amount includes the payment already made by Volcan and the USD 225 million paid by CSPL for a 60% share of the capital stock. The difference will be financed through a non-recourse loan and no further capital contributions will be needed.

The development of the Chancay port represents a major opportunity for economic development in Peru through a new network of connectivity made up of maritime and terrestrial economic trade routes between China and the rest of the world. The exceptional characteristics of the Chancay port will enable this to become the integrated port and logistical hub in the Pacific region in the medium term.

#### **RUCUY HYDROELECTRIC PLANT**

The Rucuy 20 MW hydroelectric plant (120 GWhyear) resumed operations in July 2019, following the completion of repairs to the penstock damaged in March 2017 as a consequence of mudslides caused by the coastal El Niño. The penstock no longer crosses over the hillslope but rather through it with a raise borer. The new design minimizes any future risk of rockslide.

#### **ASSET SALE**

In December 2019, Volcan executed an agreement to sell the shares held in Empresa Administradora Cerro S.A.C., Óxidos de Pasco S.A.C. and Remediadora Ambiental S.A.C. to Cerro de Pasco Resources Inc. from Canada. This agreement is still subject to certain conditions precedent to be met in 2020. Cerro de Pasco Resources Inc. is a Canadian company listed in the Canadian Securities Exchange and it has been present in Cerro de Pasco for several years. It holds the El Metalurgista concession in the district. The transaction stipulates an initial payment of USD 30 million, a 2% NSR on the concessions held by Administradora Cerro S.A.C., and a percentage of future Au and Ag sales of the Oxides Plant throughout its operation. It also establishes the obligation to sell 100% of the concentrates produced at Administradora Cerro S.A.C. concessions to Volcan. Finally, Cerro de Pasco Resources Inc. guarantees the continuity of the health, safety, environment and social projection programs currently executed by Volcan in the area.

#### **CORPORATE ASPECTS**

In September 2019, Mrs. Irene Letts Colmenares de De Romaña resigned from her position as director of Volcan Compañía Minera S.A.A. and Compañía Minera Chungar S.A.C.. In November 2019, Ricardo Revoredo Luna was appointed director of Volcan Compañía Minera S.A.A. and Compañía Minera Chungar S.A.C. as replacement for Mrs. Irene Letts Colmenares de De Romaña. (102-7)



# THE FIRST STAGE OF CONSTRUCTION OF THE CHANCAY PORT STIPULATES AN ESTIMATE INVESTMENT OF BILLION





### **4.1** A HISTORY OF COMMITMENT

Volcan is a Peruvian mineral exploration, production, and processing company which began operations in 1943. In 2019, Volcan celebrated 76 years since it began mining operations. (**102-1**)

Through the constant hard work and dedication of its directors, management and employees, it has become one of the largest producers of silver, zinc, and lead in Peru and the world.

The Company sells concentrates of zinc, lead, copper and silver, as well as doré bars, in the domestic and international markets. In addition, Volcan generates electric power through hydroelectric plants for its own supply and also sells power to several companies located near its operations. (102-2)



# SUSTAINABILITY REPORT

Its activities are classified under ISIC category 1320 (mining of non-ferrous metal ores) and ISIC 3510 (electric power generation, transmission and distribution). (102-2)

The Company, which resulted from a merger between Volcan Compañía Minera S.A. and Empresa Minera Mahr Túnel S.A., was incorporated on February 1, 1998, in a public deed executed before Notary Public Dr. Abraham Velarde Álvarez. Volcan is registered in the Public Mining Registry under Entry 1, Record 41074, and in Record 11363057 of the Registry of Legal Entities of Lima. (102-5)



# SUSTAINABIL 2019

Rucuy hydroelectric **plant began operations**. Volcan **acquired** the Romina polymetallic project from Milpo.

The Company signed agreements with the Chinese company Cosco Shipping Ports Limited (CSPL) for the development of the Chancay port

2019

# 2016

Glencore **acquired** 55% of Class A common shares in the Public Tender Offer

2017

## 4.2 CORPORATE STRUCTURE 2019(102-18/102-45)

#### 99.99% 99.99% 99.99% 99.99% 99.90% ÓXIDOS EMPRESA CORPORACIÓN COMPAÑÍA INDUSTRIAL HIDROELÉCTRICA ROQUEL LOGÍSTICA CHANCAY S.A.C. LIMITADA DE HUACHO S.A. HUANCHOR DE PASCO MINERA GLOBAL PARAGSHA S.A.C. S.A.C. S.A.C. S.A.C. 98.38% 80.00% 4.72% 95.28% **EMPRESA DE** MINERA Compañía GENERACIÓN AURÍFERA MINERA TORUNA S.A.C. CHUNGAR S.A.C. **ELÉCTRICA RÍO** BAÑOS S.A.C. 99.99% 49.10% 50.90% REMEDIADORA **EMPRESA** AMBIENTAL EXPLOTADORA DE S.A.C. VINCHOS S.A.C. 10.95% 47.01% 42.04% EMPRESA ADMINISTRADORA CERRO S.A.C. 1.45% 4.46% 94.09% 99.98% Compañía Compañía HIDROELÉCTRICA MINERA TINGO S.A. VICHAYCOCHA S.A.C. 10.95% 2.54% 86.51% MINERA SAN SEBASTIÁN

AMC S.R.L.

**VOLCAN COMPAÑÍA MINERA S.A.A.** 

# 2019

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### **4.3** OUR OPERATIONS

Volcan carries out its activities in Peru, with operations in the regions of Lima, Pasco, and Junín. Its business address is Manuel Olguín N° 373, Santiago de Surco, Lima. The Company has five business units in Peru's Central Highlands: Yauli, Chungar, Cerro de Pasco, Alpamarca, and Óxidos de Pasco. Altogether, it has six underground mines,

one open pit, seven concentrator plants, and a lixiviation plant. (102-3) (102-4) (102-7)

In addition, the Company owns 13 hydroelectric plants near its mining operations.



	MINES			PLANTS	
UNIT	NAME	TYPE	STATUS	NAME	ТҮРЕ
	San Cristóbal	underground	active	Victoria	concentrator
	Andaychagua	underground	active	Mahr Túnel	concentrator
YAULI	Ticlio	underground	active	Andaychagua	concentrator
		underground	active		
	Carahuacra Norte	open pit	suspended		
	Animón	underground	active	Animón	concentrator
CHUNGAR	Islay	underground	active		
	Mina Subterránea	underground	suspended	Paragsha	concentrator
<b>CERRO DE PASCO</b>	Raúl Rojas	open pit	suspended	San Expedito	concentrator
	Vinchos	underground	suspended		
	Río Pallanga	underground	suspended	Alpamarca	concentrator
ALPAMARCA	Alpamarca	open pit	active		
ÓXIDOS DE PASCO	Stockpiles	stockpiles	active	Óxidos	leaching





#### MINING UNITS AND THEIR PRODUCTS (102-2)

UNIT	PRODUCT	FINE CONTENTS
	Zinc concentrate	Zinc, silver
YAULI	Lead concentrate Copper concentrate	Lead, silver
	Zinc concentrate	Copper, silver, gold
CHUNGAR	Bulk concentrate	Zinc, silver
CHUNGAR	Zinc concentrate	Lead, copper, silver
<b>CERRO DE</b>	Lead concentrate	Zinc, silver
PASCO	Zinc concentrate	Lead, silver
	Bulk concentrate	Zinc, silver
ALPAMARCA	Doré bars	Lead, copper, silver
ÓXIDOS DE PASCO	Doré bars	Silver, gold

#### LOCATION OF MINING UNITS (102-4)

UNIT	DEPARTAMENT	LOCATION
YAULI	Junin	170 km from the city of Lima
CHUNGAR	Pasco	219 km from the city of Lima
CERRO DE PASCO	Pasco	295 km from the city of Lima
ALPAMARCA	Junín	182 km from the city of Lima
ÓXIDOS DE PASCO	Pasco	295 km from the city of Lima

#### LOCATION OF HYDROELECTRIC PLANTS (102-4)

UNIT	DEPARTAMENTO	LOCATION
PH´s Chungar*	Junin	170 km from the city of Lima
PH´s Tingo	Lima/Pasco	130 km from the city of Lima
PH´s HuanPHor	Lima	110 km from the city of Lima
PH´s Rucuy	Lima	142 km from the city of Lima

\*10 hydroelectric plants: Baños I to V(5), Chicrin I to IV(4) and San José (1). Only PH San José is located in Pasco



# **4.4** OUR VALUE CHAIN

VALUE CHAIN



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MARGIN

### **4.5** WORKING WITH SOLID CORPORATE PRINCIPLES

Volcan is a mining company of Peruvian origin pursuing the maximization of shareholder value through operational excellence and the highest standards of workplace safety and environmental management, contributing to the development of its personnel and its community. (102-16)

By 2021, Volcan aspires to be one of the principal mining companies diversified in the production of base and precious metals, a leader in growth and operational excellence, acting in a socially responsible manner with a dedicated and highly qualified workforce.

#### **NEW CODE OF CONDUCT**

In January 2019, the Board of Directors approved Volcan's new code of conduct, not only with the purpose of defining standards to guarantee compliance with laws and regulations, but also to maintain and develop a compliance culture and ethical conduct within Volcan.

#### **CORPORATE PRACTICE**

The Corporate Practice is our governance framework that encompasses our corporate Values, code of conduct and corporate and operational policies. It represents our commitment to uphold good business practices, to apply Volcan's standards and policies to our activities and to meet applicable laws and external requirements. This includes the United Nations Global Compact and the membership requirements of the International Council on Mining & Metals (ICMM). It provides clear guidance on the societal, environmental and compliance standards we expect all people who work for Volcan to meet.



#### CORPORATE VALUES (102-16)



Our actions are aimed at mitigating all risks in order to guarantee the health and safety of our employees in day-to-day operations.



E F O re

Our conduct reflects an honest, just, ethical, and transparent attitude in all of our actions.



We are part of a larger corporate project in which we firmly believe and for which we give our best.





We strive to always meet the highest performance standards in our work to achieve outstanding results.



Our actions are aimed at creating harmonious relationships with our employees, communities, environment, customers, and shareholders. **(64-56)** 

#### **WORKING WITH INTEGRITY**

The Company has established a set of standards stipulated in corporate principles and values and in its Code of Ethics and Conduct, which contribute to professional development and to generating a workplace climate of integrity and honesty. These policies are followed by the employees, managers and directors of Volcan and its subcontractor companies.

The Company promotes full compliance with this code. If the employee is aware of any unethical behavior, they must report it to their manager or general auditor. They can also use the anonymous "Complaint Line", an anonymous communications channel that is open to every employee. (**102-17**)



#### CODE OF CONDUCT (102-16) (103-2)

The Code aims to ensure that each employee works at Volcan or the Group with integrity, observing the applicable laws and regulations, avoiding any personal advantage, and thus preventing the Company's interests from being affected in any way. An excerpt of the Code of Conduct is included below. The full document is available at www. volcan.com.pe

#### 1. Applying the Code of Conduct

TEveryone working for or providing services to Volcan, regardless of location or role, must comply with the Code and the Group's policies. The Code seeks to ensure that the aspirations embodied in our Values are reflected in our daily actions and decisions and in our corporate culture.

Lack of compliance with the requirements of the Code, relevant Volcan policies or the law, may result in disciplinary action, including termination of employment, and the contract of employees who provide services to the Group may be terminated.

#### 2. Health and Safety

The safety of our people is our number one priority. We believe that all fatalities, occupational diseases and injuries are preventable and that we must all take responsibility for maintaining a safe and healthy workplace.

We are committed to a strong safety culture that requires visible leadership from all levels of line management, a high level of engagement from employees and contractors and a focus on hazard identification, risk analysis and risk management. Our employees receive training that enables them to carry out their tasks safely and in accordance with our health and safety policies and procedures.

#### 3. Our people

Our people are fundamental to Volcan's success. We believe that a diverse workforce is essential for a successful business.

We treat our people fairly and with respect, and ensure

they have the opportunity to develop their careers to match their potential. We are committed to upholding the International Labour Organisation Declaration on Fundamental Principles and Rights at Work.

#### 4. Human Rights

We support and respect human rights in a manner consistent with the Universal Declaration of Human Rights. We uphold the dignity, fundamental freedoms and human rights of our employees, contractors and the communities in which we live and work, and others affected by the Company's activities. We ensure that human rights awareness is embedded in our internal risk assessment processes.

#### 5. Communities

We believe that our operations have a predominantly positive impact on the communities in which we operate. We aim to build lasting relationships with our neighbors. For this reason, we identify and address their concerns, and contribute to activities and programs designed to improve their quality of life.

#### 6. Environment

We are aware that our operations can have direct and indirect impacts on the environment. In everything we do, we seek to minimize any negative impact on the environment in accordance with the precautionary principle.

We conserve and protect environmental resources through a broad range of proactive initiatives, which include the efficient use of energy and water, minimizing waste, reducing emissions and protecting biodiversity.

#### 7. Taxes

Volcan is committed to full compliance with relevant laws and external and company reporting requirements, including those concerning disclosure to tax authorities and reporting on the tax payments that we make.

#### 8. Communications

We believe in the importance of maintaining active engagement and dialogue with stakeholders. We are

# SUSTAINABILITY REPORT

committed to communicating regularly, openly and accurately with our employees, contractors, customers, suppliers, local communities, and investors, as well as appropriate associations, governments and other stakeholders.

#### 9. Compliance

The Company is committed to operating in accordance with strong ethical principles. We expect everybody working for Volcan to take personal responsibility for ensuring that their conduct conforms to these principles.

Volcan will not knowingly assist any third party in breaching the law, or participate in any criminal, fraudulent or corrupt practice in any country. We seek to prevent such misconduct through training programs and strong leadership underpinned by internal policies, procedures and controls. This includes: Conflict of Interests, Bribery, Political Contributions and Activities, Trade Competition, Inside Information, Government Regulations, Money Laundering, Financing of Terrorism, etc.

#### 10. Quality and product safety

We have detailed management policies and programs that ensure our products meet regulatory requirements and our own quality standards and our customers' needs.

#### 11. Protecting and maintaining assets

Volcan is responsible for Group assets that are under its control. These assets include business opportunities, funds, property, proprietary information, and personal equipment (such as mobile devices, computers and access rights to IT infrastructure).

#### 12. Communications Channel

Volcan provides an anonymous open "complaint line" to all employees who may wish to submit anonymous grievances, complaints, issues or suggestions related to compliance across all aspects of the business.

### **4.6** PARTICIPATION IN ASSOCIATIONS AND ORGANIZATIONS (102-13)

- National Society of Mining, Petroleum and Energy: Active member.
- American Chamber of Commerce of Peru (AmCham): Member of the Sustainable Development Committee.
- Peruvian Foreign Trade Association (Comex).
- Enseña Perú (Teach Peru): : Member of Campeones por la Educación (Education Champions), a partnership among companies committed to education and whose goal is to close learning gaps in math and reading comprehension. (102-13)

### **4.7** AWARDS AND HONORS

#### AWARDS AND HONORS RECEIVED IN 2019

AWARD	INSTITUTION
Honorable mention in underground mining: Andaychagua Mine	Mining Safety Institute of Peru - ISEM
Honorable mention in underground mining: Ticlio Mine	Mining Safety Institute of Peru - ISEM
1st place: Yauli Laboratory	Minera Chinalco Round Robin Test – December 2019
2nd place: Yauli Laboratory	Minera Chinalco Round Robin Test – June 2019
3rd place: Chungar Laboratory	Minera Chinalco Round Robin Test – December 2019
(1) Cafet, has are used half with through a	iha nauturar

(1) Safety honors are rated halfway through the next year



# **4.8** 2019 OPERATING RESULTS

#### **MINE PRODUCTION**

In 2019, treated volumes increased by 9.1%, mainly due to greater ore volumes from the Cerro unit stockpiles being treated at the concentrator plants (+759 thousand MT).

