



**/ 2017  
SUSTAINABILITY  
REPORT /**



(GRI 102-1, 102-3, 102-53)

Headquarters: Calle Bernini 149, San Borja, Lima (Peru)

We invite our stakeholders to share their opinions, questions and/or suggestions at [asuntoscorporativos@minsur.com](mailto:asuntoscorporativos@minsur.com)

For the latest news about Minsur and its subsidiaries, visit:

[www.minsur.com](http://www.minsur.com)  
[www.marcobre.com](http://www.marcobre.com)  
[www.mtaboca.com.br](http://www.mtaboca.com.br)

This report was prepared with the support of RS+

**ERRE  
ESE  
M+S**

This report was prepared by RS+  
in accordance with the **GRI**  
**Standards: Core option**

[www.rsmas.pe](http://www.rsmas.pe)

# / Presentation

(GRI 102-1, 102-48, 102-49, 102-50,  
102-51, 102-52, 102-54, 102-56)

It is with pleasure that Minsur submits its fourth annual sustainability report; which provides its stakeholders with information on the progress made towards sustainable management in 2017. This document affirms the company's commitment with a sustainable and responsible mining industry that generates value for its stakeholders.

Minsur reports are published annually. Data included herein correspond to the FY from January 1 to December 31, 2017. This report comprises operations under the direct control of Minsur S.A., such as: San Rafael, Pisco, Pucamarca, Mina Justa (Peru), Pitinga and Pirapora (Brazil), and its subsidiaries, subject to operational control: Minera Latinoamericana S.A.C. and Cumbres Andinas S.A., These shall be called hereinafter Minsur. Whenever relevant, the report hereof also refers to exploration and expansion projects, as well as to mines in the closure stage.

This report was made in accordance to the GRI standards: Core option. The Global Reporting Initiative (GRI) is an international and independent organization, which mission is promoting the standardization of sustainability reporting practices, providing guidelines and support to organizations. Furthermore, it was created considering the principles of the International Council of Mining and Metals (ICMM), an organization gathering leading mining companies, as well as national, regional and global mining associations to address the challenges of sustainable development in the mining sector.

The elaboration process of this Report was led by Minsur's Corporate Affairs Manager with the support of external advisors for its writing and verification. Minsur thanks the several areas that contributed with information and collaborated to make this document an effective tool to strengthen the company's management and enable its continuous improvement. Information presented in the Report has been verified by the auditing company SGS. Moreover, the Report has successfully completed the GRI Materiality Disclosures Service.



## / Message from the CEO

(GRI 102-14)

### *To our stakeholders:*

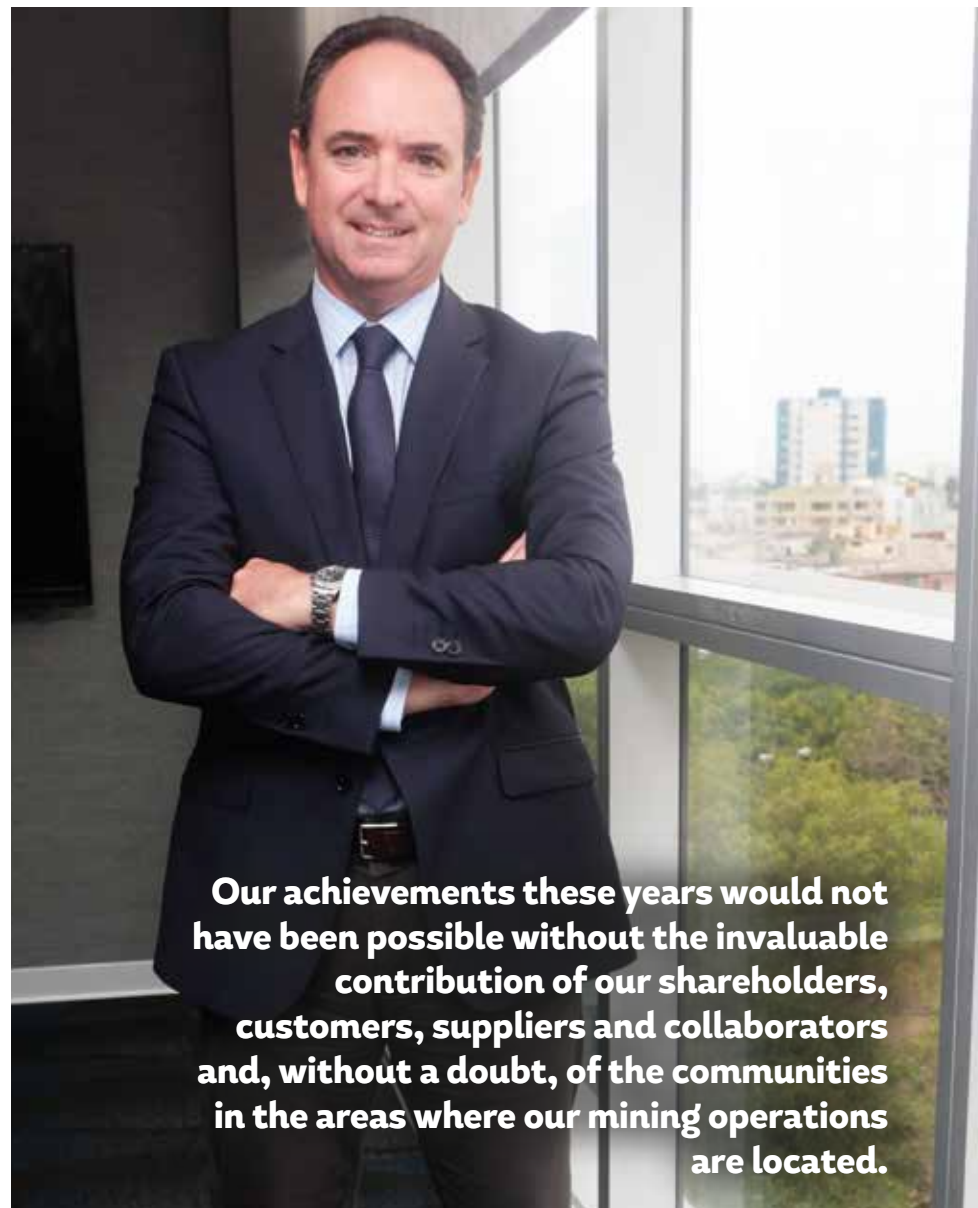
It is with pleasure that I present to you the 2017 Sustainability Report, a document summarizing the highlights of our company's management.

2017 was full of significant challenges for our country; economically, the GDP grew 2.5%, which shows a slowdown in the economic growth experienced in the last three years. This was mainly due to El Niño phenomenon, which had a strong impact on several regions in the country, and mobilized all sectors to take care of this climate emergency. In the foreign environment, the international scenario of metal prices was better than foreseen, though highly volatile, which was good for our business results and for the mining industry in general.

Last year was a very important year for our company. In terms of safety, we achieved our best historical performance; our mining units reduced their accidents resulting in loss of workdays in 40%, with no fatalities, and thus they all received recognition from the Peruvian Mining Safety Institute (ISEM).

From the operational and financial perspective, our company exceeded the goals set for the year, consolidating our operating management system, increasing productivity and continuing with our efforts to control and reduce costs, which enabled us to improve profit margins in our mining units and to generate enough cash to finance our investments in growth projects.

Thus, good operating results in our units, together with better prices of metals we trade, allowed Minsur S.A. to close 2017 with EBITDA at US\$ 250.1 million (51% of



**Our achievements these years would not have been possible without the invaluable contribution of our shareholders, customers, suppliers and collaborators and, without a doubt, of the communities in the areas where our mining operations are located.**

EBITDA margin) and a net result of US\$ 80.5 million. A significant milestone to highlight is that our subsidiary in Brazil, Mineracao Taboca, reached a record production of tin, as well as niobium and tantalum ferroalloys, based on investments made in 2016 and beginning of 2017 to expand capacity. This resulted in positive EBITDA at US\$ 9,3 million this year, thus consolidating the first year with positive EBITDA since we acquired such operation in 2008.

In 2017 we continued focusing on our expansion projects. Thus, the Feasibility Study (DPS) for our B2 project was approved in the third quarter, which represents an investment estimated in \$200 million to reprocess old tailings in San Rafael MU.

Such project started its implementation stage in the last quarter, and it is expected to start operating at the end of 2019.

Similarly, the DPS for our Mina Justa project was approved at the end of 2017, an investment estimated in USD 1,500 million with high strategic relevance for the company, since it will be our first large scale copper operation. Thus, we will be able to diversify Minsur's production base beyond the tin industry, with a world-class long-lived asset. During 2018 first half we expect to complete the project's financing process and detailed engineering, to then start the construction stage during the second half of the year, aiming to start operations by the end of 2020.

2017 was an important year also in terms of replenishment of mineral resources, especially in San Rafael, where our exploration efforts down the mine and in the surrounding areas paid off, calculating mineral resources containing 28,000 tin tons at 1.83% Sn grade. Thus, we were able to replenish exploited resources and also to extend the life of the mine.

In terms of sustainability, in 2017 we consolidated our social and environmentally responsible management in all our units. We did not have any stoppage due to conflicts with the communities and we signed a Framework Agreement with the Antauta Municipality. Minsur's first "work for tax" project was completed in

Orurillo, and we started water and sanitation works in Antauta. Furthermore, in 2017 we approved Minsur's sustainability strategy. Our social management obtained recognition with the Sustainable Development Award from the National Society of Mining, Oil and Energy (SNMPE) for the Fibra Emprendedora Project.

In 2017, we also made significant progress in our talent management, development of our collaborators and our organizational culture. We continued with the Mina de Talento program for the development and retention of high-potential professionals identified in our organization. We also conducted the second mapping of our Succession plan for management positions. Moreover, we successfully implemented the first corporate program for Leadership Development "+Líder".

Our achievements these years would not have been possible without the invaluable contribution of our shareholders, customers, suppliers and collaborators and, without a doubt, of the communities in the areas where our mining operations are located.

We thank them all for supporting our management and for their trust and collaboration.



---

Juan Luis Kruger Sayán  
CEO

**1/** ABOUT  
MINSUR

**2/** ON THIS  
REPORT

**3/** CORPORATE  
GOVERNANCE

**4/** HUMAN  
MANAGEMENT

**5/** HEALTH AND SAFETY  
MANAGEMENT

**6/** ENVIRONMENTAL  
MANAGEMENT

**7/** SOCIAL  
MANAGEMENT

**8/** GRI INDEX

**9/** EXTERNAL  
ASSURANCE

**/CONTENTS/**



# /1. ABOUT MINSUR/

**1.1 / Business profile / page 08**

**1.2 / Operations and projects / page 10**

**1.3 / Corporate framework / page 18**

**1.4 / Value chain / page 21**

**1.5 / Associations and memberships / page 23**

**1.6 / 2017 Awards / page 23**

**1.7 / Stakeholders / page 24**

## 1.1 / Business profile

(GRI 102-1, 102-2, 102-5)

Minsur is a leading company in the mining industry, with over 40 years of experience extracting and processing mineral deposits. It is part of the Breca Corporate Group (hereinafter the Breca Group), one of the main and more diverse business conglomerates in Peru, founded by the Brescia Cafferata family. Furthermore, it has investments in the mining, insurance, fishing, hotel, health, and financial industries, among other sectors. Grupo Breca owns 99.99% of common shares of de Minsur S.A share capital and 6.31% of equity stocks<sup>1</sup>.

Table 1.1.1

/ Main shareholders of Minsur S.A. /			
Minsur shareholders	Percentage of participation	Nationality	Economic group
Inversiones Breca S.A.	99.99995%	Peruvian	(*)
Other shareholder	00.00005%	Peruvian	(*)
<b>Total</b>	<b>100.00000%</b>	-	-

(\*) Economic group presented to the Peruvian securities regulator – Conasev (currently SMV) by Inversiones Nacionales de Turismo S.A., pursuant to Conasev Resolution N° 090-2005-EF-94.10, on March 1, 2007.

### Minsur corporate structure

Currently, Minsur S.A. is devoted to exploitation, extraction, processing and trade of minerals, mainly tin and gold. Its operations include the San Rafael mining unit (MU), Pucamarca MU and the smelting plant and refinery (SPR) of Pisco. Furthermore, Minsur S.A. owns different subsidiaries that ensure its growth and diversification (see table 1.1.4):

- Through its subsidiary Minera Latinoamericana S.A.C., Minsur S.A. has investments in Mineração Taboca S.A. and its subsidiary (which operates Pitinga MU and the SPR of Pirapora, both located in Brazil), Minera Andes del Sur S.P.A. (a Chilean company devoted to mining exploration) and in Inversiones Cordillera del Sur Ltda. And subsidiaries (shareholder of a

business conglomerate mainly devoted to cement production and marketing in Chile)<sup>3</sup>.

- Through its subsidiary Cumbres Andinas S.A., Minsur S.A. has investments in Minera Sillustani S.A.C., Compañía Minera Barbastro S.A.C. and Marcobre S.A.C., Peruvian mining companies with projects that -by the end of 2017- were at the stage of exploring and assessing mineral resources (Barbastro), feasibility studies (Marcobre with Mina Justa) and closure (Sillustani with Mina Regina).

Table 1.1.2

/ Common shares /			/ Equity stock /		
Ownership	Number of shareholders	% of participation	Ownership	Number of shareholders	% of participation
Less than 1%	1	0.00005 %	Less than 1%	3295	22.6606 %
Between 1%- 5%	0	-	Between 1%- 5%	7	18.0519 %
Between 5%-10%	0	-	Between 5%-10%	4	28.4101 %
More than 10%	1	99.99995 %	More than 10%	2	30.8774 %
<b>Total</b>	<b>2</b>	<b>100.00000 %</b>	<b>Total</b>	<b>3308</b>	<b>100.00000 %</b>

Table 1.1.3

Table 1.1.4

/ Structure of subsidiaries and investments of Minsur S.A. /			
Subsidiaries of Minsur S.A.	Ownership	Subsidiaries of Minera Latinoamericana S.A.C. and Cumbres Andinas S.A.C.	Ownership
Minera Latinoamericana S.A.C.	99.9 %	Mineração Taboca S.A. and subsidiaries	99.9 %
		Inversiones Cordillera del Sur Ltda. and subsidiaries	85.39 %
		Minera Andes del Sur S.P.A.	100.00 %
Cumbres Andinas S.A.	99.9 %	Minera Sillustani S.A.C.	99.99 %
		Compañía Minera Barbastro S.A.C.	99.99 %
		Marcobre S.A.C.	99.999998 %

<sup>1</sup>Common shares are registered in the Securities Public Registry, and are the only securities issued by Minsur S.A. listed on the stock market. As of December 31, 2017, shares issued by the Company amounted to 960,999,163 shares of a nominal value of S/. 1 each.

<sup>2</sup>Equity stocks give preemptive rights to shareholders for dividend payment and stripping of company's assets, but they do not confer the right to vote.

<sup>3</sup>Operations in Chile are not part of the current sustainability report, since these are not directly controlled by Minsur.



## Minsur in numbers

(GRI 102-7)



**2 290**  
collaborators



**3 918**  
contractor  
workers

Net sales in 2017



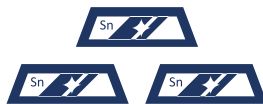
**USD 672**  
million

EBITDA in 2017



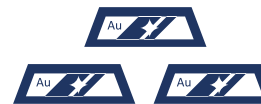
**USD 253.8**  
million

Refined tin production in  
Peru and Brazil



**24 614**  
tons

Gold production



**100 000**  
ounces

Ferroalloy  
production



**3 249**  
tons

## 1.2 / Operations and projects

(GRI 102-2, 102-4, 102-7, 102-10)

Minsur has several operations and projects that are at different stages of the mining cycle (see table 4.2.1), which are strictly managed under a system based on risk prevention and detection; ensuring health and safety, community development and environmental protection. Minsur's mining concessions amount to 248 452 hectares, 223 716 of which correspond to operations in Peru and 25 125 to operations in Brazil.

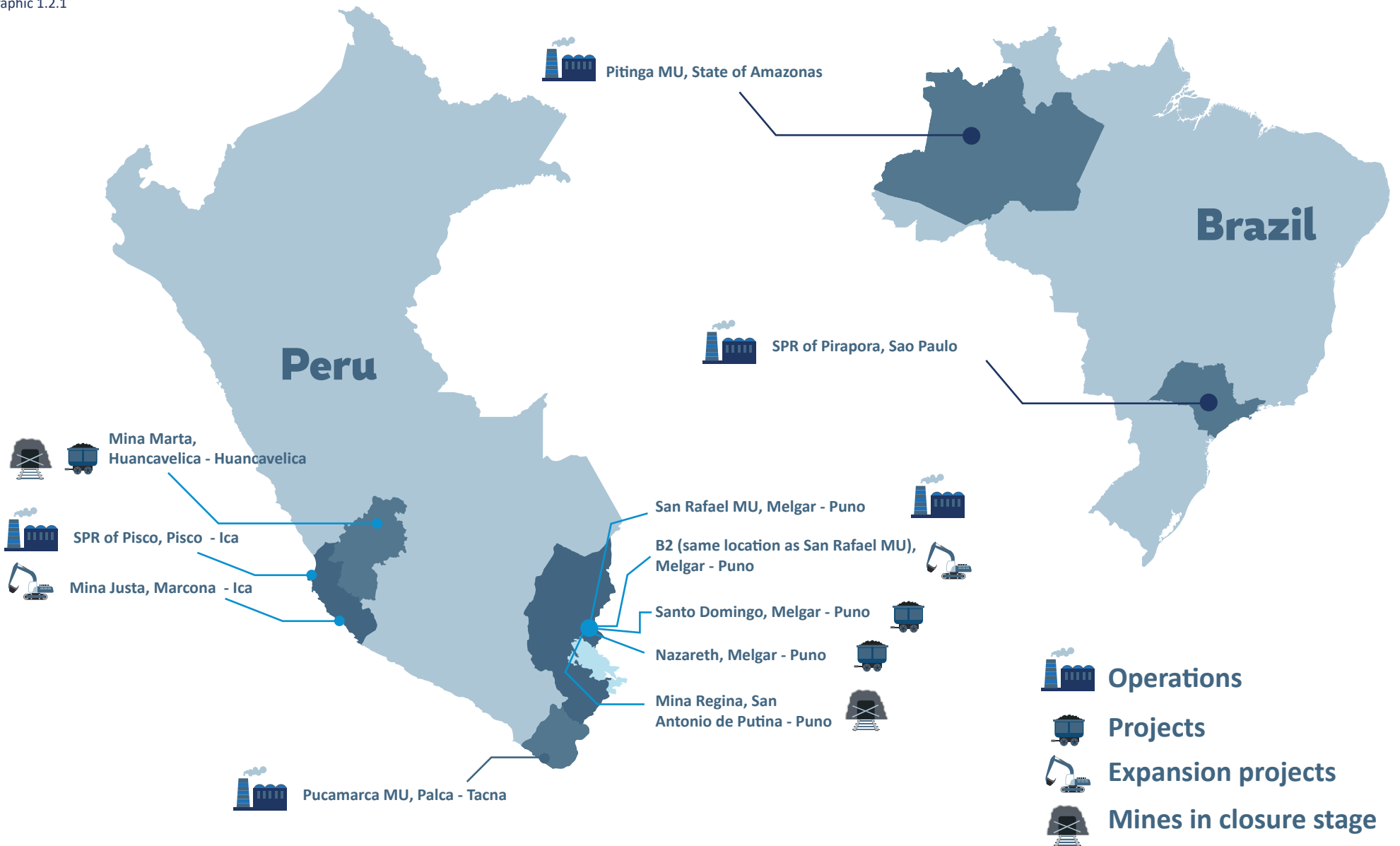
Table 1.2.1

### / Minsur operations /

Country	Company	Unit / Project	Main product (s)
<b>Operations</b>			
Peru	Minsur S.A.	San Rafael MU and SPR of Pisco	Tin
Peru	Minsur S.A.	Pucamarca MU	Gold
Brazil	Mineração Taboca S.A.	Pitinga MU and SPR of Pirapora	Tin and ferroalloys
<b>Exploration projects</b>			
Peru	Minsur S.A.	Santo Domingo	Tin
Peru	Minsur S.A.	Nazareth	Tin
Peru	Compañía Minera Barbastro S.A.C.	Mina Marta	Copper
<b>Expansion projects</b>			
Peru	Marcobre S.A.C.	Mina Justa	Copper
Peru	Minsur S.A.	Tailings Reuse B2	Tin
<b>Mines in the closure stage</b>			
Peru	Minera Sillustani S.A.C.	Mina Regina	NA
Peru	Compañía Minera Barbastro S.A.C.	Mina Marta	NA



Graphic 1.2.1



## Operations

Minsur controls five operations, three in Peru and two in Brazil.

### San Rafael MU

<b>Location:</b>	<b>Melgar Province, Puno Department – Peru</b>
<b>Start of operations:</b>	<b>1977</b>
<b>Estimated life of mine:</b>	<b>8 years</b>
<b>Type of operation:</b>	<b>Underground tin mine</b>
<b>Processes:</b>	<b>Concentration and flotation</b>
<b>Average grade:</b>	<b>1.75%</b>
<b>Production in 2017:</b>	<b>17 791 tons of tin contained in concentrates</b>
<b>Certifications:</b>	<b>ISO 14001, ISO 9001, OHSAS 18001</b>

- Since 2016, San Rafael MU works with an innovative Ore Sorting process, a German technology that allows assessing rock grade with X rays, aiming at identifying those with tin content and determine its grade; that is, the amount of mineral in each rock.
- In 2017 the tailing dam heightening (B3 and B2.5) project was completed to strengthen safe storage of tailings generated by the unit. Moreover, that same year, we started backfilling a gap generated due to ore extraction activities in the mine, aiming at stabilizing the mineshaft for mineral extraction in the upper area.



### SPR of Pisco

<b>Location:</b>	<b>Pisco Province, Ica Department – Peru</b>
<b>Start of operations:</b>	<b>1996</b>
<b>Type of operation:</b>	<b>Smelting and refining tin</b>
<b>Processes:</b>	<b>Top-submerged lance smelting furnace</b>
<b>Treated ore grade:</b>	<b>22%</b>
<b>Production in 2017:</b>	<b>18 033 tons of refined tin</b>
<b>Certifications:</b>	<b>ISO 14001, ISO 9001, OHSAS 18001</b>

- San Rafael MU is linked with the SPR of Pisco for the production and sale of approximately 99,95% pure refined tin ore and tin-based alloys.
- It is a world pioneer using the submerged lance technology –globally known as Sirosmelt technology- to process tin concentrates, significantly improving cost and production-time efficiency.



/Peru/



**Pucamarca MU**

<b>Location:</b>	Palca Province, Tacna Department – Peru
<b>Start of operations:</b>	2013
<b>Estimated life of mine:</b>	6,3 years
<b>Type of operation:</b>	Open-pit gold (mainly) and silver mine
<b>Processes:</b>	Absorption, Desorption, Recovery (ADR)
<b>Average grade:</b>	0.50 grams per ton (g/t)
<b>Production in 2017:</b>	100 010 ounces of gold
<b>Certifications:</b>	ISO 14001, ISO 9001, OHSAS 18001

- Pucamarca MU, located at the border with Chile, has an average cash cost of 4.3 Dollars per treated ton (USD/tt)<sup>4</sup>.
- Through the crushing and leaching processes, the size of mined ore is reduced and metal is separated from the rock. Then, it is smelted in an electric furnace to obtain dore bars that are 60% to 70% pure.
- In 2017, construction works to expand the leaching pad were completed, aiming at increasing gold processing capacity.



/Peru/

<sup>4</sup> Cash cost per treated ton represent the total operating cost per ore-ton treated.

### ***Pitinga MU***

<b>Location:</b>	<b>State of Amazonas – Brazil</b>
<b>Start of operations:</b>	<b>1982</b>
<b>Estimated life of mine:</b>	<b>31 years</b>
<b>Type of operation:</b>	<b>Open-pit tin, niobium and tantalum mine</b>
<b>Processes:</b>	<b>Concentration and flotation</b>
<b>Average grade:</b>	<b>0.20% of tin and 0.25% of niobium and tantalum</b>
<b>Production in 2017:</b>	<b>6 983 tin tons in concentrates</b>
<b>Certifications:</b>	<b>ISO 9001</b>

- Pitinga MU, acquired in 2008 through the subsidiary Mineração Taboca, is the world’s largest tin reserve and its life of mine is estimated in 31 years.
- In 2017, repair works of the hydropower plant continued after the accident it suffered in 2015. Furthermore, its global metallurgical capacity was expanded by modernizing its infrastructure. Moreover, a flotation plant was added, which allowed increasing niobate production.
- Since the mine’s initial stages (before it was bought by Minsur) alluvial mining activities took place. A rehabilitation program is being implemented on the lands that were most affected by these activities. Between 2014 and 2017, over 300 hectares of land were successfully rehabilitated in 7 igarapés and it is estimated that other 200 hectares will be completed in 2018.



### ***SPR of Pirapora***

<b>Location:</b>	<b>State of Sao Paulo – Brazil</b>
<b>Start of operations:</b>	<b>1973</b>
<b>Type of operation:</b>	<b>Tin smelting and refining plant</b>
<b>Processes:</b>	<b>Electric smelting furnace</b>
<b>Treated ore grade:</b>	<b>47%</b>
<b>Production in 2017:</b>	<b>6 582 tons of tin (best result in Minsur’s history)</b>
<b>Certifications:</b>	<b>ISO 9001, ISO 14001</b>

- The SPR of Pirapora is directly linked to Pitinga MU tin production. This plant treats cassiterite concentrates and converts them into high-quality refined tin, which is 99.97% pure.
- In 2017 expansion of a slag crushing plant for processing was completed, and a sinter plant for metal agglomeration before starting the process inside the electric melting furnace.



**/Brazil/**

## Exploration projects

To ensure business continuity, Minsur also explores new ore deposits. At the end of 2017, the exploration portfolio amounted to 123 247 hectares. The main exploration projects are Santo Domingo, Nazareth and Mina Marta, all located in Peru.

### Santo Domingo

**Location:** Melgar Province, Puno Department – Peru  
**Mineral:** Tin, silver, lead, zinc and gold  
**Start:** 2013  
**Investment in 2017:** USD 6.6 million

- Santo Domingo is an exploration project located 40 kilometers away from San Rafael MU. In 2017, two ore shoots were defined, one with high tin ore content, and the second with base metal. During that year, drilling works reached 27 533 meters deep.
- Due to the positive results of scheduled drilling in 2017, during that year Minsur’s Board of Directors approved an expansion diamond drilling program of 5 533.3 meters, which was completed in December.
- The project closed the year in a post-drilling stage, where drilling results are being assessed. Actions for 2018 shall include the design of a 3D deposit model, inferred resource estimation and determining the exploration study area.

### Nazareth

**Location:** Melgar Province, Puno Department – Peru  
**Mineral:** Tin  
**Start:** 2013  
**Investment in 2017:** USD 9.5 million

- Nazareth is an exploration project located 5 kilometers away from San Rafael MU, which purpose is expanding the life of that mine.
- In February 2017, a 60 000 meter drilling program started. Furthermore, a 50 x 50 meter mesh drilling was conducted aiming at locating “inferred” mineral resources and convert them into “indicated” resources<sup>5</sup>.
- The purpose for 2018 is completing the drilling program and delivering the indicated resource.

### Mina Marta

**Location:** Huancavelica Province, Huancavelica Department – Peru  
**Mineral:** Copper  
**Start of project:** 2012  
**Investment in 2017:** USD 2.5 million

- Minsur bought Mina Marta in 2005 through its subsidiary Compañía Minera Barbastro S.A.C.
- In 2017, the 7 000 meter drilling continued and the side extensions of the ore body were defined as well as its real extension in depth.
- Drilling works and the geological model are expected to be completed during the first half of 2018.

<sup>5</sup>Inferred resources are those having a low geostatistical reliability in their sampling; on the contrary indicated resources have an acceptable geostatistical reliability based on their sampling, moreover, it may be assumed (but not confirmed) that there is geological continuity and metallic content.

## Expansion projects

### *Mina Justa*

**Location:** Nazca Province, Ica Department – Peru  
**Mineral:** Copper  
**Investment in 2017:** USD 46 million

- Mina Justa is a project owned by Minsur since 2016, when it acquired Marcobre through its subsidiary Cumbres Andinas S.A. This future mine has two different types of mineral resources: a superficial layer of copper oxide and a larger and deeper body of sulphur.
- The project will use seawater instead of natural sources of drinking water.
- Its life of mine is estimated in 21 years (2 years for building, 16 for operations and 3 of closure) and operations are expected to start by the end of 2020. Annual production is estimated in 90 000 tons of copper.
- The feasibility stage was completed by the end of FY 2017. The mine construction stage shall start during the second half of 2018.



### *Tailings Reuse B2*

**Location:** Melgar Province, Puno Department – Peru  
**Mineral:** Concentrated tin  
**Total investment:** USD 23,6 million

- This project is developed inside the San Rafael MU, and its objective is implementing a plant to reuse tailings with tin content that have been disposed in the B2 tailings dam during the first years of exploitation.
- By the end of 2017, the project's implementation stage started. It includes 7 600 000 metric tons of tailings, with an average 1,05% tin grade and it will contribute to produce 45 000 tons of fine tin, during a life of mine of approximately nine years.





## Operations in closure stage

### *Mina Regina*

**Location:** San Antonio de Putina  
Province, Puno Department –  
Peru

**Total investment:** USD 6,7 million

**Start of closure:** 2014

- A decision was made to appropriately rehabilitate the old tailings area and close the mine in order to achieve physical, chemical and hydrological stability of those areas affected by mining operations of the previous owner.
- By the end of 2017 the project is in a post-closure stage, which will extend to 2029.



### *Mina Marta*

**Location:** Huancavelica Province,  
Huancavelica Department –  
Peru

**Total Investment:** USD 6 million

**Start of closure:** 2014

- Minsur acquired Mina Marta in 2005 through its subsidiary Compañía Minera Barbastro S.A.C.
- In 2013, after reviewing the existing operation profitability, a decision was made to stop operations and close the mine. This process started following the closure plan approved by the competent authority.
- The closure stage was completed in December 2017, and in 2018 we will initiate the post-closure stage.



## 1.3 / Corporate framework

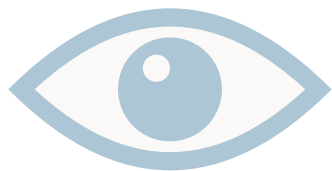
### Mission, vision and values

(GRI 102-16)

Minsur mission and vision, as well as its values, reflect the company's commitment to a responsible management promoting sustainability at all organizational levels, from the decision-making process to implementation of such decisions. Moreover, they bring the entire staff under the same course of action.

## MISSION

Generate value transforming mineral resources in a sustainable manner.



## VISION

Develop and operate world-class mining assets, as a benchmark in terms of safety, operational efficiency, socio-environmental responsibility and people's development.

### Values:

1. Integrity: acting in an honest, supportive and transparent manner.
2. Commitment: doing as promised.
3. Excellence: doing things better, always.
4. Trust: develop honest, open and respectful relationships.
5. Safety: developing all our activities safely.
6. Responsibility: respecting all our stakeholders, as well as being socially and environmentally responsible.

## Policies

Corporate policies guide Minsur’s actions, as well as those of its collaborators, contractors and suppliers, in line with its vision, mission and values; ensuring quality, safety and responsibility of mining activities. These encourage our staff to lead with the example, in words and actions, and we promote actions and behaviors that strengthen responsible management at all places all the time.

It is worth mentioning that, as part of our continuous improvement process and our admission to the International Council on Mining and Metals (ICMM), in 2017 we reviewed all our policies to assess if they are adjusted to the ICMM principles<sup>6</sup>. In this process, the company was supported by an external auditor.

Some of our main policies are stated below:

Graphic 1.3.1

			
<p><b>Code of Ethics and Conduct</b></p>	<p><b>Sustainability policy</b></p>	<p><b>Anti-corruption and anti-bribery policy</b></p>	<p><b>Human Rights policy</b></p>
<p>It establishes the conduct that shall be observed by collaborators, contractors and suppliers. The Compliance Committee, at the management level, is responsible for promoting ethical behavior and monitor compliance with the Code of Ethics and Conduct.</p>	<p>It establishes Minsur’s commitment to a sustainable and integrated management, with an emphasis on health and safety, the environment and social management issues. Our policy provides guidelines for the development of sustainability pillars.</p>	<p>It states the guidelines and procedures that will allow collaborators to recognize and prevent corruption and bribery, aiming at preventing this type of crimes in all transactions where Minsur is involved. It shall be extended to suppliers, contractors, third parties and intermediaries who could represent or act on behalf of Minsur.</p>	<p>It recognizes the responsibility to respect and promote fundamental rights set forth in the Universal Declaration of Human Rights, as well as those set forth in the International Labor Organization (ILO) Declaration, ensuring they are complied with.</p>

<sup>6</sup> For information on the ten principles of ICMM, visit: <https://www.icmm.com/en-gb/about-us/member-commitments/icmm-10-principles>

## Corporate strategy

Minsur is a company committed with responsible, sustainable and inclusive mining activities contributing to the development of the countries where it operates. The corporate strategy aligns policies, practices, procedures and standards to ethical management, always according to laws into force and the best practices. Such strategy is supported on seven pillars:

- 1 **Maximize the value of operations by increasing productivity and cost-efficiency.**
- 2 **Ensure effective implementation of growth projects.**
- 3 **Explore brownfields; that is, explore lands within existing operations aiming at expanding the life of mine.**
- 4 **Implement an active management of mergers and acquisitions (M&A), in order to consolidate Minsur's position and sustainability.**
- 5 **Achieve operational excellence in each process and stage of our mining operations.**
- 6 **Consolidate organization with a talent approach; promoting communication, as well as a leadership culture based on meritocracy.**
- 7 **Socio-environmental sustainability, mitigating environmental impacts and contributing to social development.**

The strategy reflects a concern that goes beyond economic value generation. For Minsur, it is essential to protect its collaborators' health and safety as well as those of the contractor staff, to minimize the impact on the natural environment and contribute to the local development of neighboring communities avoiding conflict at all moments.

In that regard, Minsur's sustainability vision entails achieving performance goals and generating long-term economic value, operating pursuant to the Corporate Code of Ethics and Conduct, the values of our organization, as well as the highest corporate governance standards. It is also about managing and expanding the business, making respect for human rights, efforts to provide a safe and healthy workplace, legal enforcement, fair compensation, professional opportunities, and environmental respect and protection tangible in our daily decisions and activities. Moreover, it translates in promoting economic development in the communities where Minsur operates.

## Innovation for competitiveness

Minsur bets for innovation, aiming at strengthening competitiveness and improving performance in the sector. An example of this is the implementation of the Ore Sorting technology in San Rafael MU, which allows separating high-grade from low-grade ore, providing to the concentration plant ore that was not possible to process before.

In Breca Group, Minsur has the support of BREIN, an innovation hub founded in 2017, which guides and encourages the group's companies to develop initiatives with innovation elements in a creative space, turning them into feasible and profitable projects. BREIN provides services in five fields: Tech & Digital, Data Analytics, Human Centered Design, Academy and Playground.

Moreover, as a member of different national and international associations, such as the International Tin Association (ITA) and the Tantalum-Niobium International Study Center (TIC), Minsur participates -together with other mining companies and research institutions- in events, conferences and researches promoting innovation in the mining industry. For instance, the company participated in a study implemented by ITA to improve performance of the tin fuel catalyst engine, which resulted in savings in fuel consumption. Thus, Minsur has an active role in the industry's discussions and trends.

## 1.4 / Value chain

(GRI 102-2, 102-6, 102-9, 102-16)





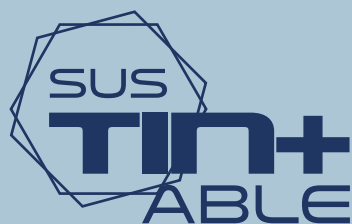
The gold supply chain is limited; it uses only one commercial bank and two external refineries with the Good Delivery seal granted by the London Bullion Market (LBMA), which accredits that gold and silver ingots meet strict quality requirements, as well as the Commodity Exchange (COMEX) certification.



On the other hand, Minsur's tin ore has been registered to the European Union regulatory system for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). This system requires the company to provide information on the risks derived from substances and how they shall be controlled across the entire production chain. The company's tin ore produced in Peru is sold under the SusTINable brand, and in Brazil under the Mamoré brand (registered Trademark of the London Metal Exchange – LME).

In 2017, Minsur products were exported to customers in Latin America, Asia, Europe and North America. Minsur considers it essential to ensure metal traceability at all stages of the company's value chain. In order to achieve a highly supervised management, the company has a strict monitoring system.

The main industries supplied by Minsur are the tinsplate, chemical and electronic welding industries. Since 2015, it was decided to directly supply our customers, without intermediaries.



Minsur's tin is marketed under the SusTINable brand, which highlights the sustainability approach of our tin ore production process, which is mined and processed in a safe environment in a way that is responsible with our environment and the community. Furthermore, the brand guarantees that tin has been processed in "conflict-free" smelting and refining plants, since both the SPR of Pisco and the SPR of Pirapora are subject to audits by the Responsible Mineral Initiative (RMI), an organization promoting supply chains that are "conflict-free" certified.

In 2017, the brand registration process continued in the countries where our tin ore is supplied. Likewise, the brand was strengthened internally, aiming at conveying to our entire staff the differential advantages of Minsur's tin ore.

In 2017, a total of 2 625 suppliers were part of Minsur's value chain, supplying different goods and specialized services to support our operations, including: transport, construction, training, food, consulting and maintenance services, as well as a variety of workers. In Peru we have 1 432 suppliers, out of which 95% are Peruvian, and in Brazil we have 1 193 suppliers, out of which 98.1% are Brazilian.

In Minsur, we aim at working closely with suppliers who share the company's values and good practices. To prevent them from generating negative impacts in the social and natural environment while supplying their goods and services, the company requires them to behave in accordance to our corporate strategy and identity, and to fully commit to our internal policies, specially to the Corporate Code of Ethics and Conduct, as well as to domestic laws into force.

To verify that their behavior is in line with these criteria, we constantly monitor them; starting before awarding the service or purchase agreement. Potential suppliers will go through a financial verification process with an external assessment tool. In addition, our strategic suppliers are subject to an annual approval process to verify their financial status, labor conditions, as well as their environmental, occupational health and safety, quality and social responsibility practices. Moreover, aiming at knowing impacts and risks involved in the services they provide, we ask our suppliers to describe in detail their service activities, considering inputs, equipment, machinery, tools, materials and infrastructure they will use. Furthermore, suppliers of our operations shall prepare an Environmental Management Plan including environmental practices and commitments as well as objectives and contingency plans.

During the service provision stage, audits are conducted to verify that suppliers' behavior and working methods are appropriate. Companies with a low performance receive support to improve their management. Thus, Minsur makes sure it always has high quality products and services, which are the result of responsible management.

### Local Suppliers

Minsur develops relationships with the communities based on trust and mutual gain. In line with this, in 2017 we developed a support program for local suppliers from the communities of San Rafael MU's area of influence, seeking to identify a portfolio of services to be provided by local suppliers, which could also be inserted in the regional market. This program will continue during the first quarter of 2018.



## Suppliers and contractors

## 1.5 / Associations and memberships

(GRI 102-12, 102-13)

Minsur has a permanent relationship with other public, union or private organizations aiming at working together to speed up the industry's institutional development and the country's sustainable development. As of the end of 2017, Minsur was part of the following associations:


Table 1.5.1

/ Associations and memberships /			
Name	Company	Voluntary or mandatory	Participation in the Board of Directors or Committee
1. National Society of Mining, Oil and Energy (SNMPE)	Minsur	Voluntary	Participation on the Committee
2. International Tin Initiative (ITA)	Minsur and Mineração Taboca	Voluntary	No
3. Tantalum-Niobium International Study Center (TIC)	Mineração Taboca	Voluntary	No
4. London Metal Exchange (LME)	Mineração Taboca	Voluntary	No
5. Sindicato Nacional da Indústria da Extração do Estanho (SNIEE)	Mineração Taboca	Voluntary	No
6. Instituto Brasileiro de Mineração (IBRAM)	Mineração Taboca	Voluntary	No
7. Federação das Indústrias do Estado de São Paulo (FIESP)	Mineração Taboca	Voluntary	No
8. Public Works for Taxes Alliance (Aloxi)	Minsur	Participation on the board and the committee	No
9. Responsible Minerals Initiative (RMI)	Minsur and Mineração Taboca	Voluntary	No

## 1.6 / Awards in 2017


 Trophy received in the Open Pit category of the **XX National Mining Safety Contest**, awarded by the Mining Safety Institute – ISEM (Pucamarca MU)

 Plaque of Honor in the Underground Category of the **XX National Mining Safety Contest**, awarded by the Mining Safety Institute - ISEM (San Rafael MU)

 Award plaque in the category Refinery and Smelters of the **XX National Mining Safety Contest**, awarded by the Mining Safety Institute - ISEM (SPR of Pisco)

 **Excellence & Quality Award** received from La Positiva Seguros

 **Sustainable Development 2017 Award** in the category Local Development Management, awarded by the National Society of Mining Oil and Energy – SNMPE (Fibra Empreendedora Program)

 **National Mining Award** granted by the Peruvian Institute of Mining Engineers (IIMP) in the 33rd edition of PERUMIN, for implementing a pre-concentration plant with the Ore Sorting technology to process slag deposits with grades below the cut-off grade, which increased San Rafael MU production.