Zinc production fell by 0.8%, copper by 3.6%, and silver by 8.6%, relative to 2018, while lead production increased by 4.6% and gold by 85.6%. The lower production of zinc, copper and silver is mainly explained by lower treated ore grades.

#### CONSOLIDATED MINING PRODUCTION (102-7)

CONSOLIDATED PRODUCTION	2018	2019	VAR %
Ore treatment (thousand MT)	8077	8809	9.1
Concentrator plants	7164	7898	10.2
Oxides plants	914	911	-0.3
Fines content			
Zinc (thousand MT)	241.1	239	-0.8
Lead (thousand MT)	47.2	49.4	4.6
Copper (thousand MT)	4.6	4.5	-3.6
Silver (million Oz)	17	15.6	-8.6
Gold (thousand Oz) Source : Volcan Cia. Minera	11.6	21.6	85.6

# SUSTAINABILITY REPORT

#### **ENERGY PRODUCTION**

In 2019, Volcan's 13 hydroelectric plants generated 387 GWh, which represents 51% of the Company's total energy consumption.

Chungar's 10 hydroelectric plants generated 151 GWh of power altogether, 39% of the Company's total consumption. Moreover, the Tingo hydroelectric plant generated 9 GWh, which was sold directly to the Company. Volcan purchased 596 GWh from the Sistema Eléctrico Interconectado Nacional (National Interconnected Electric System) in order to meet its total consumption demand in 2019.

The Huanchor hydroelectric plant produced 159 GWh. This power was sold to third parties. The Rucuy hydroelectric plant restarted commercial operations on June 1, 2019, following the successful implementation of the raiser borer that replaces part of the damaged penstock. The new design minimizes any future risk of rockslide.

ELECTRICITY BALANCE (GWH)	2018	2019	VAR %
Energy production	308	387	26
PH's Chungar	153	151	-1
PH's Tingo	9	9	-5
PH's Huanchor	146	159	9
PH's Rucuy	0	68	
Energy consumption	712	756	6
Energy purchase	550	596	8

#### VOLCAN ELECTRICITY BALANCE IN GWH (102-7)

Source : Volcan Cia. Minera

### **4**.9 **2019 FINANCIAL** RESULTS

#### INCOME STATEMENT (201-1)

INCOME STATEMENT (MM USD)	2018	2019	VAR %
Sales	775.1	743.6	-4.1
Sales cost	-534.1	-596.4	11.7
Gross profit	241.0	147.2	-38.9
Gross margin	31%	20%	-11 рр
Net Profit before exceptional items	30.3	-21.9	
Net margin	4%	-3%	-7 рр
Exceptional adjustments <sup>1</sup>	-0.9	-48.4	-
Net profit after except.	29.4	-70.3	

EBITDA <sup>2</sup>	288.8	244.1	-15.5
EBITDA margin	37%	33%	-4 рр

<sup>1</sup> In 2019, exceptional items were USD +18.3 MM in sales costs, USD -1.1 MM in administrative costs, USD -31.4 MM in other income (expenses) and USD -34.2 MM due to income taxes, totaling USD -48.4 MM.

<sup>2</sup> Does not consider exceptional adjustments Source: Volcan Cia. Minera

Volcan's main customers are domestic, accounting for 81% of sales value in 2019, followed by China, with 10%; South Korea, with 7%; and other countries, with 2%.. (**102-6**)

#### ENERGY SALES

In the energy sector, net sales totaled USD 10.8 million (102-7)

#### **ENERGY SALES**

ENERGY SALES (MM USD)	HUANCHOR	EGERBA	TINGO	TOTAL
Free Clients	5.3		0.3	5.6
Regulated Clients	1.1			1.1
Spot Market	0.3	2.2		2.5
Transmission	-	0.3	1.5	1.7
Total	6.6	2.4	1.8	10.8

#### **MINING SALES**

Volcan mining sales totaled USD 744 million in 2019, a 4% decrease compared to the previous year. (102-7)

#### DETAIL OF MINING SALES, BY METAL (201-1)

SALES (MMUSD)	2018	2019	VAR %
Zinc	488.6	421.4	-13.8
Lead	92.5	83.8	-9.3
Copper	16.3	13.9	-14.6
Silver	220.7	206.5	-6.4
Gold	13.4	28.5	112
Sales before adjustement	831.5	754.1	-9.3
Adjustments <sup>1</sup>	-56.4	-10.5	-81.3

<sup>1</sup> Adjustments: i) final settlements of shipments of previous periods, ii) adjustments related to open provisions (embedded derivative and sales adjustment), iii) hedge results. Source: Volcan Cia. Minera

#### PERCENTAGE OF SALES BY DESTINATION, 2019





# SUSTAINABILITY MANAGEMENT

### 5.1 **SUSTAINABLE** DEVELOPMENT **GOALS** (SDG)(102-12)

Volcan believes it is extremely important to promote harmonious relations with the communities in the area of influence of its operations. In order to prioritize Volcan interventions in communities within its area of direct influence, the Company has aligned its voluntary corporate social responsibility initiatives with the United Nations Sustainable Development Goals (SDG). In addition, to achieve its goals Volcan has forged partnerships with private entities, government agencies, and non-governmental organizations. Its social responsibility plans and actions are focused mainly on the

SDG TO WHICH WE CONTRIBUTED IN 2019:











following objectives:

All Public Works Tax Credits projects contribute to reduce poverty (SDG 1), develop infrastructure (SDG 9) and create partnerships for development (SDG 17). Since 2010, Volcan has invested PEN 108.5 million to finance 14 infrastructure and utilities project of great social impact. These education (SDG 4), water and sanitation (SDG 6), solid waste management and transport (SDG 11) projects, among others, benefit almost 500 thousand people and incorporate sustainability and innovation components and comprehensive solutions.

#### **ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING** FOR ALL AT ALL AGES

Volcan has committed to generating material and sustainable improvements in community health standards within its area of influence. Therefore, in alliance with Prisma, a non-governmental organization and strategic health partner, the Company has designed a project to identify the principal diseases in each community, monitor their evolution over time, and develop medical campaigns to address them.

#### **ENSURE INCLUSIVE AND EQUITABLE QUALITY** EDUCATION AND PROMOTE LIFELONG LEARNING **OPPORTUNITIES FOR ALL**

In 2019, Volcan continued its multi-annual partnership with Enseña Perú to incorporate teachers from their organization into various schools within the Company's area of influence. This produced immediate results through a direct impact in terms of academic performance improvement for more than 830 students in primary and secondary education. The intervention was focused on the Yauli, Chungar and Cerro units. In addition, the Company continued with the SENATI and CETEMIN comprehensive scholarship program, which directly benefits youths from communities near its operations.

#### **ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION** FOR ALL

Volcan has been executing projects under the Tax Works modality that have the objective of closing water and sanitation gaps in the communities. Likewise, it starts specific projects to help achieve this objective, for example, in 2019, as part of the agreement with the Community of Santa Catalina, approximately 250 meters of tracks and sidewalks were built with their respective water and drainage system through an approximate amount of USD 100,000.

#### **ENSURE ACCESS TO AFFORDABLE, RELIABLE,** SUSTAINABLE, AND MODERN ENERGY FOR ALL

Volcan owns hydroelectric plants and has chosen to invest in clean, renewable hydroelectric generation projects to supply its own operations and third parties. It has also invested in its own electricity transmission systems in an effort to better manage its cost structure, ensure greater availability of power for its mining operations, and contribute to reducing greenhouse gas emissions.

#### **BUILD RESILIENT INFRASTRUCTURE, PROMOTE** INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION, AND FOSTER INNOVATION

In 2019, the "Food Market of Chancay" project was completed and handed over in an event attended by the main local authorities. The project required a PEN 22 million investment and it will enable 85,000 people to buy their products in a cleaner environment. This project will have a significant social impact and will foster the area's growth and economic development, improving the quality of life of Chancay residents.

Moreover, Volcan started the construction of the Chancay port, where it maintains 40% of shares. The first construction stage will require an estimate investment of USD 1.3 billion and includes the entrance complex, the underground viaduct tunnel and port operating zone, the container terminal with two docks and the bulk loading, general loading and mobile loading terminal with two more docks.

The development of the Chancay port represents a major opportunity for economic development in Peru through a new network of connectivity made up of maritime and terrestrial economic trade routes between China and the rest of the world. The Chancay port is located 80 km north from Lima and its exceptional characteristics will enable it to become the integrated port and logistical hub in the Pacific region in the medium term.

Through this type of works, Volcan continues contributing to reduce the country's infrastructure gap.

# 5.2 SUSTAINABILITY STRATEGY

The business approach has shifted in recent years, aiming at improving the relation between profitability and responsibility. Modern and efficient companies make commitments to the comprehensive development of its economic, social and environmental area of influence. Volcan adheres to this concept, with the understanding that proper management of its environmental impacts has a positive effect on value generation and enables the Company to develop its operations in a sustainable manner. (102-11) It is important to emphasize that Volcan's internal policies are in compliance with Peruvian law.

Volcan's Environmental Management System (EMS) aids the Company in identifying and preventing environmental damage. The system optimizes water and energy consumption, controls waste production, and assists in evaluating the Company's commitments. Volcan updates, improves, and redesigns environmental measures as needed.

In addition, the Internal Auditing unit identifies opportunities for improvement and incorporates preventive and corrective actions throughout the different areas of the Company. The Company's permanent evaluation system contributes to the continuous improvement of procedures, adds value, and optimizes management of economic, social, and environmental risks.

Finally, the different areas of the Company are overseen and subject to enforcement by government regulatory entities that evaluate compliance with legal procedures and statutes. In this regard, the Company dedicates careful attention to the legal commitments made in the various environmental instruments it manages.

#### VOLCAN USES ITS ENVIRONMENTAL MANAGEMENT SYSTEM TO IDENTIFY AND PREVENT POSSIBLE ENVIRONMENTAL DAMAGE









# 5.3 INFORMING WITH TRANSPARENCY

Volcan conducted an evaluation to identify stakeholder groups that in one way or another are directly or indirectly influenced by its operations, taking into consideration both potential positive and negative impacts. (102-42) (102-40)

### 5.4 **STAKEHOLDER** MANAGEMENT AND DIALOGUE

Establishing solid, lasting relations with stakeholder groups is a strategic goal of Volcan's environmental management. The Company conducted surveys and interviews with employees, suppliers, and subcontractors, as well as focus groups with community representatives in its areas of direct influence. In addition, community relations specialists contributed quality information for understanding community expectations. (102-43)

It is important to note that stakeholder participation in the various stages of mining activity occurs through processes of dialogue, negotiations, participation in informational workshops, communication mechanisms, and complaint and grievance channels. (102-43) These dialogue mechanisms enable the Company to understand and more closely manage its relations with stakeholder groups. (102-43) (102-43)

#### STAKEHOLDER GROUP EXPECTATIONS, BY CATEGORY (102-44)

# ECONOMIC

- Value generated (revenues) and distributed (operating and administrative costs, payroll, investment in the community, etc.)
- Indirect economic consequences (investment in infrastructure, development of economic activities in the area of influence)

- Water use and management
- Biodiversity protection
- Effluent and waste management
- Investments for improved environmental performance

# Social (Labor)

- Employment and work practices (staff retention, turnover, social benefits, support to employees approaching retirement)
- Employee training and education
- Occupational health and safety management
- Diversity and equal opportunities

# SOCIAL (SOCIET

- Impacts on communities and their management
- Information for customers and their satisfaction level
- Planning for operation closure

#### PRINCIPAL MECHANISMS FOR DIALOGUE WITH STAKEHOLDER GROUPS (102-43)

# **SHAREHOLDERS**

- General Shareholders' Meeting
- Informational meetings
- Website for the Securities Market of the Superintendency of Securities Market (SMV)
- Email and post
- Telephone
- Company web site

# EMPLOYEES

- Frequent and interdepartmental meetings with teams
- Bimonthly meetings with unions
- Response to complaints
- Virtual media, intranet and daily email and boards
- Occupational Health and Safety Committees in all Operating Units
- Activities with employees

# COMMUNITY

- Daily interaction with community actors
- Weekly meetings with authorities
- Daily coordination with community groups
- Assemblies with active community participation
- Strategic meetings with thought leaders
- Community outreach through print and radio media
- Requests and letters

# **GOVERNMENT AND CIVIL SOCIETY**

- Requests and letters
- Email
- Telephone communications Information Office

- Permanent interaction via email and telephone
- Incident and complaints areas
- Visits to plants

# SUPPLIERS AND CONTRACTORS

- Permanent interaction
- Email
- Telephone





# SHAREHOLDER RELATIONS MANAGEMENT

### 6.1 SHARE STRUCTURE

Subscribed, paid-in and registered capital as of December 31, 2019 was PEN 3,546,617,792, comprised of 1,633,414,553 Class A common shares and 2,443,157,622 Class B common shares; the nominal value of each share is PEN 0.87. The subsidiary Empresa Minera Paragsha S.A.C. holds 182,920,350 Class A common shares and 12,234,901 Class B common shares. The subsidiary Compañía Minera Chungar S.A.C. holds 23,442,345 Class A common shares. The subsidiary Compañía Industrial Limitada de Huacho S.A. holds 306,283 Class A common shares.

#### PRINCIPAL SHAREHOLDERS - CLASS A COMMON SHARES

MAIN SHAREHOLDERS	%	TYPE OF PERSON	NATIONALITY	ECONOMIC GROUP
Glencore International AG	41.91	Legal	Switzerland	Glencore
Empresa Minera Paragsha S.A.C.	11.20	Legal	Peruvian	Volcan
De Romaña Letts José Ignacio	10.33	Natural	Peruvian	Not applicable
Letts Colmenares de De Romaña Irene Florencia	9.90	Natural	Peruvian	Not applicable
Blue Streak International N.V.	8.38	Legal	Netherlands Antilles	Not applicable
Sandown Resources S.A.*	7.81	Legal	Panamá	Glencore
(*) Glencore group, including all its subsidiaries, holds a 55.03% share.				