# 1.7 / Stakeholders

(GRI 102-40, 102-42, 102-44)

Minsur identifies eight main stakeholders, having assumed different commitments with each of them:

Graphic 1.7.1



The stakeholders were identified based on the following grounds:

- The bi-directional impact between the company and the stakeholders. That is, the extent to which a specific group is capable of producing, either a positive or a negative impact on the company and vice versa.
- Any –legal, commercial, contractual or circumstantial- relationship with Minsur, or any intervention at some point of our value chain.
- A shared development vision.



(GRI 102-43, 102-44)

Minsur strives to maintain a long-term trustful relationship with all its stakeholders, paying attention to all their expectations and responding to their questions through an open and permanent communication. Our channels respond to different frequencies of communication, from continuous communication using channels such as intranet, e-mail and website, to annual processes, such as our sustainability report, surveys and different committees. Table 1.7.2 presents our main communication and relationship channels with our stakeholders and their main concerns. All these allow implementing a continuous improvement process close to them.

Table 1.7.2

/ Communication channels and concerns by stakeholder /

Stakeholder	Collaborators and union	Shareholders and investors	Customers	Contractors and suppliers	Communities	Civil Society	Authorities and State	Media
Communication and/or relationship channel	Intranet Mail Digital newsletter Releases and notices Training Surveys Website Committees Radio Integrity channel Year-end event Sustainability report	Annual report Quarterly financial reports Teleconferences and phone calls Website Presentations	Website Integrity Channel Sustainability Report Meetings Mail Releases	Website Integrity channel Audits Induction Training Annual survey Mail Meetings	Permanent information offices * Round tables (Antauta and Ajoyani, in Puno)* Committees* Informative talks* Focus groups* Participatory environmental monitoring * Integrity channel Claim and complaint mechanism * Guided tours * Prior consultation* Annual survey* Radio* Letters and brochures Direct relationship	Sustainability report Website Guided tours Annual survey	Audits Unions Round tables and development Coordination meetings E-mail Annual report Sustainability report Annual statement Annual survey	Interviews Guided tours Press releases Press conferences Reports
Main concerns and/or expectations	Professional development opportunities Good work environment Good performance recognition Freedom of association and collective bargaining Occupational Health and safety	Good economic performance Good corporate governance Corporate reputation and image Legal Compliance	Quality products Responsible and sustainable management Conflict-free operations Occupational health and safety	Occupational health and safety Economic performance Regulatory issues Work culture Ethics and Reputation	Environment Water Hiring of local labor and local suppliers Contribution to local economy Implementation of development projects Financial support Social conflicts	Responsible management with neighboring communities Environmental care Value generation	Compliance with legal obligations on economic, social and environmental matters Economic generation value	Access to information Access to sustainability and annual reports

\*These channels only apply to operations in Peru.

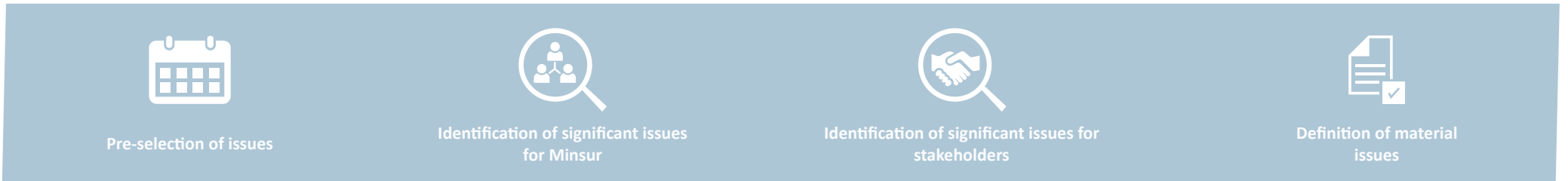


## **/2. ABOUT THIS REPORT/**

(GRI 102-43, 102-46, 102-47)

To prepare this report we conducted a materiality analysis through which we determined the material elements to be considered. The “material aspects” concept is referred to issues considered relevant by Minsur and its main stakeholders, which shall be managed and reported by the company. This analysis was led by the Corporate Affairs Management and had the support of the different departments of the company.

The following steps were followed:



Our first step was the pre-selection of preliminary issues, considering three main sources:

- The ten relevant issues for mining companies worldwide, which were identified by Futerra consulting agency, as part of a report done for Breca Group. These are: Reuse of mining operations, Mining in urban areas, Gender equality in mines, Traceability, Supplier commitment, Informality, Eco-efficiency, Reduction of negative impacts, Major incidents, and Workers health and wellbeing.
- Minsur’s 2016 Sustainability Report. The material issues identified for the 2016 materiality analysis. These are: Environmental impact control, Chemical input management, Water supply, Compliance with environmental regulations, social conflict management, Customer value proposal, Community/local supplier standards, Critical infrastructure management, Talent attraction and retention, and deposits’ quality and economic value.
- Operational risks identified in 2017, which are associated to all operations.

Preliminary issues were presented to Directors, Managers and Corporate head officers of several areas of the company during an internal workshop, aiming at validating their relevance and identifying other issues. The workshop followed a group dynamic, which allowed gathering the points of view of all departments.

Then, aiming at determining the most significant subjects for the company, each issue was assessed with a 0 to 3 score –where 3 meant “high relevance”; 2 “significant relevance”; 1 “moderate relevance”; and, 0 represented “no relevance”– considering its relevance for the company’s reputation, economic development and strategy, as well as for the laws and regulations into force. As a result, each subject received a total score ranging from 0 to 12.

After identifying the significant issues for Minsur, and based on them, we asked our stakeholders which issues were more important for them. To conduct the dialogue process, the following groups were prioritized: customers, suppliers, collaborators, communities and civil society.

- Customers: similarly to the former year they responded to an online annual customer satisfaction survey, which included questions on the subjects identified by Minsur.
- Suppliers: we decided to conduct an online survey, especially created for the materiality analysis.
- Collaborators, communities and civil society: information was collected through group meetings at Minsur’s mining units and areas of influence.

In the meetings, workshops, and surveys, the participants had the opportunity to score the relevance of issues from 1 to 5, where 1 is no relevant, and 5 very relevant. Thus we were able to validate the most significant issues.

It is worth highlighting, that proposals and concerns expressed by our stakeholders shall constitute a significant starting point for the company’s relationships in 2018. In table 1.7.1 of page 27 you may find the main concerns and expectations of each stakeholders.

After finishing the consultation and dialogue process, results were tabulated, which generated the following matrix:

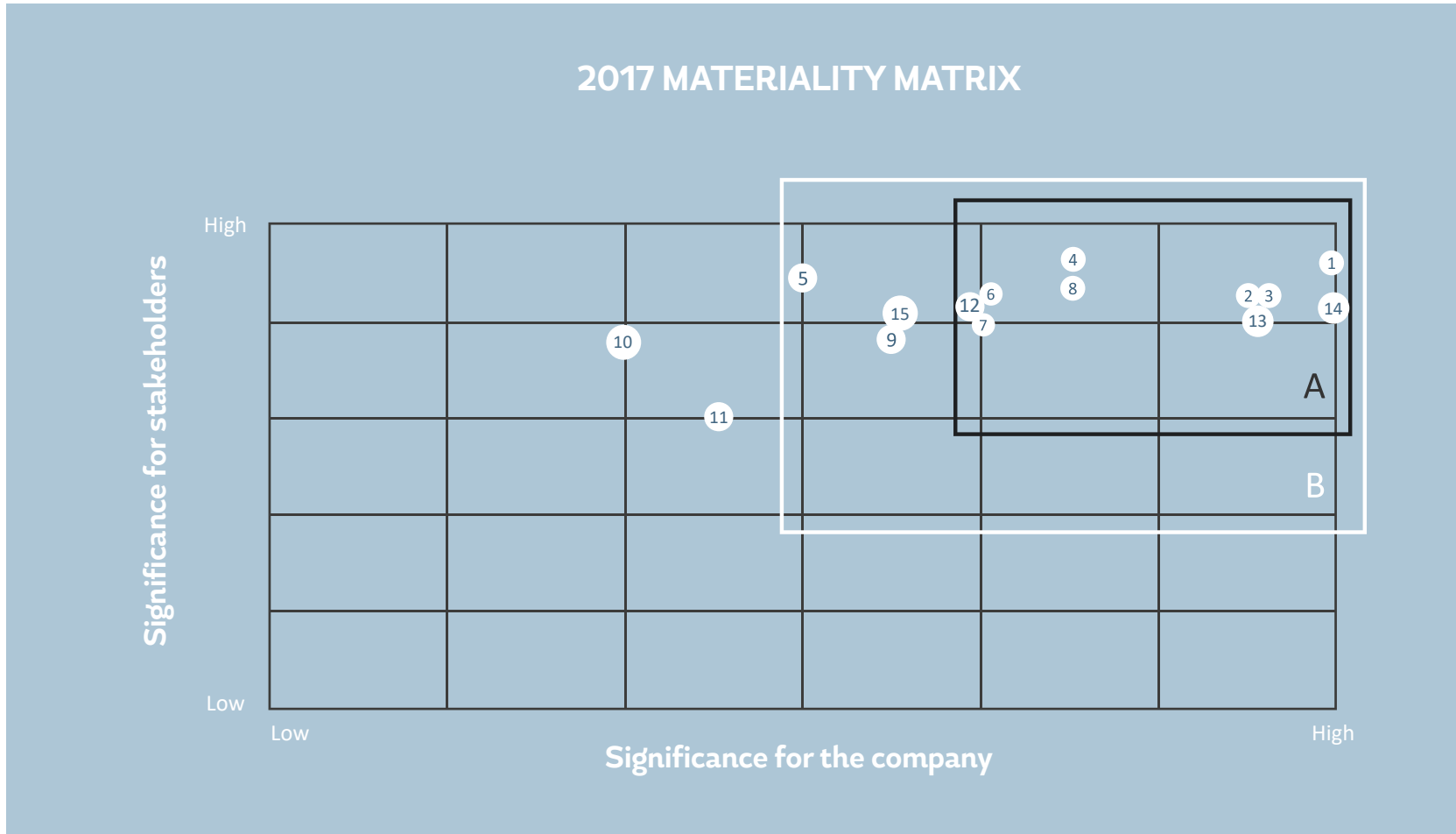
The horizontal axis represents how relevant are the issues for Minsur, and the vertical axis how relevant they are for our stakeholders. The matrix includes 15 material issues. Those included in Table A are considered the most relevant ones, since they were ranked higher by the company and stakeholders.

Notwithstanding, Minsur decided to widen its commitment also providing information on the issues included in Table B (Health, Closure Plan and Innovation) and those outside both tables (Unions and Communication with stakeholders).

In addition, Minsur decided to report the following additional material aspects due to their significance within the international mining context: Biodiversity, Materials, Emissions, Effluents, Waste, Energy, Human Rights and Rights of Indigenous peoples.

(GRI 102-43, 102-44, 102-46, 102-47)

Graphic 2.2



- 1. Water and water quality
- 2. Communities
- 3. Ethics and reputation
- 4. Safety

- 5. Health
- 6. Work culture
- 7. Talent development
- 8. Regulatory issues

- 9. Closure plan
- 10. Unions
- 11. Communication with stakeholders

- 12. Investment in exploration
- 13. Economic performance
- 14. Risk management
- 15. Innovation



# **/3.CORPORATE GOVERNANCE/**

**3.1 / Company structure / page 30**

**3.2 / Economic performance management / page 31**

**3.3 / Risk management / page 35**

**3.4 / Ethical management and human rights / page 37**

**3.5 / Legal compliance and permit management / page 41**

## 3.1 / Corporate structure

(GRI 102-18)

The decision-making process in the company is organized following three main lines: the Board of Directors, the senior corporate management and the operation management.

### 1. Board of Directors

Minsur's Board of Directors is comprised by a President a Vice-President and five Directors (four men and one woman), one of which is independent<sup>7</sup>. In addition, there are two alternate Directors. It is worth mentioning that the President of the Board of Directors does not have the casting vote.

A Strategy and Management Committee has been formed inside the Board of Directors, in charge of reviewing and orienting the Corporate Management strategy proposal, validating performance development plans and monitoring performance of business divisions, competitive environment and market trends.

There is also an Audit and Risk Committee comprised by the Independent Director, who chairs it, the President of the Board of Directors and two members of the Breca corporate center. This Committee supervises that the company's internal control system works properly and that the established policies are complied with. It monitors that timely and appropriate measures are taken to address identified and reported risks within the Committee, searches for information on issues, situations and potential risks to propose reviews and/or actions; and assesses the performance, result and compensation of the company's General Auditor. This Committee's duties will be broadened in 2018 and it shall become the Audit, Risk and Compliance Committee.

### 2. Senior Corporate management

Our Management is led by a General Manager, six directors and a corporate manager. Within this scope, we have a Compliance Committee to safeguard our Corporate Code of Ethics and Conduct, and a Crisis Management Committee to prioritize the protection of health, life, the environment, communities, corporate image/reputation, infrastructure, processes and equipment, in the event of a situation significantly affecting our operations. The General Manager is supported in the implementation of policies, standards and corporate operations by a group of Executive Committees that are inside the key management departments. In 2017 it had the support of eight Committees and an Advisory Council, holding regular meetings with them.

## Committees

- **Project Committee (also called steering committee):** to present and review the progress of ongoing projects.
- **Operation Committee:** to monitor operational results.
- **Risk Committee:** to review and update the company's risk matrix and to prepare control plans.
- **Exploration Committee:** to assess the status quo of exploration projects.
- **Executive Committee (also called EXCO):** to review the most relevant short-term issues, challenges and priorities.
- **Commercial Committee:** to review sale strategies and plans, as well as new contract opportunities.
- **Investment Committee:** to present and approve investment proposals (CAPEX) of all units.
- **Code of Ethics and Conduct Compliance Committee:** it is in charge of ensuring that the Code of Ethics and Conduct is disseminated and verify its compliance. It is also responsible for arranging actions in line with the Internal Work Regulations.
- **Advisory Board of Mineração Taboca:** to present and review operating and financial results, as well as the main strategic affairs of our subsidiary company Mineração Taboca.

<sup>7</sup> Independent directors are selected for their professional skills and has no relationship with the company's management or its main shareholders, except for its participation in the Board of Directors.

In line with the strategy of the Breca Management Model, the Mining Division has adopted five competencies that define the profile expected from all its leaders and professionals:

- **Strategist:** deeply and premeditated defines how to confront the organization's opportunities and challenges. It is focused on what generates higher value and impact on business growth and sustainability.
- **Implementer:** strongly and decisive implements plans, fulfilling the set goals. He/she aims at being practical and simple, generating a sense of urgency within the organization towards achieving results.
- **People developer:** gets surrounded by better people, delegating huge challenges and objectively measuring achievements. He/she promotes professional growth in accordance with his/her capacities and motivations.
- **Communicator:** values the dialogue and several opinions, and speaks clearly and with conviction. It is an influencing agent of change, knowing how to timely convey the most relevant information.
- **Relationship generator:** builds and keeps positive relationships with key stakeholders. He/she is careful with the impact made by his/her decisions and cares for the company's reputation with his/her actions.

### 3. Operation management

Last but not least, the third level of governance is comprised by the management of operations in Peru and Brazil, each of which report to Minsur's senior corporate management. Each mining unit, smelting plant and refinery is lead by a manager who reports directly to the Operation Manager, and has the support of the Environmental, Health and safety, Operations, Social Management and Human Resources supervisors, among others.

## 3.2 / Economic Performance Management

(GRI 102-7, 102-45, 201-1)

The mining industry is a significant engine for the economy specifically because it attracts investments and contributes to employment generation.

### Economic performance management framework

Minsur implements strict management to reach an optimal economic performance, meeting the highest ethical and transparency standards. The Administration and Finance Department is responsible for this management and it is comprised by the Commercial, Auditing, Costs and Planning subdivisions. Among its main duties, it shall record, assess and present the company's financial information, as well as permanently monitor the environment and market trends.

The CFO participates in the Risk Committee as in a Commercial Committee, through which the Commercial manager presents the sales plan and commercial results to the General Manager and the Director of Administration and Finances. Similarly, the Director of Administration and Finances manages the financial performance of the subsidiary Mineração Taboca through a Special Finance Committee.

Finally, it is worth mentioning that in 2017, A Cost-saving Committee was installed in order to consolidate efforts to achieve optimal efficiency in our operations. This Committee assesses and monitors the different cost reduction and cost-efficiency proposals presented by Minsur's staff.

### Transparent communication on performance

Every month, the Director of Administration and Finances prepares a report with the results of financial, operating and economic indicators, which is afterwards presented to the general manager and the Board of Directors. Such report is accompanied with a letter in which the results are explained.

To communicate the company's development to the investors, shareholders and other stakeholders, we prepare quarterly reports where individual and consolidated financial statements are published. The individual financial statements correspond to Minsur S.A. financial results, while the consolidated results include all companies of the Breca Group's Mining Division. Together with the consolidated quarterly report, we send a document explaining the results to the shareholders; afterwards, we have an open call with them, where they have the opportunity to make questions.

Quarterly reports are made in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). Moreover, Minsur abides by the International Accounting Standards (IAS). It is worth emphasizing that, in 2017, the way information is presented in this report was improved, with a more detailed explanation of financial results, using the same structure of an audited financial report.

At the end of each Fiscal Year a financial report is issued with a summary of quarterly reports and a deep analysis of performance throughout the year. Financial statements included in the annual report are audited by EY.

## Performance in 2017

### General results

2017 was a challenging year. Both countries where Minsur operates were affected by political instability, corruption scandals and an economic downturn.

However, thanks to an anticipated management and resilience capacity, the company achieved excellent financial and operating results in line with the mining plans. The following tables shows the direct economic value generated, distributed and retained by Minsur in 2016 and 2017 (consolidated):

Table 3.2.1.

/ Direct economic value generated, distributed and retained (consolidated)* /				
Ítem	/	2016 USD M	/	2017 USD M
<b>Generated economic value</b>		<b>622 471</b>		<b>709 369</b>
Net sales		617 048		672 100
Income from financial investments		4 954		15 871
Fix asset sale		469		21 398
<b>Economic value distributed</b>		<b>578 478</b>		<b>697 116</b>
Operational costs		332 492		366 673
Wages and workers' benefits		127 106		139 767
Payments to capital providers		47 930		102 479
Payments to the government of Peru**		58 771		69 385
Payments to the government of Brazil		10 372		15 909
Investments in the community		1 806		2 903
<b>Retained economic value</b>		<b>43 993</b>		<b>12 253</b>

\* It includes Minsur S.A., Marcobre S.A.C., and Mineração Taboca S.A.

\*\* Includes Works for Taxes and mining canon





In the third quarter of 2017 a significant income was received due to the sale of 9.5% of the shares Minsur holds in Rímac Seguros y Reaseguros (Rímac) to Inversiones Breca S.A.C., for USD 61 million. Income was distributed among the shareholders as an extraordinary dividend.

The sales volume of main metals fell as compared to 2016, mainly due to San Rafael's lower production that resulted from lower tin grades obtained during the year. However, commercial income grew 8.9% thanks to a metal price recovery throughout the year (see tables 3.2.2 and 3.2.3). The tin average price in 2017 grew at the same rate than the previous year (+12%), stabilizing after the fall in 2015. Gold showed a slight increase (+1%) as compared to 2016, while silver price remained the same.

Table 3.2.1.

**/ Net sales volume per product line /**

Product	Unit	2016	2017	Variation
Tin	t	25 113	24 534	-2 %
Gold	oz	105 694	93 118	-12 %
Silver	oz	87 041	104 236	+ 20 %
Ferroalloys	t	1 840	3 206	+ 74 %

Table 3.2.2.

**/ Net sales in USD per country /**

Sales	2016	2017
	USD M	USD M
Net Sales Peru	490	489
Net Sales Brazil	127	183
<b>Total net sales</b>	<b>617</b>	<b>672</b>

Net profit in 2017 amounted to USD 80.5 million versus the net loss of USD 87.8 million in 2016. EBITDA (earnings before interests, taxes, depreciations and amortizations) in 2017 was USD 253.8 million versus USD 207.4 million in 2016.

**Results Peru**

In the last five years Minsur has managed its economic performance with a cost-control approach, working on creating operational efficiencies and increasing operation units' productivity. As a result, in San Rafael MU the cost per meter of progress was reduced thanks to better mine planning. Furthermore, this unit increased its productivity significantly and reduced the cost per treated ton from 82 to 70 US dollars thanks to the Ore Sorting technology. Though a fire broke out in the plant in September, it had a minimum impact on the unit's production and profitability.

In the table below, we present the direct economic value generated, distributed and retained by Minsur S.A. and Marcobre S.A.C in 2016 and 2017:

Table 3.2.3.

**/ Direct economic value generated, distributed and retained by Minsur S.A. and Marcobre S.A.C./**

Item	2016 USD M	2017 USD M
<b>Economic value generated</b>	<b>493 850</b>	<b>519 491</b>
Net Sales	489 650	489 052
Income from financial investments	3 731	9 041
Fix asset sale	469	21 398
<b>Economic value distributed</b>	<b>388 109</b>	<b>475 373</b>
Operational costs	218 402	228 290
Wages and workers' benefits	81 070	85 231
Payments to capital providers	28 160	89 727
Payments to the government of Peru **	58 771	69 385
Investments in the community	1 706	2 741
<b>Economic value retained</b>	<b>105 741</b>	<b>44 118</b>

\*\* Includes Works for Taxes and mining canon

### Results Brazil

In Brazil, 2017 was a year of production records since Minsur acquired the subsidiary Mineração Taboca S.A. Refined tin production reached 6 582 tons, exceeding the previous year's production by 12%. Moreover, production of ferroalloys grew 77%, thus reaching a historical record of 3 252 tons. This was possible because significant investments were implemented in 2016: the niobate flotation plant and the expansion of ferroalloy smelting operations in Pitinga. Such expansion in the production of tin by-products has allowed Pitinga to significantly reduce the cost per fine ore ton, which closed the FY 2017 in USD 11 377 vs USD 13 676 in 2016.

It is worth highlighting that 2017 was the first year in which Mineração Taboca has reported positive EBITDA (USD 9.3 million) to the company; proving that it can become a profitable company in the short or medium term, after years of net loss.

The direct economic value generated, distributed and retained by Mineração Taboca S.A. in 2016 and 2017 is presented in the table below:

Table 3.2.4

/ Direct economic value generated, distributed and retained by Mineração Taboca S.A. /

Item	2016 USD M	2017 USD M
<b>Economic value generated</b>	<b>128 621</b>	<b>189 878</b>
Net sales	127 398	183 048
Income from financial investments	1 223	6 830
Fix asset sale	-	-
<b>Economic value distributed</b>	<b>190 369</b>	<b>221 743</b>
Operational costs	114 090	138 383
Wages and workers' benefits	46 036	54 536
Payments to capital providers	19 770	12 752
Payments to the government of Peru**	-	-
Payments to the government of Brazil	10 372	15 909
Investments in the community	100	162
<b>Economic value retained</b>	<b>-61 748</b>	<b>-31 865</b>

\*\* Includes Works for Taxes and mining canon

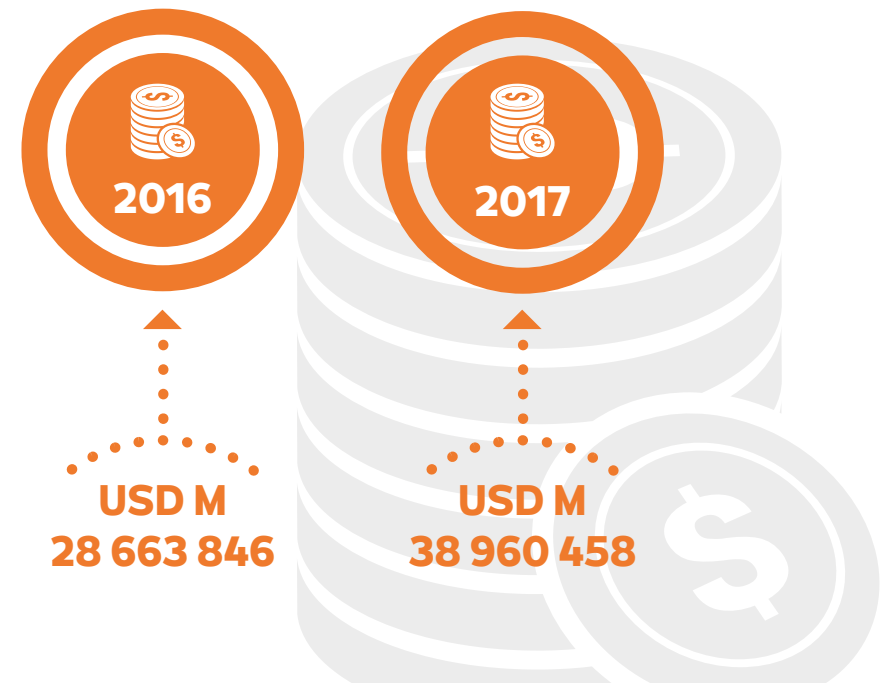
### Investment in explorations

(Minsur1)

As you may observe in the table 6.2.6, in 2017 exploration expenses increased (+36%). Mining concessions in exploration went from 113 650 hectares in 2016 to 123 247 hectares in 2017.

Graphic 3.2.1.

### Investment in exploration



For further information on Minsur economic development in 2017, read the Financial Report at [www.minsur.com/relacion-con-inversionistas/memoria-anual/](http://www.minsur.com/relacion-con-inversionistas/memoria-anual/).

### 3.3 / Risk management

(GRI 102-15, GRI 102-30)

Minsur defines risk as an uncertain event that, in case it materializes, would have a positive or negative impact to the company's objectives. A proactive risk management approach is essential for business continuity, as well as to generate trust among the stakeholders. Therefore, the company constantly seeks to identify, assess and control risks.

Through our risk management system, corporate risks are assessed as well as those arising in operations, expansion projects and explorations based on environmental, social and economic criteria to be addressed. This system has a preventive approach and it is based on the Risk Management Policy of Brea Group, and in line with ISO 31 000, both gathering the best practices in risk management.

The risk matrix is an essential component of Minsur's risk management system. It allows recording and prioritize risks inherent to mining operations and activities according to their impact and likelihood of occurrence, as well as controlling and mitigating them. Likewise, this tool serves to assess management effectiveness in practice. In 2017, the company identified an opportunity to improve risk classification, adding strategic corporate risks, climate change risks, and human rights risks, among others.

Table 3.3.1

/ List of the main identified risks and their potential impact in 2017 /

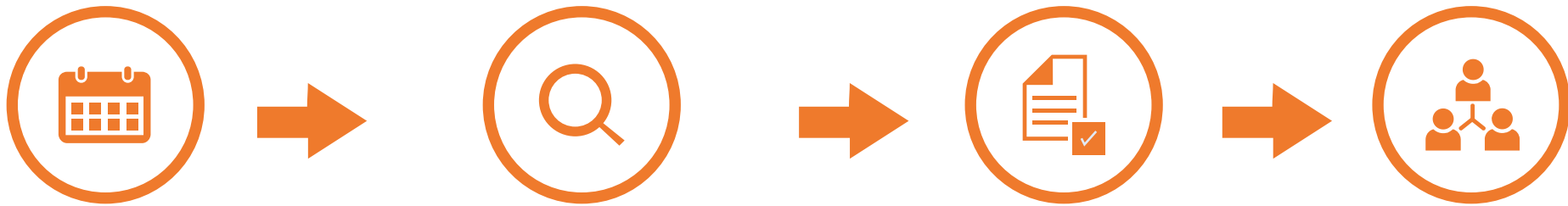
	Risks	Impact
External risks	Regulatory and permit-related risks	Major
	Water shortage	Major
	Reduction of commodity prices	Major
	Exchange rate fluctuations	Major
	Geopolitical risks	Major
Corporate risks	Resource replacement	Major
	Risk related to operations and cash cost	Moderate
	Cyber risks	Low
Sustainability risks	Health safety and the environment	Severe
	Labor relationships	Major
	Relationship with the community and human rights	Moderate



### Risk guidelines

Those responsible for risk management in Minsur identify, assess and control operational risks based on the corporate risk guidelines and following the four main steps:

Graphic 3.1.2



#### Planning

It is the process followed to define how risk management activities shall be implemented in an existing operation or an expansion project. Currently a risk management plan is prepared for each operation and project as well as at the corporate level.

#### Identifying

It is the process followed to determine the risks that may affect operations or their environment, and to document their main characteristics, including their causes, possible consequences and existing controls. At Minsur risks are mainly identified through the following means:

- Workshops, with the participation of the company's leaders, external experts, main contractors for critical processes, and other guests. Different types of risks are evaluated in these workshops, including commercial, technical, environmental, project management and social risks. The information gathered is recorded in the Risk Register Matrix.
- Information provided by different organizational departments and operating units on the risks they identified on a daily basis when conducting their activities.

It is worth mentioning that risk identification is a constant process not limited to the listed activities. It is possible to capture new risks in other activities of our operations.

#### Assessing

It is the process followed to prioritize risks for a deeper analysis, evaluating and mixing their likelihood to occur with their impact in a semi-quantitative way. Those responsible for managing risks classify them according to their impact level: extreme, high, medium and low, and continuously monitor all mapped risks aiming at verifying the risk control management and, if necessary, improving it. Risks cataloged as extreme or high risks are assessed each month; while medium and low risks, every two months.

#### Managing

It is the process to develop strategies and actions to reduce risks, guaranteeing business continuity and protecting the stakeholders and their environment.

## Risk management framework

Minsur acknowledges risk is inherent to its business, and thus effective risk management is essential to preserve its value and ensure the company's sustainable growth. The company, its subsidiaries and related companies shall make their best efforts to identify and manage the risks that may affect their stakeholders.

Risk identification, analysis and control conform a continuous process that needs the engagement of all the departments of the organization. The Board of Directors is the main responsible of ensuring business continuity through risk assessment, mitigation and/or elimination. Moreover, it exercises governance functions, supervising risk management processes, making sure Management implements an appropriate risk structure, and collaborating with Management to understand and monitor critical risks. On the other hand, Management ensures the Risk Management Model works properly and monitors implementation of action plans proposed to manage risks identified in Operations, Minsur Corporation, and Expansion Projects.

Minsur staff in charge of corporate risks monthly reports to the Corporate Directors on any significant risk that may affect the company's operations or its environment. Moreover, such staff supervises and provides orientation to those responsible for risks in the mining units, smelting plants and refinery and projects; which at the same time monitor operational risks. One of the main duties of operation managers is updating records of the risk matrix and preparing risk analysis reports on a monthly basis.

The Corporate Risk Management Committee ensures the proper implementation of risk management. This Committee is led by the general manager and comprised by five corporate managers, and the internal auditor, as well as by the managers of mining units and smelting and refining plants, who meet each month via teleconference to address risks mapped in the risk matrix and review the progress made in the plans to mitigate them

For exploration and expansion projects there is a Project Review Committee –led by the Corporate Project Manager-, which examines risks related to exploration and expansion plans together with the managers of each project. After going through the Risk Review Committee, the Manager presents the risks assessed by it to Minsur's General Manager within the Project Committee.



<sup>8</sup>To access these documents, visit <http://www.minsur.com/quienes-somos/politicas-empresariales/>

## 3.4 / Ethical Management and Human Rights

Minsur's general management is governed by a system of policies and procedures based on the highest standards and the best international ethical practices. Some of the main documents comprising this system are: Corporate Code of Ethics and Conduct, Anticorruption and Anti-bribery Policy, Manual for the prevention of asset laundering and the financing of terrorism, and Human Right Policy. These instruments constitute the framework for action for all collaborators and actors with whom Minsur has businesses, ensuring that their behavior is always in line with the standards of ethics and integrity. To affirm Minsur's commitment to transparency, all of them are published in intranet and the website, and thus they are accessible to all our stakeholders<sup>8</sup>.

### Ethics and Conduct

Minsur's image and success is comprised and supported by the actions and behavior of each one of its collaborators, regardless of their position within the company. Therefore, the company works with clear policies orienting its collaborators', contractors', suppliers' and visitors' actions. In Minsur, each collaborator -at the beginning of his/her career- signs a sworn statement confirming that he/she has read the Corporate Code of Ethics and Conduct, and agreeing to comply with the regulations therein. This Code translates the company's mission, vision and values in practical guidelines of ethical conduct that shall be followed by all of its members, contractors and suppliers. Similarly, suppliers and contractors also know and sign such sworn statement.

### Prevention of corruption, bribery, asset laundering and financing of terrorism

In addition, a group of corporate policies are applied to prevent illegal behaviors by the staff.

### Anti-corruption and anti-bribery policy

(GRI 205-3)

With its Anti-corruption and anti-bribery policy, Minsur rejects any form of bribery or corruption by its employees, partners and other stakeholders, and avoids any participation in this type of actions, both in the private and in the public scope. This policy regulates issues such as presents and contributions (donations and political contributions), targeting all collaborators, suppliers, contractors and third parties who might represent or act on behalf of the company. It includes guidelines and tools to identify, avoid and prevent non-ethical actions.

Due to Minsur's proactive anti-corruption and anti-bribery management, no cases were detected in the company in 2017. By the end of December, our anti-corruption and anti-bribery policy was updated. In 2018, this policy will be communicated to the entire –new and existing-staff, and the corresponding training will be organized. In addition, prevention monitoring shall be arranged to ensure it is complied with.

### Asset laundering and financing of terrorism prevention system

On the other hand, the Asset laundering and financing of terrorism prevention system (SPLAFT, in Spanish) in Peru prevents misuse of the company for illegal purposes related to asset laundering and financing of terrorism within its business activities. This system is based on Peruvian regulations and it is comprised by policies and procedures aiming at inform all collaborators on the significance of timely prevention and detection of this type of crimes.

The SPLAFT Manual is an essential document of this prevention system. Knowing and understanding it fully, makes it easier for our collaborators to detect and prevent these activities. All collaborators sign an acknowledgement of receipt of the manual and are trained on how to use it, how to recognize warning signals and how to act in case they detect suspicious operations or transactions.

Two important tools -part of our prevention system- are «Know your customer» and «Know your Employee». The first one, "Know your customer", allows detecting unusual operations of the customer with the company. In this regard, we ask our customers to fill an asset declaration. Regarding the second one "Know your employee", we ask all new employees to present their work, police and criminal records, as well as an asset declaration.

Aiming at keeping on improving Minsur's ethical management mechanisms, in 2017 we worked hand in hand with a group of external advisors designing a risk-based comprehensive system to prevent these type of activities, which adjusts policies and corporate procedures to the existing legal framework, both in Peru and Brazil.

### Respect for human rights

(GRI 412-2)

Minsur is concerned and respects life and peoples' integrity, as well as ethnic, religious and cultural diversity, customs, traditions, values and history of populations and communities with which it interacts. Moreover, before starting mining activities, the company conducts public consultations, informative workshops and citizen engagement plans in order to inform the communities as well as the corresponding local authorities.



To affirm such commitment, since 2016 the company has a Corporate Human Rights policy, in line with the Code of Ethics and Conduct and the laws into force in the countries where it operates and exports its minerals. This policy meets the guidelines of the Organization for economic cooperation and development (OECD) and the European Union (EU) regulations on human rights matters.

With our Human Rights Policy we recognize our duty as a company to respect, guarantee and protect human rights as provided by the Universal Human Rights Declaration in all our activities, as well as the rights recognized in the ILO Declaration. Thus, Minsur does not tolerate or contribute to any form of:

- torture, cruel or inhuman treatment or forced labor
- stalking or sexual harassment
- discrimination
- indiscriminate use of force
- child labor
- corruption, or any type of favors or actions directly affecting the company's integrity in relation to ore sources, taxes, royalties or others.

This policy is an essential part of the company's Code of Ethics and Conduct, which is periodically communicated to the entire staff as part of the induction process. In 2018, we will implement a program to strengthen the Code of Ethics and Conduct among the company's collaborators.

In relation to our Human Rights policy, 100% of our security staff has been trained in Human Rights relevant to the operation in 2017. Furthermore, we specifically emphasize that the behavior of companies providing private security services shall be in line with Minsur's Human Rights guidelines. These companies are informed about it when they start working with us and their conduct is monitored during the time they provide the service. In 2017, Verification of Compliance was implemented.

Human Resources and Property Security departments are responsible for implementing and enforcing the policy. Any action violating Minsur's commitment with human rights may be reported through the Integrity Channel, under the "open door" policy, or using the community complaint mechanism.

## Respect for the rights of indigenous populations

(GRI 411-1)

Peru and Brazil have signed the ILO Convention 169 on indigenous and tribal peoples in independent countries, and both have laws regulating the prior, free and informed consent (PFIC). Minsur mining activities comply with such regulations.

Though none of Minsur operations is located in indigenous territories, Pitinga MU is in the northern area of Brazil Amazon region, next to the Federal Reserve of Waimiri-Atroari indigenous community. This territory received the permanent reserve legal status in 2989, and it comprises more than 2.5 million hectares.

The only access to Pitinga MU is the BR 174 State highway and then a local road; and both are located inside the reserve. Access to the reserve is strictly controlled and it is only granted with the prior consent of Waimiri-Atroari people. They are contacted pursuant to Brazilian laws, and within a regulatory framework for the protection of indigenous peoples; such contact also abides by Minsur sustainability policies and practices. The permanent right of way agreement between the company and this population allows the staff, contractors and visitors to access the mine under their supervision. Environmental protection is a key element of this agreement.

Before visiting Pitinga facilities, all staff, as well as contractors and visitors receive information on the protocol to access the reserve. It states that there is a speed limit, and it is forbidden to get off the vehicles or stop to take pictures of wild animals. If a member of the indigenous population is found on the way a "no contact policy" shall be applied. Minsur respects the customs of indigenous peoples, and since 2008 no incident has been recorded with the Waimiri-Atroari community.

## Complaint and grievance mechanisms

(GRI 102-17)

### Integrity channel

Any infringement to policies and regulations may be reported through the Integrity Channel. This channel allows collaborators, suppliers, contractors and the general public to communicate their concerns on potential infringements; such as conflicts of interest, misuse of confidential information, violation of corporate standards, human rights violations, cases of discrimination, among others. The channel is accessible through several means including postal mail, e-mail, website, voicemail, fax, call center or personal interview.

The Integrity channel is managed by an external operator in order to ensure impartiality and confidentiality. This operator sends information anonymously gathered to the Compliance

Committee to be assessed. The Committee is comprised by five members: the General Manager, the Corporate Human Resources Director, the Director of Corporate Affairs, the Legal Director and the internal auditor. Each member has a position of trust within the company and is especially responsible for leading with integrity to provide a good example to all members of the organization.

Information received by the Committee is confidential, so that all collaborators communicating their concerns with good faith are protected from any possible retaliation. If, after the due process of investigation, it has been proved that an infringement was produced, the relevant measures shall be applied in accordance with the labor laws and the company's internal policies. In Brazil there is a compliance sub-committee for Mineração Taboca, which works under the same protocol than the committee in Peru and directly reports to it.

### Open Doors policy

Besides the Integrity channel, the Open Doors policy enables the collaborator to communicate directly to his/her immediate supervisor, line manager, any member of the Compliance Committee, the Compliance Officer, or the Human Resources Department any concerns on situations that arise on everyday tasks or cases that infringe the conduct regulations. To strengthen this policy, measures are taken to promote an environment of trust and communication, where collaborators feel safe to channel their questions and concerns in an open dialogue.

### Mechanisms for local communities

Local communities and other stakeholders have access to a complaint mechanism. Complaints filed with this mechanism are received by local social management teams. For more information, read chapter 10 on Social Management.





## 3.5 / Legal compliance and permit management

(GRI 419-1, 307-1)

Minsur operates pursuant to the applicable laws in the countries where it develops its mining activities. Both in Peru and Brazil, the company has regulatory management mechanisms ensuring that concessions, permits, authorizations and legal obligations are appropriately managed, together with the commitments stated in Environmental Management Instruments (EMI), such as Environmental Impact Assessments (EIA) and the Mine Closure Plans and Environmental Rehabilitation Plans, among others. These mechanisms facilitate the review and compliance of applicable laws by Minsur operations and projects, which are a tool for preventing legal risks that may arise due to sudden changes of the law in these countries.

Operations in both countries have the support of legal areas that ensure that corporate policies and current laws applicable to mining activities are complied with. Such areas provide the necessary legal support for regulatory compliance with, and management of, different governmental authorizations (concessions, permits and licenses) to develop Minsur mining activities. Moreover, the legal area is responsible for supporting in environmental management and occupational health and safety audits carried out by regulatory authorities, and it also leads the legal defense of the companies in legal or administrative procedures initiated against Minsur.