#### PRINCIPAL SHAREHOLDERS - CLASS B COMMON SHARES

MAIN SHAREHOLDERS	%	TYPE OF PERSON	NATIONALITY	ECONOMIC GROUP
IN - Fondo 2	10.53	Legal	Peruvian	Not applicable
IN - Fondo 3	8.79	Legal	Peruvian	Not applicable
RI - Fondo 2	8.76	Legal	Peruvian	Not applicable
RI - Fondo 3	7.30	Legal	Peruvian	Not applicable
Profuturo AFP-PR Fondo 2	6.86	Legal	Peruvian	Not applicable
Profuturo AFP-PR Fondo 3	5.98	Legal	Peruvian	Not applicable
Lopez De Romaña Dalmau Hernando Diego F.	4.13	Natural	Peruvian	Not applicable

# SUSTAINABILITY REPORT



### 6.2 STOCK MARKET PARTICIPATION

Volcan shares are traded on the Lima Stock Exchange, the Santiago Stock Exchange, and the Latibex in Madrid.

#### **STRATEGIC COMMITTEES**

Son los responsables de la toma de decisiones y la gestión de aspectos económicos, sociales y ambientales. Los comités directivos están conformados por los directores, mientras que los comités operativos por officials. (102-18)

#### BOARD COMMITTEES (102-20)

# **EXECUTIVE COMMITTEE**

Research and resolve matters entrusted to it by the Board of Directors, except for accounting matters, distribution of provisional dividends, submission of financial reports to the General Shareholders' Meeting, and the specific powers that the General Shareholders' Meeting concedes to the Board of Directors, in accordance with Article 38 of the bylaws.

# **AUDIT COMMITTEE**

- Support management to ensure compliance with the Company's Good Corporate Governance standards.
- Monitor compliance with the Company's Strategic Management of Corporate Risk.
- Guarantee the existence of a proper internal control system.
- Monitor the implementation of effective controls based on the cost/benefit evaluation.
- Although there is no formal Risk Committee, most of its duties are carried out by the Audit Committee.

#### STOCK MARKET

SHARE	LIMA STOCK EXCHANGE	STOCK EXCHANGE	MADRID STOCK EXCHANGE LATIBEX
Volcan Class "A" common share	VOLCAAC1	VCMAC1	
Volcan Class "B" common share	VOLCABC1	VCMBC1	XVOLB.MC

# HUMAN RESOURCE COMMITTEE

- Ensure that an organizational structure is maintained in accordance with business needs, promoting meritocracy and professional development of the company's executives.
- Define guidelines for compensation plans (current and long-term) for management levels, to ensure alignment with company objectives and consistency with market conditions, to attract and retain the best talent available. Participate in determining annual bonuses for senior management based on performance.

# CORPORATE SOCIAL Responsibility Committee

- Define annual objectives and priority improvement initiatives in the areas of community, environment, and occupational health and safety.
- Monitor progress of implementation of priority initiatives, including progress of the Dupont project.
- Analyze and propose for assessment specific topics that require a Board decision.

#### **OPERATIONAL COMMITTEES (102-20)**

	COMMITTEE	
	Management Committee- Occupational Health and Safety	Seguimiento y control al cu gestión de severidad y accio
LIMA	Environmental Affaire	Control and follow-up to en
	Environmental Affairs Committee	Follow-up and control of en environmental impacts and
		Follow-up and control of the
	Management Committee- Occupational Health and Safety	Monitor Occupational Healt committees.
	Surery	Participate in scheduled saf
UNITS	Human Resource Management Indicators Committee	Control and follow-up of hu absenteeism, vacations, sele
	Environmental Services Management Committee	Responsible for implement
	Health Indicators Committee	Follow-up and control of oc
	Meeting on operational	Follow-up and control of mo
	results, production indicators and costs	Control of mine planning, p

#### **INVESTOR RELATIONS**

Volcan strives to maintain constant communication with all stakeholders, above and beyond legal requirements. The Company believes it is essential that current and potential investors are provided with timely, complete, accessible, and transparent information about the key activities that could affect their decisions. In this area, the main achievements in 2019 were: (102-43)

- Preparation and organization of the required Annual General Shareholders Meeting.
- The CEO's or CFO's quarterly presentation of financial statements to specialized analysts who cover Volcan stock.
- Participation in three non-deal road shows for institutional

#### VOLCAN STRIVES TO MAINTAIN CONSTANT COMMUNICATION WITH ALL STAKEHOLDERS, ABOVE AND BEYOND LEGAL REQUIREMENTS

# SUSTAINABILITY REPORT

#### DUTIES

- umplimiento de estándares, procedimientos e indicadores de identabilidad
- nvironmental licenses and certifications.
- nvironmental inspections to identify and prevent d potential deviations from the regulations.
- e Safety Management Systemd
- Ith, Safety, Environment, and Quality system (SSOMAC)
- fety inspections
- uman resource management indicators: overtime, lection, medical exams, etc.
- iting the Environmental Management System
- ccupational health indicators
- onthly budget compliance
- production indicators, physical goals and costs
- and individual investors.
- Participation in conferences with national and international investors, and presentation of the Company's operating
- and financial results.
- Hiring a consultant specialized in corporate
- communications to achieve greater transparency with different stakeholder groups.
- New layout for Volcan's corporate website, providing access to more detailed information through a modern web platform.

#### •••••••

# HEALTH AND SAFETY. THE MAIN VALUE OF VOLCAN

### HEALTH AND SAFETY

Our strategy for ensuring appropriate management of occupational health and safety is defined as follows:

- Management commitment and involvement through the Occupational Health and Safety, Environment, and Quality Policy.
- SafeWork Program and its 19 key elements, including:
   Fatal Hazards Protocols
- Life-Saving Behaviors
- › Zero Tolerance
- Consequence management (recognition and sanction)
- Accident investigation
- Use of ICAM methodology (Incident Cause Analysis Method) to identify root causes and key findings
- Risk Management
- Application of bow-tie methodology to identify critical, preventive and mitigating controls
- Contractor management
- Approval of contractors and risk assessment prepared and validated for each area: operations, projects, explorations and energy
- Change management
- Risk assessment whenever a change is made to the processes, equipment or employment positions

A series of audits were carried out to verify compliance with the Safety Program:

- Internal auditss:
- > Fatal Hazard Audit, across the units of each cluster
- Audits by Glencore's Corporate HSEC:
- Audit to the implementation of the SafeWork
   Program and its 19 key elements
- Catastrophic Hazard Management Audit
- > Emergency, Fires and Explosions Response Audit

The implementation of the corrective actions decided during these audits is currently underway at Volcan. In line with the trends observed in the findings and the analysis of accidents and HPRIs, the actions focus on five Fatal Hazard Protocols:

# SUSTAINABILITY REPORT

01. ENERGY ISOLATION/ LOCKOUT	<ul> <li>Implementation of lockout templates for each mine equipment</li> <li>Verification of zero energy state in locked out equipment</li> </ul>
02. WORKING ATHEIGHTS	<ul> <li>Certification of anchor points by an external company</li> </ul>
04. MOBILE EQUIPMENT	<ul> <li>Installation of four cameras and two monitors on each mine equipment to ensure visibility of people and equipment located in blind spots</li> <li>Installation of operator's booths to be used with teleoperated equipment</li> <li>Installation of hooks for towing stuck equipment</li> </ul>
O5. ROCK MASS FAULT (LOOSE ROCK)	<ul> <li>Implementation of heavy ground support standard in intersections</li> <li>Use cable bolting for ground support observing geomechanical recommendations</li> <li>Implementation of the Mining Operations Opening Plan in line with Glencore's Final Block Plan</li> </ul>
OG. ELECTRICAL SAFETY	<ul> <li>Installation of boards equipped with differential protection at pumping stationary and heading ponds</li> <li>Installation of shielded cables for better protection, preventing short circuits caused by damaged cables</li> <li>Installation of resistors and measurement of earthing continuity in substations</li> </ul>

Additional critical controls have been implemented with regard to:

- Emergency preparedness and response:
- Identification of shelter areas with intake of fresh air and release of exhaust air for fuel dispatch
   Installation of portable and capies shelters (moughle)
- Installation of portable and canvas shelters (movable and temporary)
- Implementation of stationary shelters in areas with heavy personnel traffic (mess halls, workshops)
- Providing self-rescuers to all personnel entering the mine
- Installation of Tag Board to identify the personnel who enters and leaves the mine and carry out works in the operations
- Fires and exposure
- Switching from mineral to vegetal oil in electric transformers
- Installation of ansul system in mobile equipment

- Installation of fire suppression systems in fuel supply chambers and electric substations

The actions plans related to the audit of these Fatal Hazards were entered into Glencore's risk manager software, where all progress is reported.

Safety has been given priority over production goals by the senior management. This has been announced to all employees through communication campaigns and focus groups where Life-Saving Behaviors were shared, explaining why compliance is important, why zero tolerance on deviations will be enforced, and how compliance will be either recognized or sanctioned accordingly. The Operations Managers are the leaders in charge of ensuring that this communication reaches all personnel of Volcan and contractor companies.



#### **ACCIDENT REPORTING**



. . . . . .

VOLCAN'S MAIN OBJECTIVE IS TO GUARANTEE ZERO FATAL ACCIDENTS. THE GOAL IS TO DEVELOP A CULTURE WHERE AREA LEADERS AND GENERAL SUPERVISORS TAKE ON A SAFETY LEADERSHIP ROLE AND ENSURE A SAFE WORKPLACE FOR ALL WORKERS AND STRENGTHEN THE ZERO DAMAGE CULTURE.

. . . . .







Volcan's and subsidiaries' safety management results were:

- One fatal accident at Chungar Mine
  19 disabling accidents (27% reduction from 2018)
  50 minor accidents (29% reduction from 2018)
  17 property accidents (48% reduction from 2018)
  15 HPRIs (46% reduction from 2018)

#### **BOARD COMMITTEES**

Volcan's main objective is to guarantee ZERO FATAL ACCIDENTS. The goal is to develop a culture where area leaders and general supervisors take on a safety leadership role and ensure a SAFE WORKPLACE for all workers and strengthen the Zero Damage culture.

N°	UNIT	DATE	COMPANY	ТҮРЕ	MORTAL DANGER	CLASSIFICATION
1	Carahuacra	03/01/2019	ROBOCON	Contractor	Rock mass fault	Accidente
2	Carahuacra	23/01/2019	Tecnomin	Contractor	Energy Lockout	Accidente
3	Andaychagua	18/02/2019	Volcán	Volcan	Rock mass fault	Incidente
4	Andaychagua	05/03/2019	Volcán	Volcan	Shafts and winches	Incidente
5	Ticlio	28/06//2019	Volcán	Volcan	Vehicles and mobile eq.	Accidente
6	Animón	01/07/2019	Geohidráulica	Contractor	Energy Lockout	Incidente
7	Alpamarca	24/07/2019	Ecoserm Rancas	Contractor	Vehicles and mobile eq.	Incidente
8	Carahuacra	24/07/2019	Pacific Perú	Contractor	Vehicles and mobile eq.	Incidente
9	Animón	15/08/2019	Tecnomin	Contractor	Vehicles and mobile eq.	Incidente
10	San Cristóbal	21/08/2019	RockDrill	Contractor	Vehicles and mobile eq.	Incidente
11	San Cristóbal	01/10/2019	Volcán	Volcán	Vehicles and mobile eq.	Accidente
12	Carahuacra	05/10/2019	Volcán	Volcán	Vehicles and mobile eq.	Accidente
13	Ticlio	05/11/2019	JRC	Contractor	Explosives and blasting	Incidente
14	Carahuacra	25/12/2019	Volcán	Volcán	Rock mass fault	Incidente
15	Andaychagua	27/12/2019	Volcán	Volcán	Rock mass fault	Accidente



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# SUSTAINA

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# HUMAN RESOURCE MANAGEMENT

Volcan promotes adequate labor environment and conditions for all its employees. The Company is committed to enforce its values, Code of Conduct, and corporate vision and mission. In addition, it provides the resources and tools employees need to carry out their activities. Moreover, the Company ensures respect for collective agreements with all of its unions. (103-2)

#### TOTAL EMPLOYEES BY GENDER AND EMPLOYMENT CATEGORY (102-8) (405-1)

			TOTAL
Volcan Cía. Minera S.A.A.	118	1595	1713
Officials	3	29	32
Staff	87	400	487
Employees	25	774	799
Workers	3	392	395
Cía. Minera Chungar S.A.C.	32	949	981
Officials	0	3	3
Staff	28	240	268
Employees	2	343	345
Workers	2	363	365
Emp. Admin. Cerro S.A.C.	24	227	251
Officials	0	0	0
Staff	5	46	51
Employees	5	23	28
Workers	14	158	172
Óxidos de Pasco S.A.C.	7	117	124
Officials	0	0	0
Staff	2	35	37
Employees	4	45	49
Workers	1	37	38
Hidroeléctrica Huanchor S.A.C.	1	20	21
Staff	1	10	11
Employee	-	10	10



At year-end 2019, the Company had a total of 3,090 direct employees in Lima and its operating units. In addition, 7,390 employees work with Volcan specialized subcontractor companies, representing 70.5% of the workforce. (102-7)



#### TOTAL EMPLOYEES BY TYPE OF CONTRACT (102-8) (405-1)

DIVISION	w	WORKERS			EMPLOYEES			OFFICIALS			TOTAL		
DIVISION	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019	
Volcan Cía Minera S.A.A.	433	442	395	1222	1228	1286	31	32	32	1686	1702	1713	
Cía Minera Chungar S.A.C.	368	366	365	534	558	612	2	3	3	904	927	980	
Emp. Admin. Cerro S.A.C	167	171	172	62	69	79				229	240	251	
Óxidos de Pasco S.A.C.	39	39	38	78	80	86	1	1		118	120	124	
Hidroeléctrica Huanchor S.A.C.				22	22	22				22	22	22	
Total	1007	1018	970	1918	1957	2085	34	36	35	2959	3011	3090	

#### EMPLOYEES WITH SPECIALIZED COMPANIES (102-8)

# TOTAL **7390**

UNIT	2019
Yauli	3630
Chungar	2472
Alpamarca	470
Cerro de Pasco	578
Óxido de Pasco	216
Vinchos	24

# FOR VOLCAN, PROMOTING AN ADEQUATE LABOR ENVIRONMENT AND CONDITIONS FOR ALL ITS EMPLOYEES IS ESSENTIAL TO ACHIEVE THE COMPANY'S OBJECTIVES



# SUSTAINABILITY REPORT



DEPARTMENT	VOLCAN CÍA. MINERA S.A.A.			CÍA MIN	IERA CHU S.A.C.	JNGAR	EMP. ADMIN. CERRO S.A.C.		
	FEMENINE	MALE	TOTAL	FEMENINE	MALE	TOTAL	FEMENINE	MALE	TOTAL
Amazonas					2	2			
Ancash		23	23	2	11	13		3	3
Apurimac		2	2						
Arequipa	3	24	27	2	21	23		3	3
Ayacucho		4	4		5	6			
Cajamarca					6	6			
Callao	6	19	25		12	12			
Cusco		6	6			2			
Huancavelica		29	29		11	11			2
Huancayo		26	26						
Huánuco		20	21		25	25		2	2
Ica		4	4		8	8			
Junin	28	925	953	6	198	2-4	4	35	39
La Libertad		16	17	2	17	19			
Lambayeque		3	3						
Lima	74	376	450	11	150	161	4	29	33
Madre de Dios									
Moquegua						2		5	6
Pasco	5	104	109	5	468	473	14	143	157
Piura		4	4		7	7			
Puno		4	4						
San Martín									
Tacna		3	3						
Tumbes									
Ucayali									
Total	118	1595	1713	32	949	981	24	227	251

#### STAFFING SIZE BY REGION AND GENDER (102-8) (405-1)

DEPARTMENT	ÓXIDO DE PASCO S.A.C.				OELÉCTR NCHOR S.		CONSOLIDATED			
	FEMENINE	MALE	TOTAL	FEMENINE	MALE	TOTAL	FEMENINE	MALE	TOTAL	
Amazonas								2	2	
Ancash		6	6				2	43	45	
Apurimac								2	2	
Arequipa							5	48	53	
Ayacucho							2	10	12	
Cajamarca		2	2					10	10	
Callao							6	33	39	
Cusco								7	8	
Huancavelica								42	43	
Huancayo								26	26	
Huánuco		4	4					51	52	
Ica								13	14	
Junin		25	26		8	8	39	1191	1230	
La Libertad		5	6				4	39	43	
Lambayeque								5	5	
Lima		15	15		11	11	89	581	670	
Madre de Dios										
Moquegua							2	8	10	
Pasco	4	57	61				28	772	800	
Piura								12	12	
Puno								4	5	
San Martín								2	2	
Tacna								4	4	
Tumbes										
Ucayali										
Total	7	117	124	1	2-	21	182	2908	3090	



### 8.1 TALENT RECRUITMENT AND RETENTION STRATEGY

Volcan focuses on attracting the best talent to contribute to the achievement of results and the development of the organizational culture through employer branding, applicant experience and internal talent promotion initiatives.