To obtain environmental-related permits and licenses, there is a specialized team within the Environmental Department in charge of submitting applications for environmental permits and authorizations to the corresponding governmental entities. This team works hand in hand with the legal area in strategy design, as well as permit and licenses application and attainment, interacting and meeting with regulatory authorities.

In 2017 a new system, called GEORGE, has been installed to manage legal requirements and permits. It serves as an automated tool to manage all permits and licenses, legal obligations, IGAS commitments, and legal requirements of Minsur Comprehensive Management system.

### Non-compliance in 2017

In Peru, in 2017, 27 sanctioning administrative procedures have been initiated by i) the Supervising Agency of the investments in Energy and Mining (Osinermin), (ii) the Agency for Environmental Assessment and Enforcement (OEFA); (iii) the Ministry of Production (PRODUCE); (iv) the

National Water Authority (ANA); and (v) the Superintendency of Ground Transportation for passengers and cargo (SUTRAN) against Minsur S.A.; for alleged failure to fulfill its obligations under Environmental Management Instruments and alleged breaches to regulations on occupational health and safety, water and hazardous material transportation matters.

Out of these sanctioning procedures, eight were dismissed in 2017, with 19 still open by the end of 2017. As a result of these procedures and because of the solid arguments of both companies, total fines paid in 2017 amount to USD 7,627.50, corresponding to two sanctioning procedures. Last but not least, a total of two sanctioning procedures have resulted in non-financial penalties.

Regarding the judicial procedures on civil, criminal and labor matters (among others) there were 99 procedures in total, out of which 13 were dismissed and the others remained ongoing by the end of the year. S/. 11,995.79 have been paid for fees and costs of these judicial procedures in 2017.

In Brazil, Mineração Taboca S.A. received seven notices of infringement in 2017, which were issued by the Departamento Nacional de Produção Mineral (DNPM, the federal mining agency) for providing poor information to the National Dam Safety information system, and by the Diretoria Executiva de Administração Tributária (Sao Paulo Tax Authority) for tax issues currently in dispute. Fines effectively paid in 2017 are related to other seven notices of infringement issued by the Regional Office of the Ministry of Labor and Employment in Amazonas in former years, which amount to USD 8 927. Non-financial penalties were not imposed to our operations in 2017.





# **/4. HUMAN MANAGEMENT/**

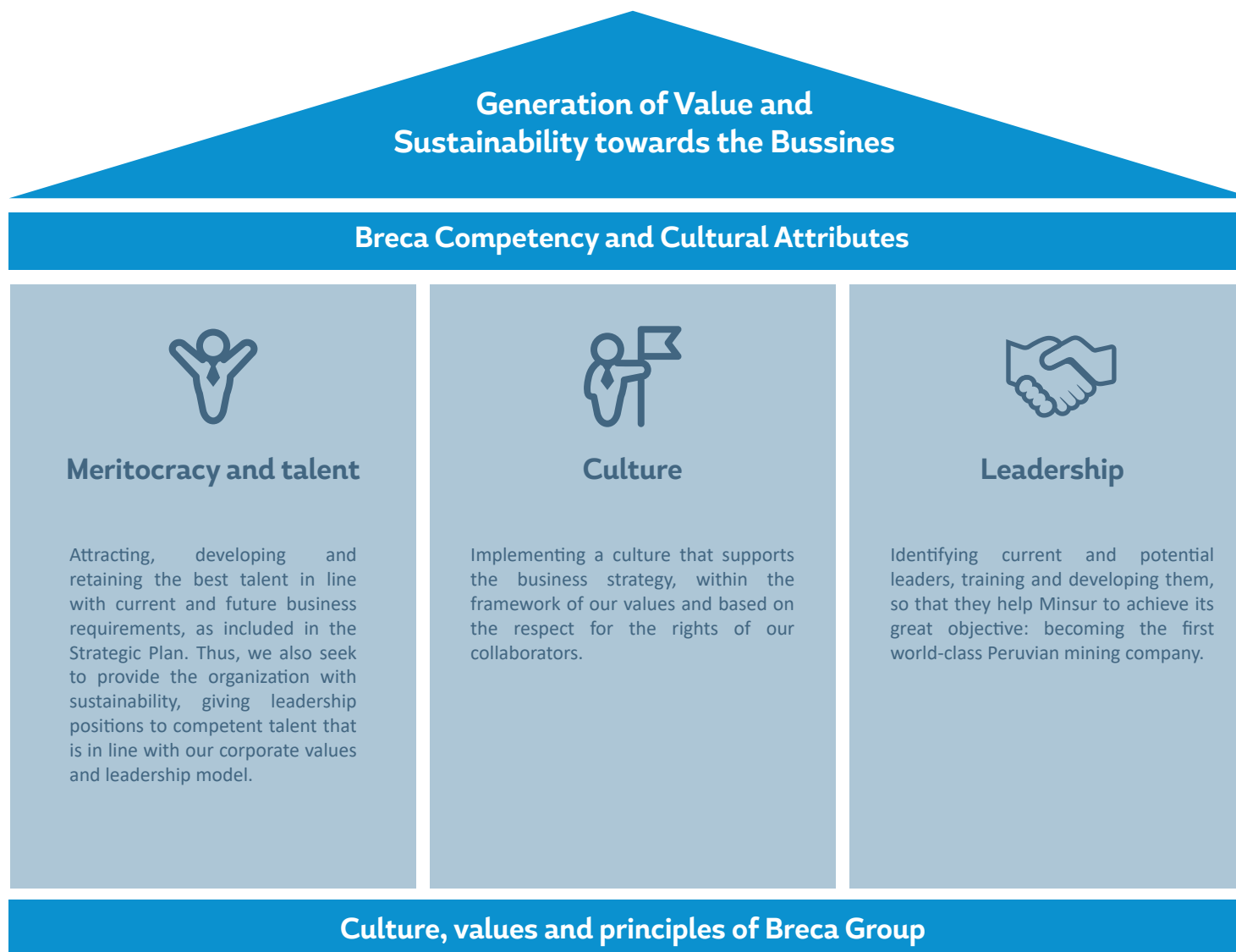
**4.1 / Employment numbers / page 44**

**4.2 / Talent attraction / page 47**

**4.3 / Talent retention / page 48**

**4.4 / Freedom of association and  
collective bargaining / page 50**

The Human Resources management, led by the Human Resources Director, works constantly to strengthen human capital performance through a strategy that reflects the significance of the three following components:



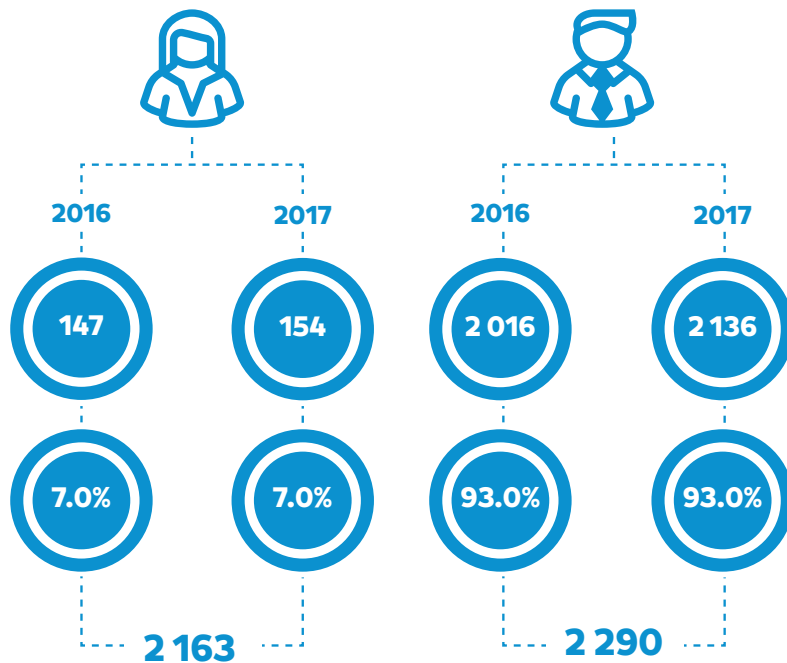
## 4.1 / Employment numbers

(GRI 102-7, 102-8, 401-1)

The talent of our collaborators is the basis of Minsur's growth. By the end of 2017 the company had 2 290 collaborators in total -1 279 in Peru and 1 011 in Brazil- as compared to 2 163 collaborators in 2016 (see table 7.1.1). Based on the categories established in our collaborators' IDs, we may conclude that 93% of them are men and 7% are women. Minsur acknowledges the small representation of women in our company, and it is focused on increasing their number by promoting gender balance.

Graphic 4.1.1.

Total active employees as of December 2016 and 2017



As it may be observed in table 4.1.1 and table 4.1.2, the great majority of our collaborators has a permanent agreement and works full-time.

Table 4.1.1.

/ Number of employees in 2017, by employment agreement, region and gender /

Employment agreement	Peru				Brazil		Total
	Puno	Ica	Tacna	Lima	Sao Paulo	Amazonas	
<b>Permanent agreement</b>	<b>550</b>	<b>215</b>	<b>198</b>	<b>234</b>	<b>225</b>	<b>782</b>	<b>2 204</b>
Female	9	4	8	56	28	42	147
Male	541	211	190	178	197	740	2,057
<b>Temporary agreement</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>14</b>	<b>4</b>	<b>0</b>	<b>86</b>
Female	0	0	4	2	1	0	7
Male	2	6	56	12	3	0	79
<b>Total</b>	<b>552</b>	<b>221</b>	<b>258</b>	<b>248</b>	<b>229</b>	<b>782</b>	<b>2 290</b>

Table 4.1.2.

/ Total number of employees in 2017, by employment type and gender /

Employment type	Number of employees
<b>Full-time</b>	<b>2 285</b>
Female	152
Male	2,133
<b>Part-time</b>	<b>5</b>
Female	2
Male	3
<b>Total</b>	<b>2 290</b>

Throughout 2017, 393 new collaborators were hired: 45 women and 348 men. Most of the people hired are between 30 and 50 years old (see table 4.1.3). Moreover, 252 collaborators stopped working at the company in 2017 (see graphic 4.1.2 further detail), 149 of which were laid-off. Most of these cases were verified in Pitinga MU in Brazil. The main causes were: restructuring, completion of projects, low performance or work absenteeism. The total turnover rate in 2017 was 11%. Thus, it was reduced by 0.73% as compared to 2016 (see table 4.1.4).

Table 4.1.3.

/ Number of recruits in 2017 by region, gender and age/

Country		Peru						Brazil					
Region		Lima	Ica	Tacna	Puno	Sao Paulo	Amazonas						
Age range \ Gender	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
	Younger than 30	3	5	0	3	1	4	0	6	6	18	3	48
Between 30 and 50 years old	13	34	0	2	3	22	3	28	2	16	10	133	
Older than 50	0	8	0	0	0	4	0	2	1	1	0	14	
New recruits		16	47	0	5	4	30	3	36	9	35	13	195
											<b>Total</b>	<b>393</b>	

Graphic 4.1.2.

### Number of employees who stopped working at the company and reasons



Table 4.1.4

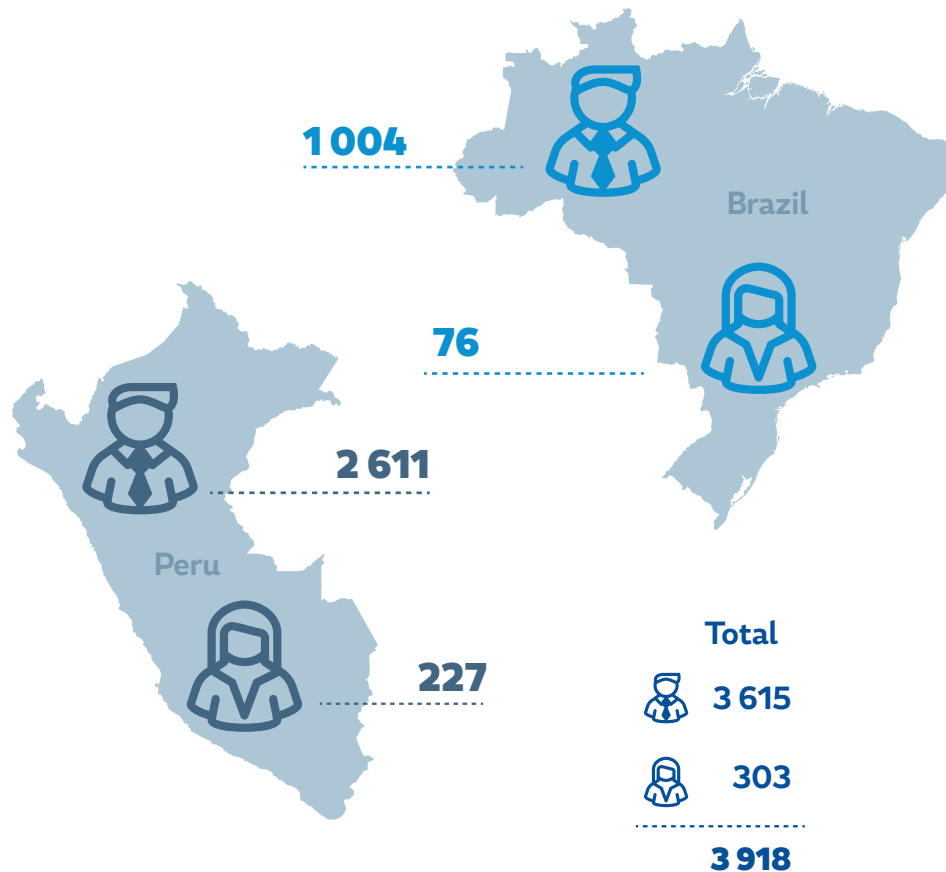
#### / Turnover rate in 2017 by region, gender and age /

Country	Peru						Brazil					
Region	Lima	Ica	Tacna	Puno	Sao Paulo	Amazonas	Lima	Ica	Tacna	Puno	Sao Paulo	Amazonas
Age range \ Gender												
Younger than 30	40.0%	7.7%	0.0%	0.0%	0.0%	10.5%	0.0%	25.0%	50.0%	19.0%	37.5%	10.8%
Between 30 and 50 years old	8.7%	7.4%	0.0%	0.0%	11.1%	4.3%	25.0%	4.0%	15.8%	7.1%	36.4%	18.3%
Older than 50	28.6%	23.8%	0.0%	6.1%	0.0%	0.0%	0.0%	2.5%	0.0%	12.9%	50.0%	31.4%
											<b>Total turnover:</b>	<b>11%</b>
											<b>Voluntary turnover:</b>	<b>4%</b>

It is worth highlighting that a great proportion of work done in our operations and mining projects is carried out by subcontracted staff. This is a common practice in the mining industry. In 2017, Minsur had the valuable support of 3 918 workers from contractors (see graphic 4.1.3).

Graphic 4.1.3.

### Total number of contractors' staff



## 4.2 / Talent attraction

In our company, the Human Resources Department is the main responsible for our efforts to attract the best talent, according to our Attraction and Selection Policy. Besides recruitment processes targeting the external market, such department conducts two programs prioritizing the internal talent:

- «Moving opportunities»: which fosters internal promotion when job positions open up. In 2017, 87 collaborators had access to these opportunities.
- «Talent attracts talent»: which attracts people referred by our own collaborators for open recruitment processes.

The hiring process is based on the job position requirements. Furthermore, promotions are processed considering job performance, always considering our commitment to equal opportunities, diversity and respect. No form of discrimination shall be tolerated: What is essential for Minsur is finding the best talent capable to contribute to strengthening the required capacities, regardless of their gender, origin, ethnicity or age.

At Minsur we are constantly looking for talent from our areas of influence. There is a corporate process created by the Social Management department for recruiting non-qualified or semi-qualified workers from our areas of influence. By the end of 2017, a total of 299 collaborators from the areas of influence of San Rafael, Pisco, Pucamarca and Mina Justa worked in Minsur.



## 4.3 / Talent retention

Minsur has several policies and initiatives aiming at fostering the best of our collaborators and providing labor continuity, thus enabling their personal and professional development.

### Training for professional development

(GRI 404-1)

Minsur encourages its collaborators' professional development by offering them the opportunity to participate in several training programs:

#### Supérate

Súperate is an open program for operators and technician at the units in Peru. Annually, they select and support those collaborators, operators and technicians, who shall develop specific competencies and skills required for their jobs. They enter the Supérate program and receive specialized technical training from teachers from Tecsup institute. Thus, they have the opportunity to acquire skills for their professional development. In 2017, an average satisfaction rate of 89% was achieved among the participants.

#### +Líder

To reach the vision of a world-class Peruvian company, Minsur needs world-class leaders. For that reason the +Leader program was born in 2017 to develop Minsur's leader profile: Strategist, Implementer, People developer, Communicator and Relationship generator. These competencies are also included in the final performance assessment. In the training aspect, two programs are developed: a Management Program, and an Executive training Program. The first was developed with the PAD, the School of Senior Management of the University of Piura, aiming at providing a space for Directors, Managers and Supervisors to receive training and reflect on leadership issues. Participants worked for three days on cases referred to ethics, leadership skills and values.

Also, an Executive Training program was developed for heads, coordinators and supervisors, in alliance with the University of Applied Sciences (UPC). In line with the Leader competencies, it

was focused on issues such as time management, assertive communication, active listening, among others, and on teaching how to apply such skills in everyday tasks to efficiently manage their work teams towards the achievement of goals. The training consisted in four days, and its methodology was based on explaining key leadership concepts and internalizing them through group discussions of case studies. New courses, such as Strategic Thinking, Conflict Resolution and Executive Coaching Tools, shall be added to the program in 2018.

Table 4.3.1.

#### / Average training hours per employee, by gender /

Gender	Total employees	Total hours of training	Average hours
Female	154	8 299	53.8
Male	2 136	162 020	75.6
<b>Total</b>	<b>2 290</b>	<b>170 320</b>	<b>74.4</b>

Table 4.3.2

#### / Average training hours per employee, by job category /

Level	Position	Average hours
Officers	Directors	33.6
	Managers	39.8
Employees	Superintendents, heads, supervisors	81.9
	Engineers / Analysts	56.9
Technicians / Workers	Technicians	85.0
	Workers	77.3
<b>Total</b>		<b>74.4</b>



Moreover, +Leader give an opportunity to any Minsur collaborators with no reporting staff to access to training to develop the leader profile's competencies. These courses are: Change Management, Proactivity, Personal Leadership, Effective Presentations, and Negotiation and Conflict Management; of 8 hours each. It is worth mentioning that the training programs are based on meritocracy. This means that, when a collaborator wants to participate in a training program, he/she shall have a good performance rating.

In 2017, employees received an average of 74.4 training hours (see table 4.3.1 and table 4.3.2).

Collaborators at the employee, technician and worker level received the largest number of training hours. The difference between the average training hours for men and women responds to the fact that most of our female collaborators work in our Lima premises, thus requiring less technical training.

### Competitive wages based on meritocracy

A fair wage is a significant factor to build a well-motivated and satisfied workforce. Our compensation policy ensures that all collaborators receive a competitive wage. To establish our compensation plans, we compare wages with other first-level mining companies. The Director of Human Resources is responsible for supervising that all compensation and benefit strategies are met, while the General Manager is responsible for authorizing them.

It is worth emphasizing that since 2015 we are promoting a work environment based in meritocracy, where achievements and good performance are recognized through a performance management system based on the Performance Management Policy. This system aims at generating more trust among leaders and collaborators, as well as identifying talents and engaging the entire staff with our strategy and the continuous improvement of our organization.

We conduct an annual assessment of our collaborators' performance, and the level of compliance with their individual objectives is validated (goals guiding the collaborator, which are related to the business strategy), as well as their competencies (behaviors and soft skills). Each collaborator's final assessment is comprised by four sub-stages:

- i. Self-assessment: the collaborator analyzed the objectives he/she has fulfilled.
- ii. Evaluation by direct supervisor: validation of self-assessment by the direct supervisor, as well as a 360 degree assessment of his/her competencies, by his/her hierarchical supervisor, matrix supervisor, peers, direct reports and/or internal customers.

- iii. Calibration: we review of preliminary scores, comparing them with preliminary assessments and relativizing them with other members of the department or unit.
- iv. Final qualification and feedback: leaders receive the final calibrated score of their direct reports and with that it gives them feedback on their performance.

The performance management system strongly influences the responsibility of leaders as real people managers. They are responsible of the performance of those they supervise, which means that if the equipment underperforms leaders shall also receive a negative score, which will have an impact on their annual bonus.

### Work environment management

(Minsur2)

The staff satisfaction is a factor that positively impacts their motivation and productivity and, thus, the company success. At Minsur, we always promote an environment of open communication so that collaborators may channel their questions and concerns. They are empowered to express their concerns in the meetings with their direct supervisors and the Human Resources staff, at the mining units where they work or through the Integrity Channel mentioned above.