The evaluation standards of Volcan and its contractors have evolved throughout the years by applying best practices. The implementation of a virtual evaluation system optimized the results and decreased recruitment times. This rapidly-acquired information allow us to confirm if the candidates fit the culture and profile we seek.

Volcan is involved throughout the process to attract, develop and retain talent. Accordingly, it manages a series of performance and talent evaluation methods; education, through annual training plans; career paths, through training programs aimed at trainees, and internal promotion based on meritocracy or internal competition; and, labor market and salary studies, among others.

### 8.2 TRAINING AND DEVELOPMENT

At Volcan, safety is the key value, and the Company makes a permanent effort to achieve the highest industrial standards to consolidate a culture of operational excellence. Accordingly, all efforts are focused on developing and enforcing instructional actions among the Company's own employees and those of its contractors, aligning the productivity, continuous improvement and safety culture toward Volcan's strategic objectives. (103-2)

The instructional strategy systemically integrates three of the Company's main areas related to competencies: Safety, Leadership and Technical Competencies. These are included in an annual training program that aims at developing the organization's talent to ensure that each employee becomes a key factor in achieving the objectives of each area, which, in turn, will allow us to achieve the Company's strategic objectives. (103-1)

The instructional efforts are focused on the Company's own employees and those of the contractors. In 2019, the Company invested 142,161 man-hours in training to reach an average of 67 hours of training per worker. Similarly, 399,601 man-hours were invested in training for contractor employees, with an average of 40 hours of training per worker. (404-1)

AT VOLCAN, SAFETY IS THE KEY VALUE, AND THE COMPANY MAKES A PERMANENT EFFORT TO ACHIEVE THE HIGHEST INDUSTRIAL STANDARDS TO CONSOLIDATE A CULTURE OF OPERATIONAL EXCELLENCE.

#### AVERAGE MAN-HOURS OF EMPLOYEE TRAINING BY PROFESSIONAL CATEGORY AND GENDER (404-1)

COMPANY PERSONNEL	BY PROFESSIONAL CATEGORY BY GENDER							
	OFFICIALS	STAFF	EMPLOYEES	WORKERS	FEMENINE	MALE	TOTAL	
Number of Company workers	35	854	1231	970	181	2909	3090	
Total training man-hours	4252	85 347	26 525	26 038	8327	133 834	142 161	
Average training hours per worker	121.5	99.9	21.5	26.8	46	46	46	

PERSONNEL FROM THRID PARTIES	BY PR	OFESSION	AL CATEGO	BY GENDER		TOTAL	
	OFFICIALS	STAFF	EMPLOYEES	WORKERS	FEMENINE	MALE	TOTAL
Number of Company workers	-	58	1888	5444	492	6898	7390
Total training man-hours	-	2868	93 316	303 417	20 107	379 494	399 601
Average training hours per worker	-	49.4	49.4	55.7	40.9	55.0	54.1

Regarding Safety competencies, the actions are aligned to the safety plans through the SafeWork Program and the deployment of its tools, the Safety and Environment Hazards Management Leadership Program, Health Management and best Social Responsibility practices. Moreover, to promote awareness on risk self-management, the Self-Care Program has been developed with all the Company's employees in mind. Furthermore, Volcan's Training Center has deployed the Supervisor Leadership Program, which aims at developing Volcan Leader competencies aimed at a cultural transformation to uphold the Company's vision.



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Finally, with regard to technical competencies, an annual training program has been developed and it focuses on updating the Company's best practices, technologies and innovations in administrative, juridical, financial and cost management processes. Volcan's Training Center has also developed a heavy machinery operator program that seeks to improve the mining cycle and productivity across underground and open pit operations. (404-2)

#### TRAINING PARTICIPANTS AND MAN-HOURS IN SPECIAL PROGRAMS (404-1)

COMPANY PERSONNEL	SUPERVISOR DEVELOPMENT PROGRAMS	OPERATOR TRAINING PROGRAM	TOTAL
Participants	544	323	867
Training man-hours	12528	3462	15990

PERSONNEL FROM THRID PARTIES	SUPERVISOR DEVELOPMENT PROGRAMS	OPERATOR TRAINING PROGRAM	TOTAL
Participants	1066	277	1343
Training man-hours	25584	1210	26794

The management of the Training and Development area is assessed through indicators established for each training program. These include the percentage of compliance with each instructional action by the relevant target group, as well as the efficiency of the learning process which translates into a productivity increase, the decrease of occupational accidents, the results of the organizational climate survey, and the performance assessment. (103-3)

Volcan believes in talent development and provides economic facilities and financial support to employees who display great potential, with the ultimate goal of multiplying the best mining practices through them. Such facilities include educational activities abroad and postgraduate studies (specialized courses, degrees and master's degrees) at the best business institutions and schools in Peru. (404-2)



### 8.3 **EMPLOYEE WELLBEING AND WORKING CONDITIONS**

The Company strives to promote a good working environment and appropriate conditions for all of its employees and to ensure their wellbeing during their time at the company. (103-2)

Accordingly, the Health, Hygiene and Wellbeing area has been working on the three prevention stages (primary, secondary and tertiary) and the relevant Health Surveillance (VISA, in Spanish), including occupational and non-occupational matters, working together with Occupational Hygiene based on objective information, and with Social Wellbeing to guide the employee as needed. The following was carried out:
Occupational health examinations for all the Company's

- and third parties' employees
- Treatment for pathologies commonly found among employees, such as respiratory, gastrointestinal and musculoskeletal conditions
- The odontology and obstetrics services were implemented at Carahuacra
- A new health center was built at the Andaychagua unit
- The certifications and authorizations necessary for the operation of Volcan's health centers were obtained



#### **OCCUPATIONAL HYGIENE**

provides information on factors and agents identified at each job, and identifies the exposure level. It also defines controls at the source of exposure and establishes the need for protective devices to be used by the employees to prevent damage to their health.

is focused on improving the employee's quality of life (social support and guidance for hospitalized employees, integration events, inspections and verification of the mining units' habitability conditions), and it also focuses on their family through the following programs: • Program to support the family of an employee at risk Social risk program

employee







### **SOCIAL WELLBEING**

• Program to support the direct relatives of a deceased

#### MECHANISMS FOR DIALOGUE WITH EMPLOYEES (102-43)

MECHANISM	DESCRIPTION
Meetings on internal agreements	Collective complaints and observations on work and operational issues are received. Agreements recorded in minutes are monitored during periodical meetings and through indicators.
Bi-monthly scheduled meetings between unions and labor relations areas	Labor, safety and operational complaints from units are solved. Items on the agenda are monitored through indicators and reviewed through a Monthly Workplace Relations Committee and sent to the Operations Management.
Reception of individual complaints	Complaints are received as established in the internal work regulations and in the collective agreement. The immediate supervisor is responsible for handling these, or in their stead the head of Workplace Relations for the respective unit.
Open Doors	Quarterly meeting to close the gaps between the CEO and staff, in both Lima and in the units. Its purpose is to communicate the current situation and Company prospects in terms of safety, operations, finance, projects, workplace climate and other relevant issues for the Company. This is a space that promotes open dialog in both directions to resolve any queries or concerns.
Quarterly meeting	Meeting with the Metallurgical Mining Workers Federation of Volcan to present the Company's economic and financial position. The aim is to keep staff informed and committed to corporate goals.

### 8.3 ORGANIZATIONAL CLIMATE AND COMMITMENT

Volcan constantly implements initiatives and improves working conditions to increase the wellbeing, commitment and satisfaction of its employees year over year. It measures Identification and Commitment, Leadership and Human Resources Management indicators through quantitative and qualitative assessments.

Climate committees were assembled in all units to analyze survey results and identify strengths and improvement opportunities. On the basis of the results and information gathered per area, transversal and specific action plans were developed.

As part of the actions taken in 2019, working conditions were improved, including habitability, food, infrastructure, and work schedule through the implementation of flexible schedules.

The effort to solidify culture continued through the recognition of values, safety and seniority. In 2019, 243 recognitions were issued, and a digital tool to expedite recognitions was implemented.

Finally, the following was carried out: Team Building, Leadership Workshops, Volcalloween, monthly birthday celebrations, holiday celebrations, contests, fairs, nutritional talks, internal sports activities, recognition of five-year-period anniversaries, among others. General survey results showed a 77% satisfaction level, 15% higher than the results achieved in 2018, with the participation of 97% of employees.

#### **DIALOGUE WITH EMPLOYEES**

Dialogue procedures and Volcan labor policies are evidence of the Company's interest in establishing closer connections with employees and union organizations. In addition, collective bargaining agreements and internal policies establish procedures for addressing, overseeing, and tracking commitments, which are carried out through regular meetings with the various unions and regular joint inspections of work areas.

General labor relations management indicators measure operations stoppages by personnel due to complaints that have not been addressed or collective bargaining processes. In 2019, there were no strikes longer than one week or employee blockades. (MM4)

GENERAL LABOR RELATIONS MANAGEMENT INDICATORS MEASURE OPERATIONS STOPPAGES BY PERSONNEL DUE TO COMPLAINTS THAT HAVE NOT BEEN ADDRESSED OR COLLECTIVE BARGAINING PROCESSES. IN 2019, THERE WERE NO STRIKES LONGER THAN ONE WEEK OR EMPLOYEE BLOCKADES.

# SUSTAINABILITY REPORT

# 8.4 ECONOMIC WELLBEING

The majority of personnel is comprised of workers and employees at the Yauli, Chungar and Cerro de Pasco units. Salaries are established in accordance with the provisions of the collective bargaining agreement; they are never based on minimum-wage laws. (103-2) (202-1)

# RELATIONSHIP BETWEEN LOWEST SALARY AND MINIMUM LEGAL SALARY

Minimum legal salary (MLS)	PEN 930
Lowest operator salary	PEN 1,650
Ratio (lowest salary/MLS)	1.8



### **8.5** SOCIAL BENEFITS FOR EMPLOYEES

Volcan provides the following social benefits to all fulltime employees. (401-2)

#### SOCIAL BENEFITS

BENEFIT	DETAILS
Life Insurance	Life insurance known as "Seguro de Vida Ley" to all workers from the first day they start working.
Health Insurance	EPS medical insurance for staff and officials. The group of workers and employees have EsSalud coverage.
Personal accident insurance	Benefit to managers and deputy managers.
Incapacity or disability coverage (medical services)	In case of disability (common accident, illness), the coverage of Rímac EPS or EsSalud is available. On the other hand, work accidents are covered by Rímac (improvement introduced in 2016).
Incapacity or disability coverage (economic benefits)	In the case of temporary disability, it is covered by EsSalud, in the case of permanent disability and as a result of an accident at work, it is covered by the ONP or Mapfre.
Subsides for maternity / paternity	Rest for maternity is 98 days and for paternity is 4 days.
Pension fund	Benefit acquired by the worker for his contributions to the pension system. Each member has an individual savings account managed by an AFP or the ONP in their name.

### 8.6 performance management

Volcan applies the performance and talent assessment; these processes are part of the employee management cycle and are manifested through recognition of their individual contributions in the period evaluated. In 2019, new corporate competencies were developed and a 360-degree evaluation was performed on the leaders. (103-2)

The results contributed to strengthen the meritocracy culture. In 2019, plans were developed for training, career paths, compensation, retention and recognitions.

Continuing with the 2nd edition of the Trainee Program, in 2019, young professionals have worked at different areas, strengthening their academic knowledge, gaining experience and developing an improvement project. All of them have obtained process management skills.



# **8.7** SIGNIFICANT CHANGES IN THE LABOR FORCE

The increase in personnel turnover in the market triggered a process of personnel reduction and Volcan was also affected by this global situation. In 2019, 450 employees were terminated, mainly due to resignation, mutual consent and expiration of contract. (102-8)

#### EMPLOYEES TERMINATED IN 2019

COMPANY	2019
Volcan Cía Minera S.A.A.	257
Cía. Minera Chungar	122
Emp. Admin. Cerro SAC	55
Oxidos de Pasco S.A.C.	14
Hidroeléctrica Huanchor S.A.C.	2
Total	450

Annual employee turnover at Volcan was 14.5%; the majority of terminated employees were from Junín, Pasco, and Limaa. (401-1)

#### ANNUAL EMPLOYEE TURNOVER BY AGE RANGE AND GENDER

DIVISION	COMPANY	UNIT	AGE RANGE (YEARS)			PER GENDER		TOTAL
		UNIT	18-29	30-50	50+	FEMENINE	MALE	TOTAL
Mining	Volcan Cía Minera S.A.A.	Yauli y Lima	1.60%	8.50%	5.00%	1.50%	13.50%	15.00%
	Cía. Minera Chungar	Chungar y Alpamarca	2.40%	8.70%	1.20%	1.50%	10.90%	12.40%
	Emp. Admin. Cerro SAC	Cerro de Pasco	7.10%	11.10%	3.60%	6.00%	15.90%	21.80%
	Oxidos de Pasco S.A.C.	Óxidos de Pasco	0.80%	10.50%	0.00%	0.80%	10.50%	11.30%
Energy	Hidroeléctrica Huanchor S.A.C.	C.H. Huanchor	0.00%	9.10%	0.00%	4.50%	4.50%	9.10%
Total			2.30%	8.90%	3.40%	1.90%	12.70%	14.50%



#### EMPLOYEES TERMINATED BY CAUSE

CAUSE	2019
Termination	5
Death	7
Gross misconduct	2
Mutual consent	143
Resignation	219
Retirement	4
Contract expiration	64
Completion of test period	5
Trans. due to court order	1
Total	450

REGION	VOLCAN CÍA. MINERA S.A.A.	CÍA MINERA CHUNGAR S.A.C.	EMP. ADMIN. CERRO S.A.C.	ÓXIDO DE PASCO S.A.C.	HIDROELÉCTRICA HUANCHOR S.A.C	CONSOLIDATED
Ancash	0.1%	0.2%	0.4%	0.8%		0.2%
Arequipa	0.6%	0.9%	0.4%			0.7%
Ayacucho	0.1%	0.1%				0.1%
Cajamarca	0.1%	0.3%	0.4%			0.2%
Callao	0.2%	0.4%	0.4%			0.3%
Cusco	0.3%	0.2%				0.2%
Huancavelica	0.1%	0.2%				0.1%
Huancayo	0.2%	0.0%				0.1%
Huánuco	0.1%	0.1%	1.2%			0.2%
lca	0.1%	0.2%				0.1%
Junin	6.0%	2.2%	3.6%			4.4%
La Libertad	0.3%	0.4%		0.8%		0.3%
Lambayeque	0.1%	0.4%				0.2%
Lima	6.5%	4.3%	3.2%	4.8%	9.1%	5.5%
Pasco	0.1%	2.1%	12.30%	2.4%		1.8%
Piura	0.1%	0.2%				0.1%
Puno	0.0%	0.1%				0.0%
San Martín	0.1%	0.0%				0.1%
Total	15.1%	12.3%	21.9%	<b>8.80</b> %	9.1%	14.6%

#### ANNUAL EMPLOYEE TURNOVER BY REGION

This level of turnover requires rapid, appropriate actions to cover positions and ensure that the Company's activities are not affected. During the year, the Company was able to fill positions vacated due to layoffs and other positions, for a total of 451 new hires, including those carried out under the "Prioritization Program". All positions have been budgeted and authorized by Management. (103-1)

In 2019, more employees were hired in Lima, Junín and Pasco. Most of these hires are from the local community or skilled workers who live close to Volcan's operations.