Furthermore, recognizing that mining works in remote areas under the regime system may be complicated, a transportation bonus is granted to those technicians and workers who live in other areas, so that they are able to travel and spend time with their families during their days off. We also assume the cost of food services for collaborators in their workdays, and several activities are organized to promote the best balance between family and work.

### Collaborators' satisfaction

As part of our continuous improvement process, every year we assess our collaborators' level of satisfaction with their work environment and their relationship with Minsur, using a cultural diagnostic survey, which includes questions related to the work schedule, workload, collaborators' autonomy, satisfaction with their job, among others. Moreover, surveys are reviewed and updated annually aiming at improving and adjusting them to our collaborators' needs. The adjustment of the survey to the leadership skills mentioned above was a significant action taken in 2017.

Besides, in 2017 it was established that the Manager or Director of each corporate area is responsible of the work environment satisfaction level in their corresponding area, and he/she is assessed in relation to this performance indicator. With this it is emphasized that a good work environment is everybody's responsibility and not only Human Resources' job. Based on the survey results, the management shall prepare enhancement plans and, by the end of the year, report which measures were taken to optimize the work environment.

Thanks to the measures taken in 2017 to improve the work environment, general satisfaction of our collaborators increased by 3%, reaching 69% (see table 4.3.3). 72% of collaborators in Peru and Brazil participated in this survey. This result encourages us to continue implementing actions to strengthen our work environment and improve staff motivation.

Table 4.3.3.

## / Satisfaction survey /

Unit	Satisfaction 2016	Satisfaction 2017
Mina Justa	70.90 %	82.30 %
Pisco	77.40 %	78.90 %
Lima	72.90 %	78.30 %
Pucamarca	79.00 %	74.10 %
Pirapora	63.00 %	72.30 %
San Rafael	57.10 %	65.00 %
Pitinga	61.50 %	63.40 %
Weighted average	66 %	69%



## 4.4 / Freedom of association and collective bargaining

(GRI 102-41)

Good relationships with our collaborators, contractors and their corresponding unions are essential for the business success. Therefore, the company recognizes their right to associate to unions and participate in collective bargaining. In Brazil, 100% of collaborators is covered by a union agreement, while in Peru 49% of workers is covered by such an agreement (workers and technicians of San Rafael MU and SPR of Pisco). Therefore, 72% of total collaborators (Peru and Brazil) are represented by a union agreement. In 2017, a new union was formed in the Pucamarca MU, with which there is no negotiation process for an agreement, as of the date this report was issued.

The governments of both countries have ratified the ILO Convention 87 (on the freedom of association and protection of the right to organize) and ILO Convention 98 (on the right to organize and collective bargaining) and have a sound regulatory framework governing the relationship between unions and the company. The company abides by the laws on these matters, and adopts a proactive approach in the negotiations with employees and their representatives. In these negotiations, the Human Resources department of each mining unit is the main responsible, acting as a link between organized staff and the company, ensuring that agreements are fair and well-balanced for both parties.

Wages and employment conditions are negotiated at the operational level pursuant to the company's policies and regulations. All wage negotiations were successfully completed within the term and legal framework. Besides the wage matters, collective agreements comprised matters such as guarantees (special bonuses for special physical work conditions, such as working inside a mine or at heights, for instance), vacations, life conditions, among others.

In Peru and Brazil we have open communication channels with the unions, ensuring that their demands are listened to. These communication channels are managed by experts in labor relations. Thanks to these communication tools, our workforce has not gone in any strike in the last four years.

Furthermore, we consider relevant guaranteeing the freedom of association and collective bargaining of the subcontracted staff, and that their union agreements shall be honored by their employers. We demand that our suppliers and contractors comply with labor laws and union agreements. The company's internal auditor assesses such compliance and verifies if, for instance, wages, bonuses and settlements are properly paid. The auditor reports to the Human Resources department and works hand in hand with the Logistics and the Legal Departments. It is also worth mentioning that all contractors' workers may communicate their questions and concerns regarding their employer or Minsur through our Integrity Channel.



# 05 /5. HEALTH AND SAFETY MANAGEMENT /

**5.1 / Occupational health and safety  
management system / page 52**

**5.2 / Prevention approach / page 54**

**5.3 / Occupational health / page 56**

**5.4 / Health and safety performance / page 57**

## 5.1 / Occupational Health and Safety management system

(GRI 403-1)

Minsur firmly believes that all people have the right to a safe and healthy workplace. As a mining company, it is aware that our operators and contractors' workers are daily exposed to high occupational health and safety risks. Aiming at preventing injuries, they operate within a safe work environment. Thus, the company ensures an environment that allows workers to go back home to see their families at the end of their workday.

### Occupational Health and Safety in Minsur

Health and safety of our workers and those from our contractors are our priority. This issue is essential and it is included in our corporate value system, as reflected in the Code of Ethics and Conduct, and it may be found in our Sustainability Policy, document that in 2016 replaced the Policy on Safety, Health, Environment and Social Responsibility. This policy is complemented by the Policy on the prevention of accidents caused by fatigue and drowsiness, Policy on the Responsible Use of mobile phones at work and Policy on a work environment free of alcohol and drugs.

In addition to our Sustainability Policy there is a Health and safety Management Corporate System that comprises 14 management standards and 21 operational standards. This group of standards provides the guidelines and necessary actions to consolidate a culture of safety and ensure that—in all the company's activities—occupational health and safety are always the main priority. The abovementioned standards are continuously updated to ensure that they meet the highest standards. For example, in 2017 two new operational standards were implemented: one related to protection against electric shocks from storms and other related to safety at electric sub-stations, power rooms and motor control center.

The Health and Safety Corporate Management system is based on the laws of Peru and Brazil and the best health and safety practices worldwide. It is in line with the OHSAS 18001 international certification, which establishes a series of certifiable requirements to control occupational risks that affect people's health and safety. All operating units in Peru have such certification. All units in Brazil are working to be in line with OHSAS 18001, an effort that will continue in 2018.

The Health and Safety corporate department is responsible for implementing the Health and Safety management system across the company, besides providing orientation and monitoring to health and safety supervisors and teams at all operating units. This area is led by the Health and Safety Corporate Manager, who directly reports to the Operations Director. The Corporate Health and Safety Committee meets monthly, with the participation of the Operations Director and Corporate Managers, as well as Unit Managers, and Health and safety Supervisors of mining units, in order to analyze results and management progress.

### Safety at operating units

Each mining unit has its own procedures linked to the Health and safety Management System, but they are adjusted to and follow the guidelines of the safety corporate standards. There is a health and safety team led by a Health and safety Supervisor at all mining units. Moreover, all units have a joint occupational health and safety committee that represents all workers.

The health and safety committee is in charge of assessing and supervising operations' risk control and promoting safe behaviors. Its members monitor performance indicators on health and safety matters daily. Furthermore, they document and report all incidents or accidents through a Flash Report. A significant fact in 2017 was the introduction of a new incident and accident management software, which allows recording and managing all incidents and accidents in an online system. This tool makes it easier to better quantify data and have a stronger control. Statistics and safety performance evolution are monthly reported to the Operations Director and the Occupational Health and safety Manager.

In the event that a high potential event or an accident resulting in loss of days occur, a Committee comprised by the Operations Director, Corporate Operations Manager, Corporate Health and Safety Manager, Mining Unit Manager, and—if necessary—the contractor's manager shall be activated in order to investigate the causes of such event and take the corresponding control measures. Moreover, a preventing safety stop shall be planned, so that the entire staff participates in workshops to jointly review high potential events or accidents resulting in loss of days that occurred. In 2017 there were three stops, similarly to 2016.

Different mechanisms were implemented to monitor and mitigate occupational health and safety risks that may affect employees and contractors' staff; such as falls, fatigue, moving machinery, traffic accidents, etc. For instance in 2016 a process to install GPS systems on staff transportation vehicles was initiated to monitor their location and speed. In 2017, this system was extended to all SUVs to achieve a greater impact. Thanks to it, not only accidents are detected, but also any high potential event (event that had the potential to become an accident). Another safety mechanism is related to the electric storm detection system, comprised by equipment to detect lightning to warn workers preemptively.

### Assessment of the management system

Manager and safety personnel conduct regular inspections on the field to monitor that safety practices are met. Moreover, an annual audit will be conducted to assess the level of compliance with the occupational health and safety laws and corporate regulations.

Additionally, we request and demand to the contractors' management to make a safety commitment and actively engage in safety management development. Contractors with a low safety performance have received support to enhance their management in this regard.

Last but not least, the Safe Partner award is granted to those contractors and suppliers with the best health and safety performance when providing their services to our company, thus promoting a safe behavior among them. Such award is delivered in an annual event called Strategic Partners' Meeting, which gathers managers of our main suppliers and contractors. In this space, Minsur promotes Sustainability and Safety standards so that our partners adjust to them.

The companies awarded for their safety performance in 2017 were:

- For achieving the best safety performance in Minsur's operating units, Mineração Taboca and Marcobre: EXPLOMIN del Perú, Ferreyros, Sodexo and GEOTEC.
- For their outstanding commitment to safety: EXSA and Moly-Cop Adesur.



## 5.2/ Prevention approach

Minsur has a strong commitment with the promotion of a preventive culture. The company focuses strongly on the prevention of all type of accidents and risk assessment, constantly strengthening the control mechanisms. Besides, it has several training programs, as well as campaigns and observation mechanisms.

### Training programs

It is essential to engage all members of the company in the health and safety management to be able to fulfill our zero-accident goal. Thus, all workers are trained on these matters as part of their induction process and they receive refresher courses and specific training during the time they work for Minsur.

Contractors also receive induction training, besides specific courses for the job they carry out. In 2017, contractors' training programs were adjusted to the Minsur's training program for contractors' staff, by requiring mandatory courses before they provided their services, which are conducted by the Mining Safety Institute (ISEM), a non-profit organization which purpose is improving the level of safety of Peruvian mines through training. In 2017, an average of 60 hours of training was provided to contractors' staff.

The first module of the School for Health and Safety Leaders was implemented in 2017. This is an internal training program that aims at strengthening technical knowledge and soft skills of Minsur's staff in order to promote a "zero-accident" culture in our operations in Peru. This program is open to professionals and technicians with occupational health and safety-related positions in mining operations. It is 12 months long and it includes 120 hours of blended learning.

It seeks to train professionals who will lead with their example, in words and actions. 68 leaders participated in 2017. At the end of the course, each participant shall receive a certificate of specialization on Occupational Health and safety in mining operations issued by ISEM and APPER. In 2018, the School for Health and Safety Leaders" will begin working at Brazil units.



### Prevention programs and campaigns

Furthermore, the company has implemented several prevention programs, which motivate the entire staff so that they work with eyes wide open, detect risk situations and take care of each other:



**01**

**Rules for Life program**

It is a group of 10 rules that save lives and shall be mandatorily complied with. These are non-negotiable rules and are strengthened regularly with all workers, aiming at preventing serious or fatal accidents caused by unsafe behaviors or failure to meet these rules.

**02**

**STOP program (PARE in Spanish: Think, Analyze, Solve and Implement)**

It promotes a preventive culture among workers, so that before they carry out any task they evaluate risks and act safely. They are empowered to refuse to work risking their life or other persons' lives (which is known as the right to say «No»).

**03**

**Program to prevent injuries to fingers and hands**

It aims at reducing these types of injuries by providing training, conducting awareness campaigns and other activities.

**04**

**Safety Observers Program "Miners protecting miners"**

Which aims at recognizing safe behavior at work, as well as proactively correcting unsafe behavior. In el 2017, 256 workers participated as safety observers; each of them was trained to identify risks and unsafe behaviors.

Moreover, several awareness interventions were conducted in 2017. For instance, we implemented multiple campaigns on the negative effects of alcohol and drug consumption on peoples' health, as well as its impact on the workplace. Drama plays were organized with employees recreating hazardous situations to realize what are the consequences of unsafe behaviors.

It is worth mentioning that the company communicates the "Moments of Safety" every 15 days, through which the Operations Director provides safety recommendations based on the lessons learned from accidents, incidents and high potential events occurred in the mining industry.

## 5.3 / Occupational Health

Occupational health plays a significant role in the control of operational risks and it is as important as safety. All employees and the contractors' workers are subject to medical exams to continuously assess their mental and physical condition, considering the operational risks they are exposed to. These exams include: audiometry, chest x-rays, spirometry and metal (blood and/or urine) exams, among others.

Moreover, since the moment they start working, all employees have insurance against accidents at work and occupational diseases, private individual health insurance (100% covered) and Oncology insurance. In case of a work accident, healthcare expenses are covered until our collaborator is recovered.

Occupational Health activities in 2017 were focused mainly on assessing and monitoring the work area, aiming at controlling occupational risk exposure that could negatively affect the job's safety conditions. Some of these activities include:

- Monitoring of physical agents (noise, vibration, temperature) and chemicals (total and respirable dust, silica, mercury, carbon monoxide, hydrocyanic gas, arsine, among others), as well as ergonomic risk.
- Hearing, breathing and skin protection programs.
- Medical campaigns related to health and healthy life styles; for instance, dental care, eye care and vaccination (influenza and tetanus) campaigns; as well as detection and control of chronic diseases.
- Training on specific occupational health issues; for instance, the use of personal protection equipment, first aid, load handling, fatigue and drowsiness control, and protocols to assist victims of chemical poisoning.

At Minsur we constantly monitor our workers' health aiming at detecting occupational diseases. Besides, we monitor and provide effective care as necessary. We follow strict safety practices to keep our workers and contractor's workers safe. For instance, in Pitinga MU we have supervisor of radiation protection, who have been trained on safe management of radioactive materials and radioactivity measurement, as well as on on-site contingency management.





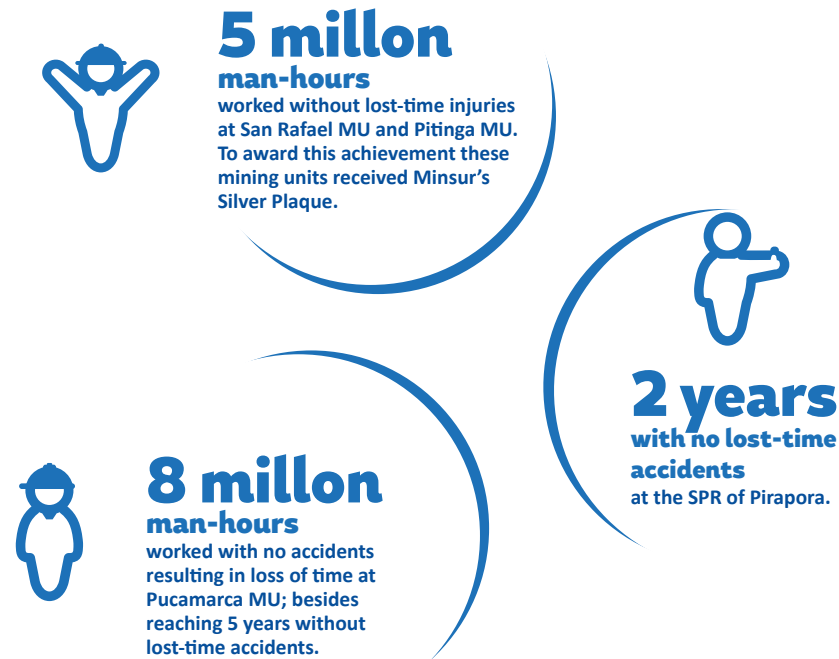
## 5.4 / Health and safety performance

(GRI 403-2)

In 2017, several units were awarded for their excellent safety performance. Pucamarca MU received a Trophy in the Open Pit category in the XX National Mining Safety Contest. In this same contest, San Rafael MU received a Plaque of Honor in the Underground mining category and the SPR of Pisco received a Plaque in the Smelting and Refinery category. In addition, La Positiva Seguros granted Minsur the Excellence & Quality award for its outstanding work to prevent occupational risks.

Moreover, we made the following remarkable achievements on safety matters:

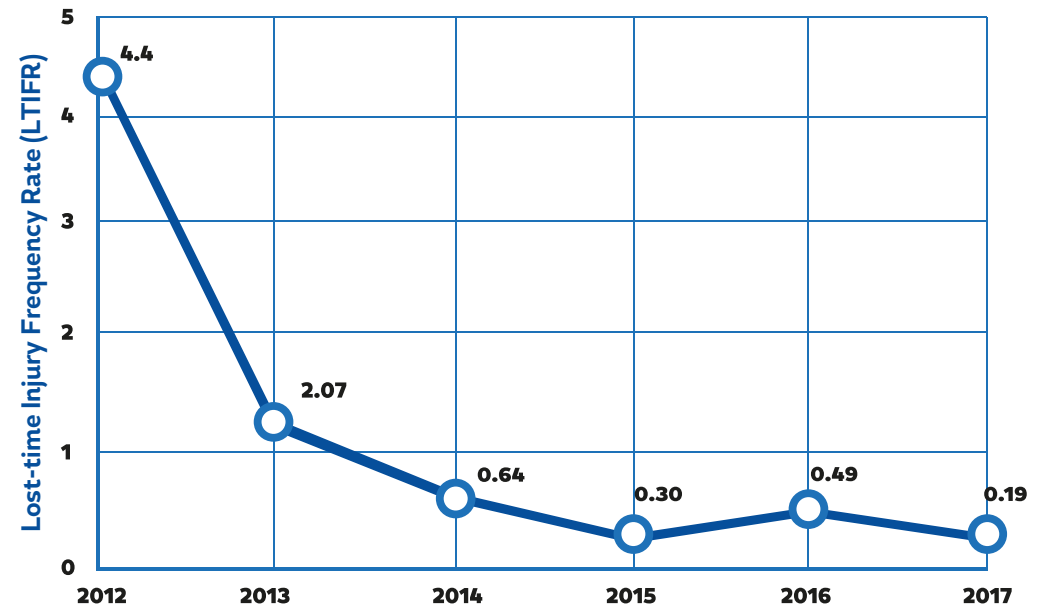
Graphic 5.4.1



Throughout 2017, 33 recordable injuries were produced in total<sup>9</sup>, considering the company's workers and the contractors' staff, out of which three were accidents resulting in loss of days. There were no fatal accidents (see graphics 5.4.1 and 5.4.2 and see tables 5.4.3 and 5.4.4). As compared to 2016, the Lost-time injury frequency rate fell by 61% (2016: 0.49; 2017: 0.19). The chart below shows the LTIFR reduction history from 2012 to 2017:













Graphic 5.4.2.

### Lost-time Injury Frequency Rate (LTIFR) reduction history















<sup>9</sup>Accidents with recordable injuries include accidents with medical treatment, restricted work, lost-time injuries and fatal accidents.

Table 5.4.1.

/ Types of accidents, by region and gender for employees* /													
Country	Peru						Brazil		Total				
Region	Lima		Ica		Tacna		Puno		Sao Paulo		Amazonas		
Type of accident													
Accidents with medical treatment	0	0	0	0	0	1	0	1	0	0	0	3	5
Accidents resulting in restricted work	0	0	0	1	0	2	0	4	0	4	0	0	11
Lost-time accidents	0	0	0	1	0	0	0	0	0	0	0	0	1
Fatal accidents	0	0	0	0	0	0	0	0	0	0	0	0	0

\*An employee is a person who has an employment relationship with the company, pursuant to national laws or enforcement practices.

Table 5.4.2.

/ Types of accidents, by region and gender for workers* (excluding employees) /													
Country	Peru						Brazil		Total				
Region	Lima		Ica		Tacna		Puno		Sao Paulo		Amazonas		
Type of accident													
Accidents with medical treatment	0	0	0	0	0	0	0	6	0	0	0	4	10
Accidents resulting in restricted work	0	0	0	0	0	0	1	0	0	0	3	0	4
Lost-time accidents	0	0	0	1	0	0	1	0	0	0	0	0	2
Fatal accidents	0	0	0	0	0	0	0	0	0	0	0	0	0

\*A worker is a person who carries out a job. For instance, interns, apprentices, independent workers and those working for companies other than the reporting organization (for instance, suppliers/contractors).

Table 5.4.3.