#### HIRING BY PLACE OF ORIGIN

REGION	VOLCAN CÍA. MINERA S.A.A.	CÍA MINERA CHUNGAR S.A.C.	EMP. ADMIN. CERRO S.A.C.	ÓXIDO DE PASCO S.A.C.	HIDROELÉCTRICA HUANCHOR S.A.C	CONSOLIDATED
Amazonas		2				2
Ancash	11	6	1	1		19
Apurimac	2					2
Arequipa	10	8	1			19
Ayacucho	3	4		1		8
Cajamarca		2				2
Callao		2				2
Cusco	5	1				6
Huancavelica	11	8	1	1		21
Huánuco	3	5	1	1		10
lca	1		1		1	3
Junin	77	40	6	6	1	130
La Libertad	2	6	1			9
Lambayeque	1	1				2
Lima	70	27	7	3		107
Madre de Dios		1				1
Moquegua	1	1	1			3
Pasco	23	23	38	10		94
Piura	2	2				4
Puno	3					3
San Martín	1	1				2
Tacna		1				1
Tumbes		1				1
Total	226	142	58	23	2	451

#### IN 2019, THE COMPANY WAS ABLE TO FILL POSITIONS VACATED DUE TO LAYOFFS AND OTHER POSITIONS, FOR A TOTAL OF 451 NEW HIRES



. . .

# 8.8 LOCAL HIRING

Providing employment to trained personnel in the area of the different mining units is a key factor in promoting local development and strong community relations. In this aspect, Volcan has maintained its commitment, in conjunction with local communities, of giving priority to the members of the communities when hiring personnel for its operations. The number of local residents working at Volcan operations and the way they apply for employment varies in each community.

The local hiring process begins with identifying the position, then determining the worker profile and seeking candidates. The position requirements are communicated to the communal resident committee through the Corporate Social Responsibility office in each unit. The ultimate goal is to meet, in a reasonable manner, the demand for work in accordance with operating needs. (103-1)(103-2)

#### FIRMLY RESPECTING HUMAN RIGHTS (102-8)

UNIT	DETAILS
Yauli	120 employees who belong to the local community of 1,191 community residents
Hydroelectric plants	6 employees who belong to the local community residents



### 8.9 FIRMLY RESPECTING HUMAN RIGHTS

Respect for human rights is a theme that Volcan promotes both inside and outside the Company, including suppliers and subcontractors. To promote compliance, the Company sponsors training talks on labor regulations and has a process for permanent oversight and supervision of subcontractor's personnel hiring. In addition, as part of their orientation when joining the Company, new employees receive a copy of the Code of Conduct and sign a commitment to respect the corporate values and principles. (103-2)

To provide guarantees and prevent possible cases of human rights abuses, Volcan offers an anonymous "Complaint Line". In 2019, the Company did not receive any reports or become aware of any incidents of discrimination, forced labor, or child labor in its operating units. (406-1) (408-1)(409-1)

#### **NON-DISCRIMINATION**

Eradicating discrimination of any kind is important to Volcan, as managing this issue strengthens the Company's workplace climate. Towards that end, Volcan has programs to support employees, their families, and the community in general that are based on prevention, education, and advice. In addition, the Complaint Line is provided to detect cases of discrimination. Reports can be made confidentially and anonymously. (103-1) (103-2)

#### FORCED LABOR

Volcan condemns any form of forced labor in all of its operations. Compliance with measures to eliminate poor labor practices is an opportunity to improve workplace climate. (103-1)

The Company did not receive any forced labor reports in 2019. Volcan complies with labor laws and requires respect for recognition of employee overtime. The Company's Internal Workplace Regulation is aligned with the General Law on Workplace Inspection, the Internal Regulation on Workplace Health and Safety, the Code of Conduct and the



# SUSTAINABILITY REPORT

MILAGROS
Policy on Occupational Health, Safety, Environment and Quality (SSOMAC). Volcan also offers support programs for its employees and their families for the prevention of forced labor risks. (103-2) (409-1)

#### **CHILD LABOR**

Under the Code of Conduct, Volcan has a Human Rights declaration (item 4) wherein it stipulates that no minor will be hired, except as provided by Law. (103-1)

**Management:** Under the agreement executed with the Huayllay and Huaychao communities, Volcan opens community employment positions for children of community members during the summer months of January, February and March. The participants are not forced or coerced to do the job, and the activities are coordinated and led by Community Boards, with the authorization of the minors' legal tutors. (408-1)

In addition, child labor is forbidden by the procedures, regulations and internal management controls in place for hiring personnel.

To prevent the risk of child labor, Volcan is firmly committed to help communities grow by providing education, aiding the implementation of educational infrastructure, providing teachers and a psychologist, holding extracurricular workshops and a school for parents, among others. (103-2)



### 8.10 FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

Volcan respects the right to collective bargaining, as established in the collective bargaining agreement and internal work regulations. These documents include commitments to improve working conditions and economic benefits the Company provides in agreement with eight unions to avoid the impact of labor strikes or stoppages (103-1)

In addition, Volcan respects its employees' freedom to join unions and participate in collective bargaining, as established by both domestic and international law. Employees are completely free to meet and associate with one another in the entity or union of their choice. **(103-2)** 

Collective bargaining with Volcan's unions is carried out through direct dialogue.

Toward that end, the Company signs collective bargaining accords or agreements with unions that represent the majority of its employees. During these negotiations, the parties evaluate salary increases and working conditions in the operating units. It should be noted that employees of subcontractor or supplier companies are not represented by unions. (103-3)

Under the Company's policy, benefits contained in collective bargaining agreements apply to all Volcan employees. It is important to note that 77% of workers and 38% of employees belong to a union and their salary increases and working conditions are regulated through collective bargaining processes. (102-41)

As in other areas, the Company provides a "Complaint Line" for reporting cases of discrimination or infringement of the rights of unionized employees. The Company did not receive any reports in 2019. (406-1)

### 8.11 REGULATORY COMPLIANCE WITH UNIONS

Compliance with legal labor obligations and collective bargaining agreements improves relations with employees, strengthens the continuity of operations, and enables the Company to understand personnel concerns and needs. (103-1)

Volcan uses the following tools to manage labor relations and compliance with legal labor obligations and agreements: (103-2)

- Regular meetings with union representatives, as established by the Company and the unions. These meetings take place every two weeks or every month. They are an opportunity to hear grievances or contributions from the employees represented.
- Continuous improvement meetings, with the participation of Operations Management. The purpose of these meetings is to obtain regular feedback from



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- employees through their unions, and follow up on implementation.
- Meetings with union representatives and the Financial
- and Accounting Management to provide regular updates on the economic and financial situation of the operations.

Finally, labor relations committees meet monthly to evaluate management indicators related to: (103-3)

- The number of items addressed in the bi-weekly or monthly agendas with different unions.
- Compliance with commitments made to unions arising from internal items (agendas).
- Number of workers who belong to unions, of total operations personnel.
- Number of days of labor stoppages due to union grievances.

# MANAGEMENT OF SUBCONTRACTOR AND SUPPLIERS

## SUPPLY CHAIN (102-9)



CLASSIFICATION	AVERAGE NUMBER	ANNUAL PAYMENT (MM USD)
Regular Suppliers	243	161
Regular Subcontractors	79	289
Total	322	450



To ensure appropriate economic, social, and environmental performance, Volcan supervises its subcontractors to ensure that they comply with labor laws and are aligned with Company's principles, values, policies and safety standards. Toward that end, the Company strictly controls compliance with regulations and obligations in the operating units. In addition, the subcontractor invoice payment procedure is subject to controls; invoices are approved only after the subcontractor submits evidence of compliance with labor obligations for the previous month to the Administrative area. (103-2)

Consequently, all subcontractor firms must work in accordance with the standards of Volcan's Occupational Health and Safety and Environment System, as well as best practices in social responsibility promoted by the Company. Each subcontractor worker is required to receive a minimum number of hours of training and actively participate in all programs and talks given each month

#### **PROCUREMENT PRACTICES**

Volcan's procurement policy prioritizes local hiring for services and certain inputs, as long as the required

technical conditions and quality standards are met, and goods and services are offered at competitive market prices. The Company also encourages subcontractors or suppliers to hire personnel from the area of influence of the mining unit, mainly for positions requiring unskilled labor. (103-2)

In addition, Volcan has quality standards for the raw materials it purchases and makes periodic visits to its different suppliers. The Company also follows a procedure that establishes technical and financial mechanisms for procuring goods and services.

It is worth noting that, in 2019, 94% of materials and supplies were purchased from Peruvian suppliers. The remaining 6% were imports. (**204-1**)

Volcan set aside a percentage of its annual budget for local suppliers to purchase products and services in the areas of its major operations. A local supplier is defined as any company that provides services or goods and is located within the area of influence of Volcan's mine operations.





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#### PROPER PRODUCT MANAGEMENT

Correct handling and manipulation of Volcan products not only ensures efficient management but also appropriate environmental care throughout the logistics chain. Toward that end, the Company strives to work with partners who engage in transportation, storage, shipping, and other specialized services. In addition, the Company uses Material Safety Data Sheets (MSDS) for each of its products. The reports are available to all agents in the chain. This procedure enables the Company to ensure the transparency of information about the chemical composition, use, storage, handling, emergency procedures, and potential health effects of its products. As a result, customers, shipping companies, logistics agents, and warehouses are duly informed. All MSDS reports are reviewed and periodically updated to ensure their applicability. (103-1)(103-2)

## CUSTOMER MANAGEMENT

#### ONE OF THE MOST IMPORTANT OBJECTIVES OF VOLCAN'S COMMERCIAL MANAGEMENT IS TO BUILD A PORTFOLIO OF KEY CUSTOMERS IN ORDER TO ACHIEVE DIVERSIFICATION BASED ON A SOLID, LONG-TERM RELATION.

A good commercial relation is built on the foundations of contract compliance, which is defined in the most part in the delivery plan and the agreed technical specifications. Accordingly, the Operations Management and Logistics Management are in constant communication to anticipate, evaluate, and promptly inform the customer about any deviation from planned deliveries caused by production,

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operational or logistic issues.

Executive Management evaluates the following indicators:Concentrates delivered under the sales contract with each client.

Quality of concentrates in relation to agreed technical specifications.

## COMMUNITY RELATIONS MANAGEMENT

## SOCIAL RESPONSIBILITY IS A STRATEGIC AREA OF THE VOLCAN CORPORATE VISION TO REACH ITS GOAL OF BECOMING A LEADING MINING COMPANY BY 2021.

Toward that end, our social management is used as a tool that enables us to carry out operations in a sustainable manner and have a positive impact on the development of communities within our direct area of influence. In this way, we strive to strengthen our relationship and dialogue with community leaders as well as important government authorities and social groups to generate a partnership committed to development and community wellbeing. (103-1)

Our sustainable management activities are established in Sustainable Development Plans and Community Relations Plans and the Public Works Tax Credit Program, which are focused on collaboration through: (103-2)

- Productive development projects that involve diversification beyond mining itself.
- Promoting local employment through formalization and growth of community enterprises that provide goods and services to the mining industry.
- Strategic areas of development such as education, health, nutrition, institution-building, and infrastructure.
- Public-private partnership mechanisms to reduce the infrastructure and utilities gap.

The basis of open and harmonious communication is respect for people, their customs, and their traditions. That is the essence of Volcan's relations with one of its

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#### •••••••••••••••••

main stakeholder groups: the communities within its area of influence. One of the pillars of community relations management is the expectations that communities have of the Company. (102-43)

In this aspect, Volcan has Open Door Policies to receive all members from stakeholder groups. It also has communication mechanisms, such as: Procedures to address complaints and grievances, and inquiries directly related to the operations, environmental matters, among others.

As part of its communication efforts, Volcan publishes a journal at each unit to explain what it does for the community and share relevant articles related to education, health, safety, environment, among others. In addition, public communications are made on local radio stations.

### 11.1 **KEY** COMMUNITY **EXPECTATIONS**



**Development interventions** based on the sustainable development plan



A strategic alliance that promotes community development

Current law requires that companies conduct environmental and social studies before initiating any



Expectation that the Company will prioritize hiring members of the local community and their families (direct or indirect hiring).

and control of the community relations activities contained in its policies, rules, and procedures, including: (103-3)

- Community Relations Plans (CRP), register commitments acquired by the Company each year
- Community relations protocols that govern the conduct and performance of all management personnel at operating units or projects
- Current regulations, which include mechanisms for enforcement and control of compliance with commitments
- Involvement of the Office of Social Management and Dialogue of the Presidential Council of Ministers, which channels community grievances, coordinates dialogue, and facilitates consensus
- Participation by the Ministry of Energy and Mines, which, through the Social Management Office, facilitates dialogue and verifies the information in the Annual Consolidated Declaration, which is a sworn statement
- Permanent Information Offices (PIO), which are a channel for community concerns, complaints, and grievances regarding social and environmental matters (MM7)

**THE BASIS OF OPEN AND** HARMONIOUS COMMUNICATION **IS RESPECT FOR PEOPLE, THEIR CUSTOMS, AND THEIR TRADITIONS.** THAT IS THE ESSENCE OF **VOLCAN'S RELATIONS WITH ONE OF ITS MAIN STAKEHOLDER GROUPS: THE COMMUNITIES** WITHIN ITS AREA OF INFLUENCE

extractive activity. These instruments clearly establish the mechanisms for assessing and managing the impacts of operational activities on the surrounding population. This information enables development of environmental and social baselines that describe the environmental and socioeconomic characteristics of the area prior to the start of activities. (103-1)

The baselines are used to determine the potential social impacts of the activity or mining project and to develop measures to mitigate or control negative impacts and reinforce positive ones. These measures are set forth in the Community Relations Plan (CRP) which also documents the population's concerns and desires. (103-2)

Based on this analysis, the following programs were established: (413-1)

- Communication and information programs
- Education programs
- Health programs
- Employment promotion programs
- Local goods and services procurement programs
- Cultural promotion programs, among others

Volcan manages mechanisms for involvement, follow-up,



## 11.2 AREAS OF INFLUENCE

Each Volcan operating unit has signed agreements with the communities in its direct area of influence. Shown below are the operating units and the communities within their direct and indirect areas of influence.