/ Occupational health and safety indicators for employees* /												
Country	Peru						Brazil					
Region	Lima	Ica	Tacna	Puno	Sao Paulo	Amazonas						
Indicators												
Recordable Injury Frequency Rate (RIFR)**	0	0	0	4.71	0	3.44	0	3.39	0	6.83	0	1.57
Lost Day rate (LDR)***	0	0	0	0.39	0	0	0	0	0	0	0	0
Incidence rate of occupational diseases (IROD)****	0	0	0	0	0	0	0	0	0	0	0	0
Severity rate (SR)	0	0	0	0.39	0	0	0	0	0	0	0	0
Fatalities resulting from work accidents	0	0	0	0	0	0	0	0	0	0	0	0
Fatalities resulting from occupational diseases	0	0	0	0	0	0	0	0	0	0	0	0

\* An employee is a person who has an employment relationship with the company, pursuant to national laws or enforcement practices  
 \*\* Does not include first-aid  
 \*\*\* Reference is made to scheduled workdays and the time starts running from the next day after the lost-time accident occurs.  
 \*\*\*\* Only new cases are considered

Table 5.4.4.

/ Occupational Health and Safety indicators for workers* (excluding employees) /												
Country	Peru						Brazil					
Region	Lima	Puno	Tacna	Ica	Sao Paulo	Amazonas						
Indicators												
Recordable Injury Frequency Rate (RIFR)	0	0	0.2	1.3	0	0	0	3.27	0	0	0	2.25
Fatalities resulting from work accidents	0	0	0	0	0	0	0	0	0	0	0	0
Fatalities resulting from occupational diseases	0	0	0	0	0	0	0	0	0	0	0	0

\* A worker is a person who carries out a job. For instance, interns, apprentices, independent workers and those working for companies other than the reporting organization (for instance, suppliers/contractors).



# **/6. ENVIRONMENTAL MANAGEMENT/**

**6.1 / Management system / page 61**

**6.2 / Water management / page 64**

**6.3 / Effluent and waste management / page 66**

**6.4 / Materials management / page 69**

**6.5 / Emission management / page 70**

**6.6 / Energy management / page 71**

**6.7 / Biodiversity management / page 74**

## 6.1/ Management System

(GRI 102-11)

Minsur develops business with a permanent emphasis on the environment and reducing environmental impacts. Its corporate policy framework includes crosscutting sustainability principles to ensure that due-diligence is implemented in all processes and operations of the company. During the life-of-mine cycle we use a precautionary approach from conception through study preparation, permit management, implementation, closure and post-closure, identifying and assessing risks and impacts, and establishing environmental control measures. For example, in Marcobre expansion project we decided to use seawater instead of groundwater or surface water from the area of influence.

Pirapora, Pisco, Pucamarca and San Rafael operations have received the ISO 14001 certification, which is an international standard that provides a framework to protect the environment. Though Pitinga MU has not yet received such certification, Minsur’s Environmental Management System (EMS), which applies to all of the company’s mining operations and projects, was designed based on the ISO 14001 standards. Thus, all operate pursuant to those regulations.

The EMS is governed by our Sustainability Policy and is implemented under the EMS Corporate Manual; comprised by 11 management standards and 14 operational standards on environmental matters, which shall be adopted by the entire staff (employees and contractors) in the operation and support processes. This document provides management guidelines to ensure compliance with legal requirements at all mining stages.



The EMS is comprised by 7 fundamental pillars, which are in line with Minsur's mission and vision:

Graphic 6.1.1



## Management framework

The corporate environmental area is led by a manager, who belongs to the Direction of Corporate Affairs. The latter reports directly to the Director of Corporate Affairs and provides supervision and support to the environmental teams of our units to ensure that regulations, guidelines and strategies are properly implemented.

That area also has a team in charge of applying for the required environmental permits and authorizations, including Environmental Impact Assessments (EIAs), closure plans, water permits and others that may be required. This team works closely with the environmental compliance legal team of the same department, which makes sure that all operations meet the corporate environmental standards and existing environmental laws. Both teams coordinate with the legal and environmental teams in Peru and Brazil, which have the same responsibilities and duties.

Each mining unit and project has an environmental supervisor and a supporting team operating under the Environmental Management System, which has a EMS manual where the management and operational standards that set forth the environmental control measures are described. The unit or project manager is responsible for implementing such standards and for identifying and assessing the risks associated to mining activities, recording them in the risk matrices. The matrices are reviewed and updated annually to verify that all components have been included.

## Monitoring and impact assessment

At Minsur, all environmental impacts are assessed throughout the entire mine life cycle, from the exploration stage to the post-closure activities, using the following tools:

### Internal audits:

Internal audits are carried out to determine if operations meet the environmental management system standards and the existing legal requirements, as well as to validate the effectiveness of the management system. In the event that a unit or project with a performance below the standard is detected, the environmental supervisor of such unit or project shall implement the corrective actions required by the final audit report and, afterwards, he/she shall prepare a report on the result of implementing these actions.

As part of this internal audit process, the environmental supervisors conduct cross audits between mining units or projects in order to share management experiences and identify

improvement opportunities for their own operating units; for example an environmental supervisor who works at Pitinga MU or SPR of Pirapora in Brazil may visit a mining unit in Peru or viceversa.

### Environmental Performance Indicators:

The Environmental Supervisors record and assess Environmental Performance Indicators (EPI) on a monthly basis, thus measuring and monitoring environmental impacts and potential risks. These indicators are reported to the Environmental Manager in monthly meetings to identify and define the improvement actions to be implemented.

### Environmental monitoring:

Monitoring points have been established in the areas of influence of mining units and projects, to continuously assess noise, as well as air, soil and water quality, as authorized by the competent authorities. In addition, some mining units have implemented a participatory environmental monitoring, engaging the communities of the areas of direct influence.

### Environmental oversight:

Minsur environmental performance is periodically supervised by the Agency for Environmental Assessment and Enforcement (OEFA) in Peru; the Instituto de Proteção Ambiental do Amazonas (IPAAM) for the Amazon region and Companhia Ambiental do Estado de São Paulo (CETESBI) for the Sao Paulo region, in Brazil; in order to verify that the laws, environmental management instruments, permit application processes, mandates or provisions issued by competent authorities, as well as other sources of environmental obligations subject to supervision.

## Incidents

In 2017, no spills or other type of incident with significant environmental impact were produced in Minsur's operations.

## 6.2 / Water management

(GRI 303-1, 303-2, 303-3)

All units and mining projects have the required authorization and permits to use local water sources, and several mechanisms are used to minimize the impact of operations on water sources and to prevent polluting them:

### Efficient consumption

Minsur seeks to reduce the amount of water consumed in all its mining activities by managing water efficiently. This is considered in the infrastructure designed of all units.

All units reuse and recycle a large part of water consumed, and several water saving initiatives are implemented. It is worth emphasizing that water balances and hydrogeological studies were made in order to know water features and amount, while assessing alternative water sources in our units' neighboring areas.

Aiming at raising awareness among our collaborators on water conservation and responsible consumption, human resources and environmental teams frequently conduct campaigns and lectures on this issues, besides using other tools such as signaling works at the camps with information boards to promote water saving.

Throughout 2017, it was calculated –through direct measurement- that the total use of water by Minsur was 7 451 thousand cubic meters (m3) (see table 6.2.1). Pitinga MU consumes a larger amount of water than the other units, because it uses it for a larger number of processes. At the same time, this unit reuses and recycles the larger amount of water (see table 6.2.2).

According to the environmental management instruments and permits granted by the competent authorities, no body of water is significantly affected.



### Water quality

On the other hand, operating units' environmental teams control water quality and amount with periodical monitoring; this could be done on a monthly, quarterly or biannual basis, depending on the commitments assumed with competent authority and the operating unit. Furthermore, additional monitoring activities -that go beyond the environmental authorities' requirements- are conducted on different bodies of water, such as lagoons, gorges and rivers, for a more efficient control of water management in the units.

Monitoring is carried out with the support of an external laboratory, as periodically as established in the environmental management instruments. In order to communicate and explain to the communities in the area of influence how water is managed, participatory monitoring is organized, so that they are able to know and verify the results of water amount and quality measurements. Minsur aims at maintaining all parameters within the limits required by oversight and supervision agencies, because it is an environmentally responsible company.





Table 6.2.1.

## /Water withdrawal by source in 2017/

Source	Volume (thousand m3 per year) by unit						Total
	San Rafael MU <sup>10</sup>	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	Pirapora MU	
Surface water*	1 257	0	0	0	4 000.9	0	5 257.9
Underground water	1 521	407.9	198.5	10.4	0	93.8	2 231.6
Rainwater collected and stored directly by the organization	0	45.3	0	0	0	0	45.3
<b>Total</b>	<b>2 778</b>	<b>453.2</b>	<b>198.5</b>	<b>10.4</b>	<b>4 000.9</b>	<b>93.8</b>	<b>7 451</b>

\*Minsur uses surface waters such as lagoons and rivers.

Table 6.2.2.

## / Recycled and reused water in 2017 /

Source	Volume (thousand m3 per year) by unit					
	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	Pirapora MU
Fresh water consumption	2 778	453.2	198.5	10.5	62 226.9	93.8
Recycled and reused water in a recirculation cycle	916.9	361.8	76.1	0.5	58 215.5	0
% recycled water in one cycle	33%	80%	38%	5%	94%	0%
Volume of reused an recycled water in all recirculation cycles	1 368.5	1 809	122.7	0.6	970 253.6	0
Percentage of reused water in relation to withdrawn water	49 %	399 %	62 %	5%	1559 %	0 %

<sup>10</sup>Data provided by San Rafael MU correspond to the reports submitted to the Local Water authority from May to December 2017. Such authority requested San Rafael MU to report the amount of water consumed starting in May 2017. For that reason, flowmeters were installed, to provide a more exact measurement. As a result, the total amount of water withdrawn in 2017 was significantly reduced as compared to 2016.

## 6.3 / Effluent and Waste management

### Effluents

(GRI 306-1, 306-3)

San Rafael and Pitinga mining units generated industrial effluents, which were permanently monitored pursuant to the company's environmental management plans, the maximum permissible limits (MPL) and the environmental quality standards (EQS) into force in Peru and Brazil. Throughout the year, these units generated 15 607.7 thousand m3 of effluents in total (see table 6.3.1). All effluents were treated before being discharged, thus discharges were suitable for irrigation and recreational purposes, depending on the operation (see graphic 6.3.1). Before effluent discharge, the water was treated to obtain values within the regulations' parameters. It is worth mentioning that, in 2017, no effluents were reused by any other organization.

The SPR of Pirapora and SPR of Pisco generated domestic, non-industrial effluents. Likewise, Mina Justa operations did not generate industrial effluents, since drill fluid handling takes place in fluid ponds, and then water is reused in exploration activities. Pucamarca MU did not produce effluents either, since it operated under a permanent water re-circulation system. Thus, it reported zero discharges to the environment.

It is worth mentioning that infrastructure of all units and plants have protection measures to address any contingency. Thanks to these measures there were no significant spills in 2017. Notwithstanding, all units and plants have contingency and emergency plans to handle any type of environmental incident.

Table 6.3.1.

/ Effluents by discharge type /							
Type of discharge	Volume (thousand m3/year)						Total
	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	Pirapora MU	
Industrial discharge	7 908.5	0	0	0	7 458.2*	0	15 366.7
Domestic discharge	38.2	0	10.5	0.1	182.5	9.7	241
<b>Total</b>	<b>7 946.7</b>	<b>0</b>	<b>10.5</b>	<b>0.1</b>	<b>7 933.2</b>	<b>9.7</b>	<b>15 607.7</b>

\* This is an estimated. The volume of the day was measured extrapolating that figure to the annual average.

Graphic 6.3.1.

### Water discharge by quality and destination



## Waste

(GRI 306-2)

The operational standards for the management of solid waste, tailings, waste, chemical substances and hydrocarbons establish the guidelines for their responsible management and disposal. Throughout 2017, the units generated 3 119.1 tons of waste in total, which were disposed using one or more of the following techniques: recycling, reusing, composting, burning and landfills, depending on the type of waste (see table 6.3.2).

Minsur operates under the premise that waste reuse, recycling or composting shall be prioritized. In 2017, 35.5% of total waste was reused and 16.7% of it was recycled. Our objective is increasing such percentages continuously. During 2017, San Rafael MU started composting pilot tests to also be able to apply this disposal technique to a part of its waste, and a part of the non-hazardous waste of SPR Pirapora was donated to cooperatives to be recycled, in order to help generating employment and income for workers who depend on recyclable waste.

We also worked with the communities to raise awareness on the significance of recycling and the correct disposal of waste. These activities were conducted in coordination with the social management area. A significant example of these activities is the School Recycling Competition organized by the Pucamarca MU, called "Recycle, Create and Win". The schools of the Vilavani, Palca and Ataspaca communities participated in this activity.

Waste that is not reused or recycled is safely disposed following the appropriate and regulated practices. In both countries where Minsur operates (Peru and Brazil) the disposal methods are decided and approved by the competent environmental agency. Transportation and final disposal of hazardous waste is commissioned to a service provider duly recognized by the competent authority.

One example of waste management is the construction of a volatilization pad at San Rafael MU in 2017 to treat hydrocarbon-polluted waste and a new landfill, which service life is estimated in 10 years.

San Rafael and Pitinga mining units generated mining tailings as part of the operation process. To manage them properly, there is a responsible officer at the operational level, who continuously monitors the tailings dam in order to identify any risk, and the appropriate control measures are early implemented to prevent deterioration or loss of the structure, pursuant to the safety standards issued by the Canadian Dam Association (CDA). The responsible officer reports the conditions of the infrastructure to the unit's management, to the Geotechnics Manager and to the Operations Director at the corporate level, on a monthly basis.

In the case of Brazil, the SPR of Pirapora stores material in piles to then reuse it. Pitinga MU stores tailings in dams and internal landfills that meet the standards, practices and internal

procedure, and comply with the national laws issued by the National Nuclear Energy Commission (Comissão Nacional de Energia Nuclear, CNEN in Portuguese). Minsur in Brazil fully meets the legal requirements and it has been considered a reference in terms of compliance with the CNEN regulations.



Table 6.3.2.

/ Amount of hazardous and non-hazardous waste and type of disposal /

Type of disposal	Weight (t/year)						Total
	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	Pirapora MU	
<b>Hazardous waste</b>							
Recycling	0	46.3	5.5	0	63	3	117.8
Landfill outside the unit	380.8	54.8	22.3	1.5	0	0	459.4
Incineration	0	0	0	0	65.6	0	65.6
<b>Subtotal</b>	<b>380.8</b>	<b>101.1</b>	<b>27.8</b>	<b>1.5</b>	<b>128.6</b>	<b>3</b>	<b>642.8</b>
<b>Non-hazardous waste</b>							
Reuse	1 094.5	0.0	0.0	0.0	12.7	0.0	1 107.2
Recycling	0.0	141.7	183.5	0.0	67.3	11.5	404
Composting	0.0	46.9	0.0	0.0	0.0	0.0	46.9
Incineration (burning of mass waste)	0	0	0	0	66.8	0.0	66.8
Landfill outside the unit	115.2	54.9	0	3.4	74.1	57.5	304.9
Landfill located at the unit	363.8	0	0	0	182.5	0	546.3
<b>Subtotal</b>	<b>1 573.5</b>	<b>243.5</b>	<b>183.5</b>	<b>3.4</b>	<b>403.4</b>	<b>69</b>	<b>2 476.3</b>
<b>Grand total</b>	<b>1 954.3</b>	<b>344.6</b>	<b>211.3</b>	<b>4.9</b>	<b>532</b>	<b>71</b>	<b>3 119.1</b>

## 6.4 / Materials Management

(GRI 301-1)

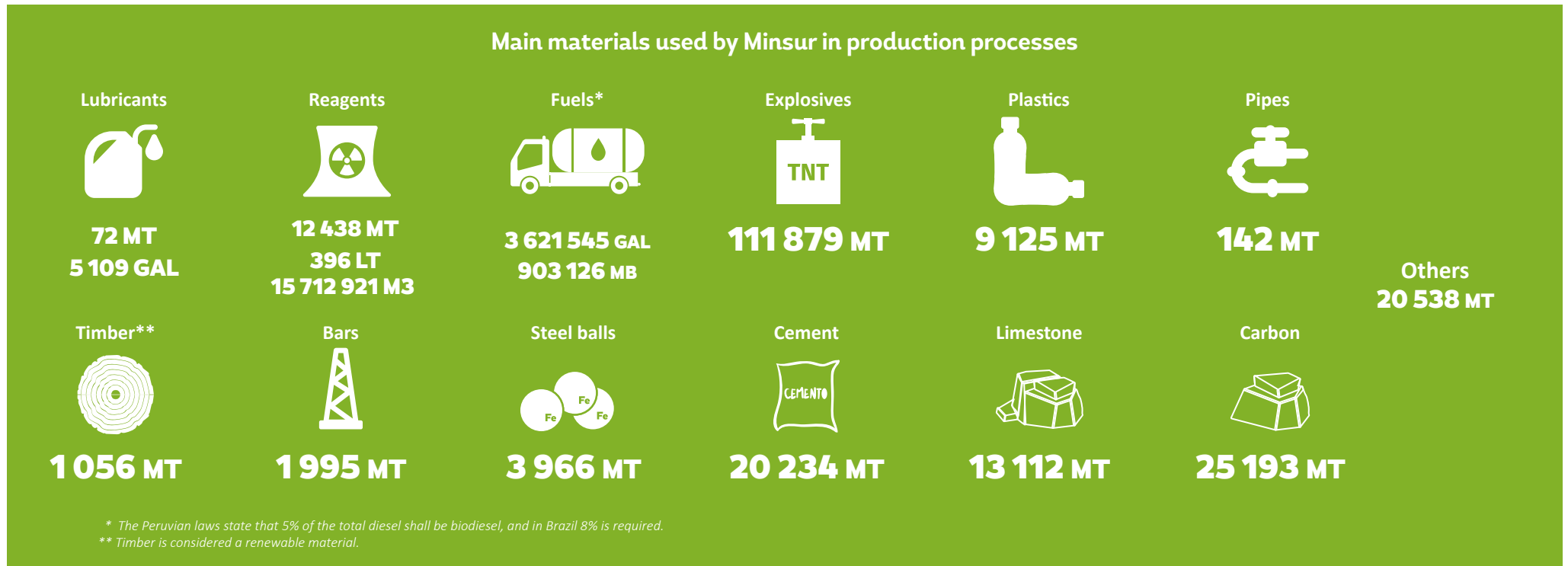
The main materials or inputs used by our units for ore production are fuel, lubricants, explosives and chemicals. Minsur is very careful when handling these materials, considering their physical-chemical and biological features and their potential negative effects on health and the environment.

The company has an operational standard to manage chemical substances and another one to manage hydrocarbons, as well as specific procedures to appropriately store, handle and transport them, and contingency plans. All warehouses have a spill containment system, and all units and plants have contingency plans. Vehicles transporting hazardous materials abide by the existing regulations.

Moreover, there is a preventive system to identify hazardous materials, classifying them according to the degree to which it affects health, its inflammability and physical hazards, and specifying the personal protection equipment code to be used while handling them. It is worth mentioning that the staff in charge of operating or transporting hazardous materials receives appropriate training to manage them.

The type and the amount of the main materials used by Minsur in its operations are shown below.

Graphic 6.4.1.



## 6.5 / Emission Management

(GRI 305-1)

Minsur considers that controlling emissions generated by its mining activities is very important to prevent altering air quality, protect the environment and the health of its staff and neighboring communities. Thanks to the control and monitoring measures, emission levels meet the maximum permissible as provided by law. These measures include: noise, dust and gas monitoring. The table below shows the main control mechanisms in each operating unit:

Table 6.5.1.

/ Emission sources and control mechanisms /		
Unit	Main sources	Type of control
<b>San Rafael MU</b>	Mobile equipment, laboratory	Dust collectors and acid gas neutralization
<b>Pucamarca MU</b>	Mobile equipment, laboratory, process plant, power generators, motor pumps	Extractor fan and hood, scrubbing tower
<b>SPR of Pisco</b>	Mobile equipment, smelting, refinery, grinding	Gas collection system, baghouse filter system
<b>Mina Justa</b>	Mobile equipment, power generator	Review and technical maintenance of vehicles and equipment
<b>Pitinga MU</b>	Mobile equipment, machinery, power generators, metallurgical processes	Extractor fan and hood, baghouse filter tower
<b>Pirapora MU</b>	Mobile equipment, smelting, refinery, grinding	Gas collection system, Baghouse filter system

In the SPR of Pisco the largest gas emission is mainly produced by the Ausmelt furnace, which smelts the tin concentrate (cassiterite). Processes emissions go previously through a baghouse filter system located in each one of the tree existing chimneys in the smelting, refining and by-product areas. Thus, only air free of particles is allowed to pass, since dust is retained, and the accumulation of dust generated by filtered gas is monitored. In 2017, the smelting dust collection system was enhanced making it more efficient. Likewise, emissions generated in the SPR Pirapora during the smelting process go to the gas collection system comprised by pipelines that are connected to the baghouse filter system, responsible for cleaning the air that passes through it.