#### AREA OF DIRECT INFLUENCE (413-1) (413-2)

39 RURAL COMMUNITIES IN THE AREA OF DIRECT IMPACT							
Baños	Cerro	Alpamarca	Chungar	Carahuacra- San Cristobal	Andaychagua	Ticlio	Exploraciones
13	11	4	2	3	2	3	6
Carhuacayán	Quiulacocha	Carhuacayán	San Juan de Huayllay	Pomacocha	Huay Huay	San Francisco de Asis de Pucará	Chauca
Chauca	Racracancha	San José de Baños	San Agustín de Huaychao	San Juan Baut. De Pachachaca	Suitucancha	San Mateo de Huanchor	Cochahuayco
Chuquiquirpay	Sacra Familia	Santa Catalina		Yauli		San Antonio	Santa Catalina
Huascoy	San Antonio de Rancas	Chuquiquirpay					Santa Cruz
Pirca	San Miguel						Sisicaya
San José de Baños	Santa Ana de Tusi						Vichaycocha
San Juan de Uchucuanico	Tingo Palca						
San Juan de Viscas	Yurajhuaca						
San Miguel de Vichay cocha	La Merced de Jarria						
Santa Cruz de Andamarca	San Miguel de Pallanchacra						
Ravira	Vinchos						





### 11.3 BUILDING HARMONIOUS COMMUNITY RELATIONS

#### **COMMITMENT TO EDUCATION**

#### **PRIMARY AND SECONDARY EDUCATION**

In 2019, the alliance with Enseña Peru NGO, an association that promotes a professional movement to transform education, was still in place. The partnership between Volcan and Enseña Perú has been present at the Yauli, Chungar and Cerro de Pasco units during the year, and had a direct impact on more than 830 primary and secondary education students. Improvement indicators were achieved in math, language comprehension, physics, English, science, technology and environment. (203-1)

#### AREAS OF ENSEÑA PERU'S PROGRAM INTERVENTION (203-1)

DPT.	UNIT	COMMUNITY
	Cerro	Rancas
Pasco	Character	Huayllay
	Chungar	Huaychao
Junín		Huayhuay
	Yauli	Suitucancha
		Yauli

In addition, a pilot project was carried out together with Diseña el Cambio NGO, an institution specialized in implementing educational methodologies aimed at innovation and self-generation of sustainable solutions for community issues. The negotiations were completed with an aim to replicate the results at the operations' educational institutions.

#### **HIGHER EDUCATION**

#### Cerro Unit

In San Antonio de Rancas, 25 scholarships were awarded for studies at Daniel Alcides Carrión National University (UNDAC) and 15 students received full scholarships at SENATI. In Quiulacocha, Volcan awarded scholarships to three students for studies at UNDAC while one student received a full scholarship at SENATI.

#### **Chungar Unit**

At year-end 2019, there are five (05) SENATI scholarship holders in the Huaychao community and twelve (12) scholarship holders in the Huayllay community.

#### **Alpamarca Unit**

In 2019, three (03) students in the San José de Baños Community received full SENATI scholarships, and one student received one CETEMIN scholarship. Three (03) students in the Santa Catalina Community received full SENATI scholarships, and four CETEMIN scholarships were also awarded. In addition, all the children in the community attended the "young reporters" holiday program that was implemented during this period.

#### TRAINING

#### Yauli Unit

- In 2019, nine women of the Yauli Rural Community received training in the baking and fine pastry workshop and the community's bakery was successfully implemented.
- The solid waste management training workshop was carried out to promote recycling, in support of the women's committee initiative for recycling PET plastic.
- The training course in heavy equipment was aimed at members of communities within the area of influence, who were interested in participating, and their children. This contributed to their training and labor experience.
- Three-month computer and IT workshops were held with the attendance of over 20 students from the Pomacocha Community.
- Pre-professional practices were provided to children of community members who were close to finishing their technical or university studies. In addition, in 2019, two students from the Yauli and Pomacocha Communities carried out their summer traineeships at the Company.

#### **Chungar Unit**

- The annual "Heavy Equipment Operator" training course was held for 20 community members of Huayllay and Huaychao and their children.
- Moreover, over 20 students of Huayllay Community attended English classes.
- Training in textile crafts and occupational tools was provided to 18 women enrolled in the Rural Community of San Agustín de Huaychao, district of Huayllay, Pasco.

#### **Cerro Unit**

- Training in the Code of Ethics and Conduct was provided to the employees of subcontractors and community companies in its area of direct influence, in accordance with the Community Relations Plan Reporting Program.
- In coordination with DIRESA Pasco, educational sessions on health and nutrition, health of adolescents, healthy educational institutions and homes were held, aimed at communities in the area of influence and UGEL - Pasco.
- Talks about oral hygiene, and sessions to raise awareness on environment protection and conservation were held, aimed at students of educational institutions in the communities.
- Moreover, training in participatory social and environmental monitoring was provided, aimed at communities and towns in the area of influence. Subsequently, a follow-up was performed.
- Modules were developed to provide occupational and technical education in the field of cattle techniques, shearing techniques, and slaughter and sale of animals. The objective of this activity was to promote the improvement of the community's occupational capabilities to enable them to join the employment market of the region; and to promote development of productive and commercial chains.

#### Alpamarca Unit

 The program "Building Community Relations in the Santa Catalina and San José De Baños Communities" was carried out with the participation of social labor students of Universidad de Trujillo who made a field visit to the aforementioned communities in order to identify their problems and develop community growth actions to promote social inclusion of the different stakeholders.

#### HEALTH

The strategic alliance between the Company and Prisma

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NGO is still in place, and seeks to uphold the improvement of health standards and further impact the communities' quality of life. (203-1)

The project has identified (through progress and monitoring indicators) prevalent diseases across over ten specialties, mainly respiratory, musculoskeletal and gastrointestinal conditions. In addition, efforts to prevent these diseases are implemented through advocacy meetings, raising awareness among authorities, and through in-person educational sessions on key topics, which are determined by the community's needs: care and personal hygiene, healthy nutrition, anaemia prevention, among others. Annually, over 9,500 medical examinations are performed.

Volcan seeks the involvement of the State in the implementation and execution of these initiatives, as it plays a fundamental role to ensure the project's sustainability. In this regard, when patients who required immediate medical attention were detected, facilities were

DIVISIÓN	UNIT	LOCATION	CAMPAIGN
	Yauli (Carahuacra- San Cristóbal,	Pachachaca	1°
		Pomacocha	1°
	Andaychagua,	Suitucancha	1°
	Ticlio	Yauli	2°
	Cerro	Quiulacocha	2°
		Yurajhuanca	1°
Mining	Chungar	Huaychao	2°
		Huayllay	1°
	Alpamarca	Santa Catalina	2°
	Exploraciones	Carhuacayan	2°
		Cochahuayco	1°
		Sisicaya	1°
	Total mining		17
Energy	CH Baños	Ravira	1°
		Viscas	1°
	Total energy		2
Total			19

#### HEALTH CAMPAIGNS PER COMMUNITY (203-1)

provided to ensure they received adequate treatment at public health institutions.

#### Campaign against Anaemia

In parallel, and through the same alliance, since 2018, Prisma has been fighting the incidence of the anaemia syndrome in children under 5 in the Cerro and Chungar Communities (Paragsha, Quiulacocha and Huaychao, respectively). The plan identifies the children's nutritional condition, their consumption of iron-rich foods and/or supplements, processing of necessary micronutrients, and the severity of the anaemia, if detected.

#### **ECONOMIC DEVELOPMENT**

As part of the Economic Development element, Volcan and Prisma NGO designed a joint action strategy for preserving and protecting traditional businesses and developing their

#### ACTIONS PER LOCATION (203-1)

DIVISION	UNIT	LOCATION	CAMPAIGN
	Cerro	Coop. Yanamate	1°
		Quiulacocha	2°
		Yurajhuanca	1°
		Huayllay	1°
Mining	Chungar	Huaychao	1°
Mining	Alpamarca	Santa Catalina	1°
		Pomacocha	1°
	Yauli	Yauli	1°
		Suitucancha	1°
	Total mini	ng	10
	CH Baños	San José de Baños	1°
		Santa Cruz de Andamarca	1°
		San Miguel de Vichaycocha	1°
Energy		San Juan de Chauca	1°
		Viscas	1°
		Ravira	1°
	Total energy	gía	
Total			16

industry through innovative ideas. (103-2) (203-1)

Agricultural and livestock campaigns aimed at improving the productive chain, through technical assistance and progress monitoring in the areas of influence. In 2019, 165,000 heads of cattle were dosed.

In 2019, under the agreement reached with Santa Catalina Community regarding the Romina II project, 46 improved breed heifers and one bull equal to a total amount of USD 100,000 were delivered. Moreover, approximately 250 meters of roads and sidewalks and their corresponding water system were built, and USD 15,000 were granted to continue the pastures project. Three thousand meters of chain-link fence and 900 metal posts were delivered to San José de Baños Community to fence the farm and mark the boundary with Chuquiquirpay Community.

#### LOCAL EMPLOYMENT DEVELOPMENT

By encouraging local employment, we contributed to reduce unemployment and increase the income of communities in the area of influence, promoting improvement of local personnel capabilities to contribute to their human and professional development. Volcan continues its local business hiring policy. In 2019, community businesses achieved an aggregate annual turnover of approximately USD 50 million.

#### INFRASTRUCTURE

Volcan promotes the development of infrastructure to generate a positive social impact on quality of life, in line with the commitments assumed by the Company and the needs of the communities within its direct area of influence. In 2019, the following was implemented:

#### Yauli Unit (Carahuacra - San Cristóbal, Andaychagua, Ticlio)

- The third stage of CITE was completed, in accordance with the "Rumichaca Tailings Dam 24 ha Expansion" Agreement executed with the Yauli Community in 2012. The total investment across all works amounts to PEN 579 thousand and aims to benefit education.
- In addition, as part of the contribution to infrastructure, 400 cement bags were delivered for the construction of the Jaumanchaca bridge.

• The community's horse racecourse was built with the Company's contribution in coordination with the Pomacocha Community, promoting the development of culture and encouraging zonal activities.

#### **Cerro Unit**

- The Healthy Households Program was carried out with the objective of improving the quality of life of the community members of San Antonio de Rancas who reside in the surroundings of Ocroyoc tailings dam and other mining areas, ensuring that they live in a healthy environment. Accordingly, solar panels were delivered to 13 identified families.
- Annually, Volcan performs maintenance of access roads to the channel, as stipulated in the agreement executed with Racracancha Rural Community.

#### **Chungar Unit**

- Improvement works at Caserío Santo Rosario's stadium were completed in line with the Agreement executed with the Huaychao Rural Community.
- The construction of the 2nd cattle shed at Jatumpampa reached 50% completion.

#### Alpamarca Unit

- In 2019, under the agreement reached with Santa Catalina Community regarding the Romina II project, approximately 250 m of roads and sidewalks and their corresponding water and sewage system were built at the Catalina Community for a total amount of USD 100,000
- Maintenance was performed on the Tingo-de Baños rural community road. Moreover, we actively participated in the irrigation of the road section between Tingo bridge and San José de Baños community, as we do every year as part of Volcan's commitment to environment protection.

#### **COMPLIANCE OVERSIGHT**

Volcan's activities are supervised by government agencies that enforce fulfillment of commitments to communities and application of standards to prevent significant impact on the environment that could harm human health and lives. (103-3)

The Agency for Environmental Assessment and Enforcement (OEFA) assesses, oversees and, in some cases, sanctions Volcan's activities. OEFA is a specialized technical body

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attached to the Ministry of Environment, it enforces and ensures an adequate balance between private investment for economic activities and environmental protection. In addition, it controls the National System for Environmental Assessment and Enforcement (SINEFA). (103-3)

#### FORMAL GRIEVANCE MECHANISMS

As part of its environmental policy and to comply with citizen engagement regulations (Supreme Decree No. 028-2008-EM, Regulation on Citizen Engagement in the Mining Subsector), Volcan and its subsidiaries implement citizen engagement mechanisms for the different stages of mining activity, such as exploration, production, or mine closure. In addition, the Company has a Permanent Information Office in all units that make approved environmental impact assessments available to the community and provide information about project and operational progress. (102-43) (103-2)(413-1)(MM7)

These offices receive suggestions, comments, reports, and grievances from stakeholders in the areas of influence. The documentation is promptly processed and addressed. Depending on the type of grievance, meetings are organized to clarify questions; these are complemented by guided visits when necessary.

#### **SOCIAL INVESTMENT**

The goal of Volcan's social investment is to contribute to sustainable human development in the 39 communities in its area of direct influence. In 2019, Volcan invested USD 5.42 million in this area. The investment is

SOCIAL INVESTMENT	(USD)
Alpamarca	896,485
Cerro	881,709
Chungar	1,475,417
Exploraciones	737,194
CC.HH Baños	342,947
Carahuacra-San Cristóbal	725,475
Ticlio	302,500
Andaychagua	58,465
Total	5,420,192

#### SOCIAL INVESTMENT BY UNIT (203-1)

primarily based on the Company's 84 agreements and commitments with rural communities, established in sustainable development and community relations plans arising out of environmental impact assessments. They are concentrated in three areas: education, health, and economic development. In addition, to strengthen the local economy, Volcan worked with 21 community enterprises with total billing around USD 50 million per year for civil works, mining operations, and hauling services, among others. (103-1) (103-2) (203-1)

There are currently no impact evaluations being implemented for the main projects and investments made, as it is necessary to establish a baseline that would enable analysis of the current situation. In 2019 the baseline created for Huayllay and Huaychao Communities was used to establish intervention priorities in accordance with the most critical indicators in those communities. This resulted in prioritizing investment in education, health, and nutrition. In 2019, a perception study to take place in the main communities within the area of direct influence was awarded through a tender process. This study will be executed during 2020. (103-3) (203-2)

#### **SIGNIFICANT INVESTMENTS IN SOCIAL** INFRASTRUCTURE

Since 2010, Volcan has committed PEN 108.5 million to finance 14 infrastructure and utilities projects of great social impact that have contributed to reduce the country's infrastructure gap in education, water and sanitation, solid waste management and transport, among others. These projects benefit approximately 500 thousand people. (203-1)

Volcan is permanently participating and promoting the Public Works Tax Credits mechanism through new projects and by approaching the new local, regional and national authorities. The projects executed by the Company benefit the closest populations and follow an internal strategy of investing in crucial sectors to achieve greater social impact.

Volcan ranks third among mining companies in terms of the total funding amount committed to Public Works Tax Credits. Moreover, the Company is a founding member of ALOXI, the Partnership for Public Works Tax Credits, which includes companies.

In 2019, the "Food Market of Chancay" project was completed and handed over in an event attended by the main local authorities. The project required a PEN 22 million investment.

Volcan aims to continue the development of the city through further investments in the Public Works Tax Credits program. Projects are currently under evaluation for joint execution with the new authorities.

#### RANKINGS OF COMPANIES BY INVESTMENT AMOUNT AND NUMBER OF PROJECTS (MILLION PEN IN THE 2009-2019 PERIOD)

N°	COMPANY	TOTAL 2009-2019
1	Banco de Crédito del Perú-BCP	1,147.96
2	Compañía Minera Antamina S.A.	613.70
3	Southern Peru Copper Corporation	600.02
4	Optical Technologies S.A.C.	232.46
5	Telefónica del Perú S.A.A.	222.78
6	Banco Internacional del Perú S.A.A Interbank	186.94
7	Unión de Cervecerías Peruanas Backus y Johnston S.A.A BACKUS	109.81
8	Volcan Compañía Minera S.A.A.	108.60
9	Cementos Pacasmayo S.A.A.	87.39
10 Source: I	Ferreyros S.A. Decentralized Investment Office – ProInversión	80.40

PFN **MILLION TO FINANCE 14 INFRASTRUCTURE** AND UTILITIES PROJECTS OF GREAT SOCIAL **IMPACT THAT HAVE CONTRIBUTED TO REDUCE** THE COUNTRY'S INFRASTRUCTURE GAP IN EDUCATION, WATER AND SANITATION, SOLID WASTE MANAGEMENT AND TRANSPORT, **AMONG OTHERS** 







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### RESPONSIBLE MAN ME C

In 2019, the implementation of the environmental management system reached 71% completion, exceeding the result obtained in 2018 by 5%. These results permit to confirm the environmental approach and commitment to a continuous improvement aligned with prevention and control of the main



THESE RESULTS PERMIT TO CONFIRM THE ENVIRONMENTAL APPROACH AND COMMITMENT TO A CONTINUOUS IMPROVEMENT ALIGNED WITH PREVENTION AND CONTROL OF THE MAIN ENVIRONMENTAL RISKS



environmental risks, which are being standardized across all our operations. (102-11)

The basis of the Environmental Management System is managing Critical Environmental Risks, as part of Volcan's environmental management strategy.



#### CRITICAL ENVIRONMENTAL RISKS



### 12.1 EMISSIONS AND AIR QUALITY

Air quality and emissions are controlled through an Environmental Monitoring Program implemented across all Volcan and subsidiaries' mining units (103-1) (305-7).

Monitoring was performed monthly, or weekly in some units, and reported on a quarterly basis to the Ministry of Energy and Mines and other relevant bodies.

In 2019, fully focused and committed to the protection of the environment and adaptation to climate change, Volcan started a series of studies to identify and measure

#### KEY CORPORATE STANDARDS DEVELOPED TO MANAGE CRITICAL ENVIRONMENTAL RISKS

	Solid waste management I	manag	disposal gement nd tailing dams] I
Water and liquid effluents management		I Environmental management in new projects	Natural manag





greenhouse gas and carbon footprint generation in each operational unit, with the purpose of coming up with reduction initiatives in the upcoming years and implement actions, projects and goals aimed at reducing GHG.

In 2019, we continued to implement and internalize the air emissions standard, a crucial tool to manage the Critical Environmental Risk of "Atmospheric Emissions".

### Atmospheric emissions s) management response I resources Guidelines for agement mine closure

Volcan has a network of air quality monitoring stations across its operations and within the area of environmental and social influence. Monitoring is performed by a specialized company using inertial separation/filtration (gravimetric analysis) for 24 hours.

According to the 2019 results, emissions of particulate matter PM 10 and PM 2.5, measured in parts per million (ppm), showed values below the Environmental Quality Standard (EQS) regulated by Supreme Decree 003-2017-MINAM.

Monthly air monitoring was complied with and reported on a guarterly basis to the Ministry of Energy and Mines.

#### QUANTITY OF PM<sub>10</sub> AND PM<sub>2.5</sub> PARTICULATES BY UNIT - 2019

MINING COMPANIES	UNIT		PARTICULATE MATTER (PM) ANNUAL AVERAGE 2019		
		PM <sub>2.5</sub>	<b>PM</b> <sub>10</sub>		
Volcan Compañía Minera S.A.A.	Andaychagua	11.7	8.5		
	San Cristóbal	12	24		
	Carahuacra	8.5	2		
	Ticlio	13.3	39.3		
Compañía Minera Chungar S.A.C	Óxidos de Pasco	11.7	19		
Empresa Administradora Cerro SA.C	Cerro Pasco	15	30		
Environmental Quality Standard (EQS)		25 ug/m3	50 ug/m3		



## ENVIRONMENTAL QUALITY STANDARD FOR PARTICULATE MATTER

PARAMETER	VALUE (ANNUAL)	STANDARD
Particulate matter under 10 micra PM 10	50 ug/m <sup>3</sup>	D.S. 003-2017-
Particulate matter under 2.5 micra PM 2.5	25 ug/m <sup>3</sup>	MINAM

#### In 2019, annual PM 10 and PM 2.5 values at Volcan's mining units recorded emissions below the limit Air Quality Standards in force.

## 12.2 BIODIVERSITY

Biodiversity is an important aspect of Volcan's environment protection policy. However, it should be noted that none of Volcan's operations are located within protected natural areas that are part of the National System of Protected Natural Areas (SINANPE). (103-1)

Volcan has one exploration project located in the buffer zone of the Nor Yauyos Cochas Landscape Reserve. The biological monitoring of flora and fauna are carried out and reported bi-annually to the Ministry of Energy and Mines and the Agency for Environmental Assessment and Enforcemen. (**304-2**)

In addition, the Alpamarca unit has nine flora and fauna monitoring stations. Monitoring activities take place twice a year as established in commitments made in environmental management instruments.

As part of mine closure activities, Volcan has implemented revegetation plans using native species for the recovery of disturbed areas.



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## 12.3 TRANSPORT

Transport management is part of the Company's Environmental Management System. This system controls environmental risks through continuous assessment using the Company's hazard identification procedure, risk assessment and control, internal audits, and air quality measurement. (103-1)

With respect to personnel, Volcan transports its employees to and from operations areas in 4X4 trucks and also uses third-party bus transport services.

Mineral is transported in dump trucks, belts and/or shafts from underground extraction areas and pits to concentrate plants, while concentrates are transported from mining units to the port of Callao in enclosed trailers, containers and via the Central Andino Railway.

All transport vehicles are part of the Preventive and Predictive Maintenance Program to mitigate and control significant environmental impacts.

ENVIRONMENTAL IMPACT	ENVIRONMENTAL CONTROL
Gas emissions such as CO and CO2 due to diesel consumption	Preventive maintenance to transport vehicles
Hydrocarbons spills (oils, greases and fuels)	Preventive maintenance to transport vehicles
Noise while in movement	The Internal Traffic Regulations (RITRA) establishes when and where the horns can be used
Particulate matters while in movement	Road watering with cisterns in the surrounding areas and sprinklers located in the operation

#### ENVIRONMENTAL IMPACTS GENERATED

## 12.4 WASTE MANAGEMENT

In 2019, Volcan continued strengthening the solid waste management standards to implement the Critical Environmental Risks known as "Inadequate Solid Waste Management", which allowed to identify and manage environmental risks, resulting in better environmental control.

Indicators on reduction, storage, reuse, sale, transport, recycling, and final disposal of solid waste were implemented in 2019. We are currently implementing Environmental Performance Indicators (EPI), which will allow us to align the objectives toward 2020.

All operations have stockpile points at strategic locations for separating waste by color code. The units have temporary storage facilities for solid waste, which is picked up by service provide companies. Non-hazardous waste is disposed of at landfills, and a percentage of it is sellable and/or reusable.

Volcan and subsidiaries' waste management policies are aligned with environmental regulations in force.

To comply with the regulatory provisions of the General Law on Solid Waste approved by Supreme Decree 014-2017-MINAM, Volcan submitted the Annual Declaration on minimization and management of non-municipal solid waste to the relevant authorities. Hazardous solid waste manifests were reported on a quarterly basis to the Agency for Environmental Assessment and Enforcement (OEFA).

In 2019, Volcan and subsidiaries generated 8,304 MT of solid waste across all mining units, a decrease of 25% as

#### MAIN SOLID WASTE GENERATED IN 2019

TYPE OF WASTE	WASTE
	Used oils
	Electronic waste (RAEE, in Spanish, including batteries, used fluorescents, toners, among others)
Hazardous	Plastic waste (bags, bottles, PVC pipes)
ndzdiuous	Waste containing cyanides and sulfates
	Materials containing hydrocarbons
	Heavy metals (welding scraps)
	Explosive waste
	Organic waste
Non- hazardous	Wood waste
	Plastic waste
	Paper and cardboard
	Metal waste (scrap metal)

#### compared to 2018.

Out of the total waste generated in 2019 by Volcan and subsidiaries, 27% consisted of hazardous waste, which was disposed of at hazardous waste landfills, and 73% consisted of non-hazardous domestic and industrial waste. Domestic waste was disposed of at the unit's landfill, while industrial waste was sold, donated or reused.

IN 2019, VOLCAN AND SUBSIDIARIES GENERATED 8,304 MT OF SOLID WASTE ACROSS ALL MINING UNITS, A DECREASE OF 25% AS COMPARED TO 2018



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#### WASTE GENERATION BY VOLCAN MINING UNITS AND SUBSIDIARIES (MT) - 2019

COMPANY	MINING	ANNUAL WASTE GENERATION (MT) - 2019			
COMPANY	UNIT	HAZARDOUS	NON-HAZARDOUS	TOTAL	
	Andaychagua	234	728	962	
Compoñía Minoro Volcon C A A	San Cristóbal	216	896	1112	
Compañía Minera Volcan S.A.A	Carahuacra	44	665	709	
	Ticlio	230	144	374	
Come of the Miner Charge of CA C	Animón - Islay	1418	2802	4220	
Compañía Minera Chungar S.A.C.	Alpamarca	97	263	360	
Empresa Adm. Cerro de Pasco/ Óxidos de Pasco	Cerro y Óxidos	32	535	567	
Total		2271	6033	8304	



Volcan and subsidiaries hire service provider companies at each mining unit for the final disposal of hazardous and non-hazardous waste.

#### EPS-RS

COMPANY	UNIT		EPS	SANITARY REGISTRY
	Ticlio	Hazardous Waste	GSA-DISAL	EP-1501-067.17
			GSA-DISAL / GREEN CARE	EP - 1501-067.17 /EP-0701-007.18
		Non- Hazardous	GSA-DISAL	EP-1501-067.17
			GREEN CARE	EP-0701-007.18
Compañía	San Cristóbal	Hazardous Waste	GSA-DISAL / GREEN CARE DEL PERU S.A.	EP - 1501-067.17 /EP-0701-007.18
Minera Volcan S.A.A	-Carahuacra	Non- Hazardous	GSA-DISAL / GREEN CARE DEL PERU S.A.	EO RS- 0021-18-150142 / EO-RS-0053-18-70106
		Hazardous	GSA-DISAL	EO-RS-0021-18-150142
	Andaychagua	Waste	GREEN CARE	EO-RS-0053-18-70106
		Non- Hazardous Waste	GSA-DISAL	EO-RS-0021-18-150142
			GREEN CARE	EO-RS-0053-18-70106
		Hazardous Waste	EMICONSATH S.A	EO-RS-0235-19-190104
			D&D	EO-RS-0125-19-150142
			GSA-DISAL	EO-RS-0021-18-150142
	Chungar		EMICONSATH S.A.	EO-RS-0235-19-190104
Compañía Minera		Non- Hazardous	D&D	EO-RS-0125-19-150142
Chungar S.A.C		Thazardous	GSA-DISAL	EO-RS-0021-18-150142
		Hazardous	D&D	EO-RS-0125-19-150142
Empresa Adm. Cerro de Pasco/ Óxidos de Pasco	Alpamarca	Waste	GREENCARE	EO-RS-0053-18-70106
	, apunarca	Non- Hazardous	EMICONSATH S.A	EO-RS-0235-19-190104
		Hazardous Waste	D&D	EO-RS-0125-19-150142
		No Peligrosos	Tingo Palca	EO-RS-0003-18-190113



## 12.5 ENERGY

Energy management at the Company has two fronts: the generation of energy from renewable sources and the optimization of energy use through improving operating efficiencies. (103-2)

With regard to renewable energy, Volcan is developing hydraulic generation projects: the expansion of Tingo Hydroelectric Plant and Chancay 2 and 3 projects. Both projects are still in the permitting process.

To increase operational efficiency, the Company created the Corporate Energy Efficiency Program aimed at maintaining energy costs at 8-10% of mineral production cost. This program seeks to minimize energy consumption during peak hours, turning off equipment and using condenser banks to efficiently compensate for reactive energy. (**302-4**)

Volcan's energy consumption is calculated as follows:

- Monthly readings from meters: Consolidated monthly consumption information from meters; they provide energy procurement data (MWh). The information is provided by the electricity supplier or monitoring center.
- Monthly generation reports: Information from terminal meters at Volcan's hydroelectric plants; they provide power generation data (MWh). The information is provided by the Operations/Electric Maintenance Area

#### ELECTRICITY CONSUMPTION (302-1) (302-4)

ELECTRICITY BALANCE (GWH)	2018	2019	VAR (%)
Energy Production	308	387	26%
Ch's Chungar	153	151	-1%
ChTingo	9	9	-5%
CH Huanchor	146	159	9%
CH Rucuy	0	68	100%
Energy Consumption	712	756	<b>6</b> %
Energy Purchase	550	596	8%

and the Hydroelectric Operations Division.

• Tons processed monthly reports (t): Tons processed at the mining units' concentrator plants.

Finally, energy consumption costs versus tons processed are registered and consolidated in a monthly report prepared by the Budget and Management Control Division. (103-3)

The source used to calculate conversion reports can be found in the GRI Standards Guidelines for preparing Sustainability Reports.

## ENERGY MANAGEMENT AT THE COMPANY HAS TWO FRONTS: THE GENERATION OF ENERGY FROM RENEWABLE SOURCES AND THE OPTIMIZATION OF ENERGY USE







### 12.6 WATER MANAGEMENT

Water is an essential resource for mining that is used primarily in the mineral concentration process and to a lesser extent in auxiliary facilities and by the population. The main sources of supply are surface water and water from the interior of the mine. (103-1). (103-1)

Volumes of water used by operations are approved by licenses and permits granted by the National Water Authority.

Volcan and its subsidiaries are implementing measures to optimize the efficient use of water resources: (**303-1**)

- Recirculation of water in mining processes.
- Inspections to detect leaks and/or poor practices in order to identify opportunities for improving water and liquid effluent standards.
- Annual audits to identify process improvements and reduce water consumption.
- Personnel training in rational water use and consumption.

#### AUTHORIZED WATER VOLUMES BY UNIT

		ANNUAL VOLUME (THOUSAND M <sup>3</sup> )			
COMPANIES	UNITS	DOMESTIC	MINING	TOTAL	
	Andaychagua	111	2332	2,443	
Valaan Campañía Minara C.A.A	San Cristóbal - Marh Túnel	1,385	5,045	6,430	
Volcan Compañía Minera S.A.A.	Carahuacra	830	2186	3,016	
	Ticlio	134	513	647	
	Animón	158	2996	3,154	
Empresa Administradora Chungar S.A.C	Islay		158	158	
	Alpamarca	156	1,983	2,140	
Empresa Administradora Cerro S.A.C.	Cerro	15,768	14,822	30,590	
Total		18,542	30,035	48,576	

## Volcan controls water consumption by implementing hydrometric stations and, in some sectors, by using the conventional method.

To improve water management in 2019, the Water Management Diagnosis was updated across all mining units to identify improvement opportunities in: the implementation of flow measurement equipment, in hydraulic structures, and optimization of authorized water intakes as compared to those used by the operation.

At year-end 2019, Volcan and subsidiaries were authorized to use an annual flow of 48.5 million m3, of which 62% is for mining and 38% is for domestic use.

#### PERCENTAGE OF AUTHORIZED VOLUME IN PERMITS GRANTED TO VOLCAN AND SUBSIDIARIES



Domestic - 18,542 thousand m<sup>3</sup> Mining – 30,035 thousand m<sup>3</sup>

To safeguard, preserve, and protect water, Volcan conducts monthly environmental monitoring activities and submits the results each quarter to the Ministry of Energy and Mines and the National Water Authority. The Company monitors water and effluent quality, not only at points approved by the authorities, but also through an internal monitoring network to identify operational deviations, in order to prevent, control, and mitigate such situations.

To improve water quality and usage, in 2019 we continued the implementation of Water and Liquid Effluent Management Standards which enabled us to implement Environmental Performance Indicators (EPI) for water (102-11). The database is currently being processed and filled



## SUSTAINABILITY REPORT

out. The KPI will be defined next, and action plans focused on the efficient use of water will be established.

In 2019, the relevant authority continued the evaluation of the updates to the Plan for Integral Adaptation to Water Quality Standards and Maximum Permissible Limits across all mining units. The studies have taken into account projects and activities aimed at comprehensive water management, such as separation of contact and noncontact water and water recirculation.

The Adaptation to Water Quality Standards and Maximum Permissible Limits require significant investments and will enable us to improve water quality management, as well as to meet the environmental legislation in force.

Volcan has been able to recirculate 19% of the total water used in its operating activities, evidencing an improvement aimed at increasing water management efficiency.

Efforts have been defined to achieve comprehensive water management, including short-, medium- and long-term actions in line with national regulations and also adopting the best practices in the market and the initiatives contained in the ICMM Principles regarding water management and accountable reporting practices

### 12.7 EFFLUENT MANAGEMENT

In 2019, flow measurement equipment continues to be installed at domestic and industrial effluent discharge points to improve the control of discharge volumes.

Volcan and its subsidiaries have Water Permits and Discharge Authorizations granted by the National Water Authority.

The results of the domestic and mining discharge monitoring reports showed values below the maximum permissible limits in force. These are submitted to the competent authority on a quarterly basis. (103-1)

At the end of 2019, Volcan authorized discharges totaled 92,127 million m3, out of which 99% are from mining activities. The Cerro de Pasco unit has the largest authorized volume (38.7 million m3), followed by Yauli (33.6 million m3), Chungar (17.1 million m3) and Alpamarca (2.6 million m3). **(306-1)** 

## PERCENTAGE OF AUTHORIZED DISCHARGE VOLUMES OF VOLCAN'S AND SUBSIDIARIES



#### ANNUAL AUTHORIZED DISCHARGE VOLUME BY UNIT

MINING COMPANIES	UNITS	ANNUAL VOLUME (THOUSAND M <sup>3</sup> )			
MINING COMPANIES	UNITS	DOMESTIC	MINING	TOTAL	
	Andaychagua	52	7070	7,122.00	
Valcan Compoñía Minoro C A A	San Cristóbal - Marh Túnel	210	2551	2,761.00	
Volcan Compañía Minera S.A.A.	Carahuacra	163	15704	15,867.00	
	Ticlio	3	7884	7,887.00	
Empresa Administradora Chungar	Animón - Islay	0	17171	17,171.00	
S.A.C	Alpamarca	34	2586	2,620.00	
Empresa Administradora Cerro S.A.C. Cerro/Óxidos		0	38699	38,699.00	
Total		462	91,665	92,127.00	

VOLCAN AND ITS SUBSIDIARIES HAVE WATER PERMITS AND DISCHARGE AUTHORIZATIONS GRANTED BY THE NATIONAL WATER AUTHORITY

### 12.8 TAILINGS DAM MANAGEMENT

Volcan has six tailings dams in operation. Each one has environmental certifications, and construction and operating permits in force.

Tailings Dam management uses the SIGDERE tool (Waste Storage Management System for the Tailings Dam and Overburden) to perform the technical and environmental comprehensive planning in different areas to enforce the Monitoring Programs, and empower operators at concentrator plants allowing them to make a critical analysis and follow-up on compliance in a continuous improvement system.

SIGDERE's implementation started in 2016, as a progressive process. In 2019, the process continued, with emphasis on strengthening its implementation.

In line with Volcan's growth strategy, in 2019, objectives and goals were defined to improve environmental performance and strengthen the tailings dams' safety systems. Accordingly, the Tailings Dams Adaptation and Safety Program was implemented, establishing shortterm actions to not only adopt best practices, but also migrate towards the best technology available, aiming at adaptation to the guidelines of the Canadian Dam Association. (**306-2**)

#### TAILINGS DAMS PER MINING UNIT

COMPANIES	UNITS	TAILINGS DAMS	TYPE OF DISPOSAL	ENVIRONMENTAL INSTRUMENT
	San Cristóbal - Mahr Túnel	Mahr Túnel Nº 06	Pulp	EIA/ITS
Volcan Compañía Minera S.A.A.	Carahuacra	Rumichaca	Thickening	EIA
	Andaychagua	Andaychagua Alto	Pulp	EIA
Como i como chungar CA C	Alpamarca	Alpamarca	Pulp	ITS
Compañía Minera Chungar S.A.C.	Animón	Animón	Thickening	ITS
Empresa Administradora Cerro S.A.C.	Cerro de Pasco	Ocroyoc	Pulp	EIA

ITS: Supporting Technical Report

## SUSTAINABILITY REPORT



### 12.9 REGULATIONS, FINES AND SANCTIONS

Volcan manages its compliance with environmental regulations and the impacts generated by its operations through the following actions: (**307-1**)

- Dissemination of environmental obligations required under current regulations.
- Execution of internal audits in mining units to verify environmental obligations.
- Follow-up and verification of compliance with corrective measures imposed by the Agency for Environmental Assessment and Enforcement (OEFA).
- Follow-up through alerts to operations regarding compliance with the required periodic environmental reports.
- Environmental management system audits aimed at preventing, mitigating, and controlling environmental risks of the operation and therefore compliance with environmental obligations.

The framework of the Environmental Management System includes strategic committees comprised of management and those responsible for each mining unit, charged with making decisions regarding environmental performance. In addition, there is a level 2 committee comprised of superintendents for each operation, who share information on environmental situations and opportunities for improvement.

In 2019, OEFA carried out 25 environmental supervisions, both special and regular, out of which, 11 were performed on Volcán Compañía Minera and 14 on subsidiaries.

Likewise, regulatory compliance is evaluated through the following mechanisms:

- Correction of findings identified in environmental inspections.
- Reduction of findings detected during inspections conducted by the environmental authority.
- Decrease in fines imposed by the environmental authority.

### 12.10 COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

The Company meets all requirements of environmental regulations on mining. In addition, quarterly reports were submitted to the Ministry of Energy and Mines regarding water and air quality, and noise levels, meeting all environmental obligations required by the Peruvian Government. It also submitted quarterly reports to the National Water Authority on effluent and water quality in receiving water bodies.

Reports on environmental obligations were also submitted to the Ministry of Energy and Mines as established by Supreme Decree No. 040-2014-EM, as well as the Environmental Sustainability Report, the Environmental Strategy Compliance Report, the Annual Report on Significant Impacts, and the Annual Report on Reagents and Operational Inputs.

Finally, environmental training was provided to personnel in all mining units in compliance with Article 153 of Supreme Decree No. 040-2014-MEM. One of the most important training topics was environmental obligations in the framework of approved environmental instruments.



### 12.11 CLOSURE PLANS (MCP)

The final stage of a mine requires appropriate procedures to ensure that disturbed areas are able to recover both socially and environmentally and to avoid generating environmental liabilities that affect future generations. To date, all Volcan units have approved Mine Closure Plans (MCP) in place. The Company developed its first closure plans starting in 2009, under Law No. 28090 and its regulation, Supreme Decree No. 033-2005.

Those plans have been updated, and in some cases modified, since 2012. Accordingly, the second modification to the Closure Plan for Carahuacra and Cerro de Pasco mining unit was approved in 2019.

MINING UNIT		PCM RESOLUTION	PCM VCM BUDGET (MM USD NOT INCLUDING VAT				
			PROGRESSIVE C.	FINAL C.	POST C.	TOTAL	GUARANTEES
	UM Andaychagua	RD N° 176 - 2013 - MEM - AAM	5.54	9.85	1.07	16.45	10.91
Vauli	UM Carahuacra	RD N° 076 - 2019 - MEM -DGAAM	14.31	15.72	2.79	32.82	18.51
Yauli	UM San Cristobal	RD N° 142-2016-MEM- DGAAM	9.58	21.52	1.78	32.88	23.3
	UM Ticlio	RD N° 055-2017-MEM- DGAAM	1.41	2.72	0.69	4.82	3.41
Chungar	UM Animón	RD N° 242-2018-MEM- DGAAM	33.29	10.38	0.98	44.64	11.35
Chungar	UM Alpamarca	RD N° 096-2016-MEM- DGAAM	2.27	8.1	0.96	11.33	9.05
Corro	UM Cerro de Pasco	RD Nº 187 - 2019-MINEM- DGAAM	19.87	26.54	2.82	49.24	29.37
Cerro	UM Vinchos	RD N° 007-2018-MEM- DGAAM	6.45	1.14	0.99	8.58	2.13
San Sebastián	P. Explotación San Sebastián	RD N° 458-2014-MEM- DGAAM	0.02	0.25	0.13	0.39	0.38
Total			92.74	96.22	12.2	201.16	108.42



As part of the execution of government-approved mine closure plans, the re-vegetation and progressive restoration program has been implemented to recover areas affected by mining activities, to benefit communities in the area of influence. Progress in the activities executed and their results are reported to the Ministry of Energy and Mines; these are then enforced by the Agency for Environmental Assessment and Enforcement. (103-1)

Closure activities in 2019 were executed by Volcan and its subsidiaries as part of the progressive closure program approved by the Ministry of Energy and Mines. The investment amount is shown in the table below:

#### LIST OF CERTIFICATIONS AND PERMITS OF VOLCAN COMPAÑÍA MINERA AND SUBSIDIARIES - 2019

12.12
ENVIRONMENTAL
<b>CERTIFICATIONS AND</b>
PERMITS GRANTED IN
2019

In line with the growth strategy, we started environmental assessments for new projects, expansions, modifications and technological improvements, which follow the corporate environmental guidelines and technical guides of the Ministry of Energy and Mines and the National Service of Environmental Certification for Sustainable Investments (SENACE).

In 2019, external audits to measure the level of compliance with environmental and legal obligations continued. The following categories were used: 1. Proven Efficacy

2. Improvement Opportunity

In 2019, the environmental-legal audit was performed by an external consulting firm. The results exceeded those

obtained in 2018 by 3%, and confirm the operations' improved environmental performance.

All Volcan and subsidiaries' mining units complied with submitting the environmental obligations undertaken in the Environmental Management Instruments and the Regulations on Environmental Protection and Management for Exploitation, Beneficiation, General Labor, Transportation and Mining Storage (Supreme Decree N° 040-2014-MEM) to the Ministry of Energy and Mines and the National Water Authority.

The 15 most important environmental licenses and permits relevant to Volcan and subsidiaries' growth framework obtained in 2019 are listed in the table below.



COMPANY	MINING UNIT/ PROJECT	TYPE OF PERMIT	APPROVAL RESOLUTION	DESCRIPTION
Empresa Administradora Cerro S.A.C.	Cerro de Pasco	Autorización de Funcionamiento	R.N° 0544-2019-MINEM-DGM-V	Operating authorization of Ocroyoc tailings dam at elevation 4272 masl - Stage II Phase 2
Cello S.A.C.		PCM	RD Nº 187-2019-MINEM-DGAAM	2nd Update PCM Cerro de Pasco
Compañía	Alpamarca	Autorización de Funcionamiento	RD N° 0382-2019-MINEM-DGM-V	Operating authorization of Alpamarca tailings dam at elevation 4680masl - Stage III
Minera Chungar	Romina	ITS	RD N° 136-2019-MINEM-DGAAM	Explorations Expansion
Chungar	Palma	ITS	RD N° 099-2019-MINEM-DGAAM	2nd ITS of Palma Mining Exploration Project
		MCB	R. N° 0547-2019-MINEM-DGM-V	Modification of Beneficiation Concession
	Andaychagua	Operating Authorization	RD N° 0071-2019-MEM-DGM-V	Raising the Stage IV part B of the Andaychagua Alto Tailings Dam to elevation 4408 masl and complementary works.
		ITS	RD N° 201-2019-SENACE-PE-DEAR	3rd ITS of Andaychagua Mining Unit
		MDIA	R.D. N° 162-2019-MINEM-DGAAM	Zoraida II Project MDIA
		MDIA	RD N° 076-2019-MEM-DGAAM	Oyama Triunfo Mining Exploration
	Carahuacra	Closure Plan	RD N° 076-2019-MEM-DGAAM	2nd Update PCM Carahuacra
Volcan Compañía Minera S.A.A.		Operating Authorization	RD N° 0913-2018-MEM-DGM-V	Raising the Rumichaca Tailings Dam dike to elevation 4224 and auxiliary facilities
		ITS	RD Nº 186-2019-SENACE-PE-DEAR	4th ITS of Carahuacra Mining Unit
	Ticlio	AEIA	RD N° 0042-2019-MEM-DGAAM	Update to the Environmental Impact Assessment of UM Ticlio
		ITS	RD N° 045-2019-SENACE-PE-DEAR	1st ITS of Ticlio Mining Unit
	SC-MT	ITM	RD N° 0053-2019-MEM-DGM-V	Construction and operation of the Tailings Dam N° 06 raising to elevation 4036 Stage IV
		ITM	RD N° 0108-2019-MEM-DGM-V	Disposal of coarse and fine tailings in Tailings Dams N° 4 and N° 5 and reduction of freeboard from 2 to 1 m in dam N° 6.

EIAsd: Semi-detailed Environmental Impact Assessment ITM: Mine Technical Report MDIA: Modification to the Environmental Impact Statement AEIA: Updated Environmental Impact Assessment

MCB: Modification to Beneficiation Concession

## SUSTAINABILITY REPORT

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