The pollution control system receives preventive periodical maintenance and the filter bags in both smelting and refining plants are changed during the year to ensure they work properly. In addition, samples are taken in the chimneys to verify that the values are below the maximum limits (MPL).

San Rafael MU manages emissions generated by the laboratories with dust collectors and acid gas neutralizers. In Pucamarca MU, gasses produced in the smelting process are channeled through an extractor fan and a hood to a scrubbing tower where the dust that was dragged with the gasses is captured. Cold gasses, free of solid materials and of any pollutant are released in the atmosphere. In Pitinga MU gasses generated in the smelting process go to a baghouse filter tower where solid particles in suspension are captured.

In the Mina Justa project the main emissions in 2017 were caused by combustion in transport vehicles. Car and truck emission management is conducted through technical maintenance review of vehicles and equipment.

In 2018, Minsur will start measuring its carbon footprint in Peru, which shall be published in the next report.



## 6.6 / Energy management

(GRI 302-1)

In order to make energy consumption more efficient, and to reduce emissions to the environment, Minsur records and monitors its levels of consumption in all units and projects. In 2017, San Rafael, Pucamarca, Pisco, Mina Justa, Pitinga and Pirapora units consumed 2 944 923.7 gigajoules of power from fuel and electric power sources (see table 6.6.1).

At San Rafael, Pucamarca and Pitinga mining units, energy consumption grew as compared to 2016 due to a higher productivity (see table 6.6.2). Likewise, Mina Justa reported an increase in energy consumption due to the beginning of the project's preparatory works and exploration activities.

Throughout the year 1 793 766 gigajoules of electric power were consumed (see table 6.6.2), out of which 63% came from renewable sources (see table 6.6.3). It is worth highlighting that power generated was not sold to other organizations, since it was totally consumed by Minsur.

Moreover, 1 151 157.7 gigajoules of fuels from diesel, PLG, natural gas, gasoline oil and carbon were consumed (see graphic 6.6.1).

Minsur develops different initiatives to reduce energy consumption in its operating units. Thus, in 2017, fluorescent, halogen and vapor sodium lamps were replaced for LED lights at the SPR of Pisco and Pitinga, because these consumed less, produce less heat and provide the same or better light. San Rafael MU already has this system since 2016.



During 2017 Minsur consumed

**1 793 766**

**gigajoules of electric power**

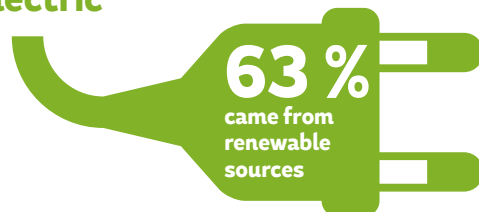


Table 6.6.1.

/ Energy consumption within the organization /							
Consumption	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	SPR of Pirapora	Total
Gigajoules							
Energy consumption	774 816	282 642.8	280 793.2	3 659.4	1 335 675.5	267 336.8	<b>2 944 923.7</b>

Table 6.6.2.

/ Electric power consumption /							
Consumption	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	SPR Pirapora	Total
Gigajoules							
Electric power consumption	546 820.9	67 789.3	91 494	630.7	947 973	139 058.1	<b>1 793 766</b>

*\*This measurement includes power for the cooling and heating system.*

Table 6.6.3.

/ Electricity consumption from renewable and non-renewable sources /							
Consumption	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	SPR Pirapora	Total
Gigajoules							
Electricity consumption from renewable source*	252 631	31 319	42 270	291	720 459	105 684.2	<b>1 152 654. 156</b>
Electricity consumption from non-renewable source	294 190	36 471	49 224	339	227 514	33 373.9	<b>641 111.9</b>

*\*The total percentage of renewable energy in Peru by 2017 has been calculated in 46.2% and in Brazil is 76%. This includes energy from hydropower plants, solar and wind stations, as well as biomass and biogas.*



Table 6.6.3






## / Fuel consumption from renewable and non-renewable sources /

Source	San Rafael MU	Pucamarca MU	SPR of Pisco	Mina Justa	Pitinga MU	SPR of Pirapora	Total
Megajoules							
Total fuel consumption from non-renewable sources	8 916 352.4	201 051 703.9	4 248 207.3	2 877 221.2	355 568 356.2	No records of Diesel	<b>572 661 840.9</b>
Total fuel consumption from renewable sources	469 281.7	10 581 668.6	223 589.9	151 432.7	18 714 124	No records of Diesel	<b>30 140 096.9</b>

\* Peruvian laws state that 5% of total diesel shall be biodiesel, and Brazil laws require 8%. Only diesel consumption has been considered.

Graphic 6.6.1.

## Fuel consumption by type

	 DIESEL	 PLG	 NATURAL GAS	 GASOLINE OIL	 CARBON	TOTAL
Megajoules						
• San Rafael MU	9 385 634	218 609 475	0	0	0	227 995 109
• Pucamarca MU	211 633 373	1 446 053	0	332 314	1 441 800	214 853 540
• SPR of Pisco	4 471 797	997 718	183 829 679	0	0	189 299 195
• Mina Justa	3 028 654	0	0	0	0	3 028 654
• Pitinga MU	374 282 480	746 805	0	3 805 942	8 867 284	387 702 511
• SPR of Pirapora	0	0	0	0	128 278 682	128 278 682

## 6.7/ Biodiversity Management

(GRI 304-3)

None of Minsur's units or projects is located inside protected areas and /or World Heritage sites. However, Pitinga MU concession is close to the Natural Reserve of Uatumã, in the northern area of the Amazon region in Brazil. The area separating this reserve from the mining conservation area is rich in biodiversity and hosts a unique ecosystem of flora and fauna. Aiming at protecting and preserving the area's biodiversity, Minsur implements a non-intervention policy, which is strictly applied. All visitors, employees and contractors accessing the area receive a document with information on the non-intervention policy that provides guidelines to avoid having contact with flora, wildlife and the community.

Pitinga operation was acquired by Minsur in 2008, with the purchase of Mineração Taboca. During Pitinga mine's first decades of operation –before Minsur acquired it- alluvial mining process were conducted, which had a negative impact on the environment. In order to remediate the affected areas, Minsur implemented a rehabilitation process of 22 igarapés<sup>11</sup>, covering a total area of 1 700 hectares, as part of the Recovery Program of areas degraded by Pitinga Mine exploitation. This plan was prepared with the support of Fundação Institucional Rio Solimões. Between 2014 and 2017, more than 300 hectares were successfully rehabilitated in 7 igarapés. The main actions taken were: soil preparation and fertilization, planting of seedlings of native woodland species and maintenance of such areas. In 2018 all already remediated areas shall receive maintenance.

In addition, in 2017, Minsur associated with the Federal University of Amazonas (UFAM) to implement a twelve-month project to identify native flora and fauna of Pitinga MU's neighboring areas, in order to develop conservation initiatives. Likewise, Minsur associated with the National Institute of Amazonian Research (INPA) to develop a research project on biodiversity, and with the municipal government Presidente Figueiredo to develop a plant nursery with over 400 000 seedlings of native species to be donated to local communities; as well as to organize awareness campaigns on the significance of restoring native plants to the area.

Other initiatives implemented by Minsur and focused on biodiversity include:

- At SPR of Pirapora there is a reserve for conservation and reforestation since 2012, which covers a total area of 4 600 m<sup>2</sup>, promoting the protection of biodiversity and conservation of over 600 species of native plants.

- Biannual monitoring is conducted in the Pucamarca MU to identify flora and fauna, and to create a database that will allow developing a biodiversity management plan for the mine concession area. Monitoring activities were conducted in rainy season and dry season.
- Minsur is an active member of the Conservation Committee of the Paracas National Reserve, located 14 kilometers away from the SPR of Pisco.
- Minsur has entered into an agreement with the National Service of National Protected Areas (SERNAP) for the development of a comprehensive management plan for tourism and the conservation of biodiversity in the National Reserves of San Fernando and San Juan, located near the Mina Justa project.
- In both countries, we work hand in hand with local communities for the conservation of biodiversity and we raise awareness among collaborators and contractors on endangered species living nearby our operations.



<sup>11</sup>Igarapé is a term from the Tupi native language, which means "canoeing way".



# /7. SOCIAL MANAGEMENT/

7.1 / Community relations management / page 76

7.2 / Mechanisms of communication and engagement / page 78

7.3 / Social Investment programs and initiatives / page 81

## 7.1/ Community relations management

(GRI 413-1)

Minsur's mission is focused on generating sustainable value by transforming mineral resources, both for the company and the communities located in the areas of influence of its operations and projects. Thus, it has a social management strategy supported on three pillars:

01

### Effective relationship building

We seek that neighboring communities know and engage in a legitimate and sustainable social interaction model, which aims at generating development opportunities for the community and the company. Before starting mining operations, relationships of trust are built through transparent dialogue and respect for local culture and the environment.

02

### Social Investment

Minsur contributes to the sustainable development of neighboring communities promoting the strengthening of local capacities, from a gender, social inclusion and interculturality; taking into consideration the specific needs of the communities with which it has a relationship. Furthermore, it promotes strengthening of institutionality and local governance, and thus it works under a multi-actor approach (State-community-company).

03

### Anticipate and monitor social risks

Local development activities in the communities allow us knowing their concerns and respond to them; enabling a constant monitoring of social risks with a preventive and timely response approach.

At the corporate level, social management is part of the Direction of Corporate Affairs. The Social Manager supervises and provides orientation to the social management teams of each unit in Peru, which at the same time develop the relationships with the communities and local authorities in the areas of influence. Furthermore, the Social management supervisor –at the corporate level- is also responsible for the social management in the exploration and expansion projects, and has the support of local teams.

Regarding the expansion project B2, community relations are in charge of San Rafael MU’s social management team, since this project is located in this MU’s concession.

A team, comprised by a manager, a supervisor, a coordinator and support personnel, was formed for Mina Justa project -which construction stage shall start in 2018- to work closely and permanently with the community of the area of influence.

Regarding operations in Brazil, it was decided not to have a special team for social management due to the limited interaction with the neighboring communities, the stakeholders and associated risks. Social management is conducted through local authorities and Minsur pursues a good and constant communication with them. Here, environmental teams are responsible for social management, led by the Sustainability Manager of our subsidiary Mineração Taboca.



## 7.2/ Mechanisms of communication and engagement

(GRI 413-1, GRI 102-43)

Management of communities located in the areas of influence is focused on creating long-term relationships during each mine's early stages. Thus, different engagement and communication mechanisms are used, which nature varies according to the operation unit or project, depending on factors such as stakeholders involved, specific risks in the area and local regulations.

### Mechanisms in Peru

In Peru, an environmental impact assessment (EIA) is prepared before initiating any mining project, to identify its impact on the natural and social environment; as well as Citizen Participation Plan (CPP) that proposes different mechanisms of consultation with the communities. The EIA is a public document, and thus it is generally available to the public.

Additionally, a prior public hearing can be summoned before approving the projects.

All Minsur's operating units have at least one permanent information office, available for neighboring communities to communicate with the company. The SPR of Pisco has one office in Pisco (Ica), Pucamarca MU has two offices in Palca district (Tacna) and San Rafael MU has two offices, one in Antauta district (Puno) and another one in Ajoyani district (Puno).

The spaces for agreement and dialogue are another significant mechanism to build relationships. For instance, through the Antauta and Ajoyani development tables, local authorities and other stakeholders have been able to participate in the decision-making process related to San Rafael MU operations and the projects to be implemented in the area, and also to discuss on local problems and other issues considered relevant.

Furthermore, different development committees, comprised by representatives of the community and of the company, were established. For instance, based on the Antauta and Ajoyani development tables, in 2016 two local employment committees were created in San Rafael MU, which have allow generating more trust in the community. This Committee monitors recruitment processes targeting candidates from local communities, thus ensuring their proper implementation. For 2018, it has been planned to establish a similar committee in the Pucamarca MU, where there are already four environmental participatory committees.

Annual surveys are also an important communication tool. Each year communities are invited to participate in a survey so that we get to know their opinions on the projects and operations,

mining activities in general and other subjects of interest. Furthermore, the company invites people from the areas of influence to participate in several informative events. In 2017, the company organized 19 informative talks, 25 guided tours and several focal groups.

Last but not least, formal agreements with the communities shall be highlighted. In 2017, Minsur entered into new agreements, among them a Community Support Agreement with the Tinyaccla peasant community (Huancavelica) for 25 years, which establishes an annual payment to a fund for a 25-year term, for the implementation of social projects and infrastructure. Moreover, it provided a framework agreement for interinstitutional cooperation with the Antauta district to formalize an alliance aiming at seeking and implementing alternatives for development. Social management teams ensure that these agreements are met at all times.



(GRI 102-43)

**Complaint and grievance mechanisms**

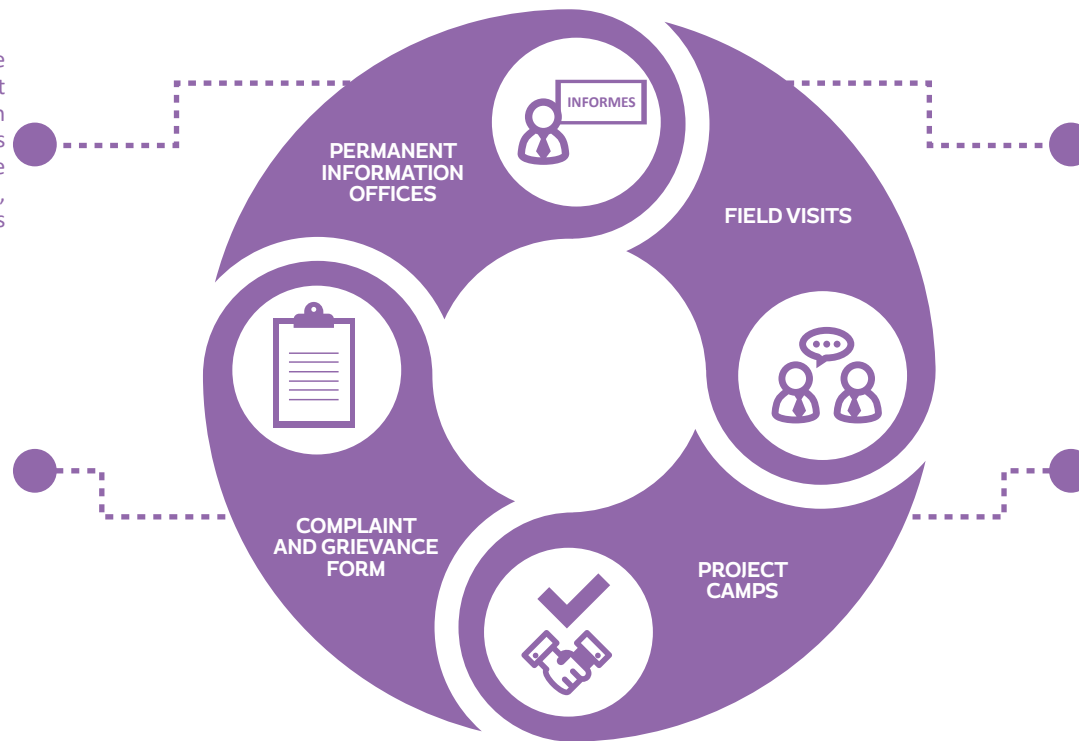
Minsur receives attentively the opinion of its stakeholders to continuously improve its performance, and promptly responds to their questions. Local population may submit their complaints, grievances or proposals through one or more of the following channels, depending on the unit or project:

Graphic 7.2.1.

## Complaint and grievance mechanisms

As we mentioned above, there are five permanent information offices that correspond to Minsur’s operations in Peru. People from local communities have permanent access to these offices to present their questions, observations or controversies involving mining units.

People may receive a complaint and grievance form from the Community Board, which submits them to the company.



Constant field visits conducted by our teams also create a space and opportunities for people to let us know of any claim or complaint.

Exploration projects’ camps are –essentially– small and easy to access for the neighboring community, if anyone wants to file any complaint or grievance. These may be received by any of our collaborators (usually by a member of the Security or Environmental departments) and then they shall be channeled to the social management department and the Project Manager.

(GRI 102-43, 102-44)

Each unit or project is responsible for managing the claim and complaint mechanism. In 2017, the company received 26 complaints in total through the abovementioned channels, 24 of which were related to exploration projects. All were responded within 7 to 30 days, depending on their seriousness and complexity. Table 7.2.1 presents a list of recurring complaints received by the company in 2017.

**Brazil mechanism**

It is worth mentioning that there are no special communication offices in Brazil due to the type of relationship our units there have with the communities. In Pitinga MU, as indicated by Brazil laws, Minsur treats directly with the Brazilian agency Fundação Nacional do Índio (FUNAI) or with the local government, in case it needs to coordinate with the indigenous population. Since 2008, Minsur has not reported any incidents with the Waimiri-Atroari community. The SPR of Pirapora is located in an area destined to industrial development in Bom Jesús, Sao Paulo.

Table 7.2.1.

/Recurring complaints and requests submitted through our complaint and grievance mechanism /	
Complaint / Request	Minsur response
Request for more local employment	<ul style="list-style-type: none"> <li>- Local Employment Committees</li> <li>- Permanent Coordination with the Human Resources department, operating units and contractors to post job offers to recruit people from the communities.</li> </ul>
Complaint for excessive dust generated in public roads	<ul style="list-style-type: none"> <li>- Extension of irrigation schedule using a tanker truck in the corresponding roads.</li> <li>- Implementation</li> </ul>
Complaint for speeding in public roads	<ul style="list-style-type: none"> <li>- Review and adaptation of speed limits established in the Internal Transit regulations (RITRA in Spanish) in the corresponding units</li> <li>- Enhancement applied to speed limit compliance monitoring and speed reducers on the roads.</li> </ul>





## 7.3/ Social investment programs and initiatives

(GRI 413-1)

Through social investment activities, Minsur proves that mining operations and traditional community activities can be promoted. In Peru, local development programs and initiatives are implemented based on four lines of investment:

### 1. Economic-productive development

Aiming to drive initiatives strengthening the economy of local communities, so that people there generate sustainable family income.

### 2. Education

Focused on managing activities to develop skills to improve employability and competitiveness.

### 3. Health and nutrition

Focused on implementing initiatives to reduce critical rates of anemia and child malnutrition.

### 4. Infrastructure

Focused on creating public-private associations to implement and finance infrastructure works within the framework of “Works for taxes”.

It is worth mentioning that several development programs are carried out with the support of Aporta, the laboratory of social innovation of the Breca Group, devoted to develop innovative social and environmental initiatives built upon the business objectives of the group’s companies.

A detailed description of Minsur’s programs and initiatives developed in 2017, under the four lines of investment, can be found below.



**Programs and projects**

***Fibra emprendedora (fiber entrepreneurship)***

**Unit/project:** *San Rafael MU*  
**Lines of investment:** *Economic-productive development and Education*  
**Start:** *2014*

Minsur designs sustainable programs that are long-lasting and self-sufficient, which are independent from the local mining activity in the long-term. A clear example of this is the Fibra Emprendedora program, developed with a group of 70 High-Andean women from the neighboring communities of San Rafael MU: Antauta and Anjoyani districts and the peasant community of Queracucho (Puno). With this program, the company helps women to commercialize products made of fine artisanal alpaca fiber, highly valued in the national market and in Europe and the United States, where they have already exported part of their production.

The program is a space for socialization and dialogue, which is used to gather and empower women in meetings and internships, as engaging them in training on business management, technical issues and soft skills. Thus, women learn to add value to their yarn design to sell it in the domestic and international markets, and they get to improve their life expectations. It is worth highlighting that the program was awarded by National Society of Mining, Oil and Energy (SNMPE) with the Sustainable Development Award 2017 in the Local Development Management category.



***Sumaq Maqui***

**Unit/project:** *SPR of Pisco*  
**Lines of investment:** *Economic-productive development and education*  
**Program Start:** *2015*

Sumaq Maqui is a program implemented by the company in the area of influence of the SPR of Pisco since 2015. Its main objective is promoting social inclusion and self-esteem of people with different abilities who live in the southern area of Paracas. With this program, the Association of Artisans Sumaq Maqui has the opportunity to generate additional income and learn jewelry techniques, as well as social skills. The Sumaq Maqui association is comprised by 29 low-income entrepreneurs with different abilities, who proudly pass on the mysticism of Paracas culture selling their products with the brand SUMAQUI.

In 2017, different courses were developed for these entrepreneurs on several subjects, such as business management, sound management of the SUMAQUI business plan (which groups all production, design, administration and sales processes of SUMAQU), jewelry techniques and computer courses. Moreover, several integration meetings were conducted to strengthen the Sumaq Maqui team unity and its relationship with the authorities.





**SAMI child development project**

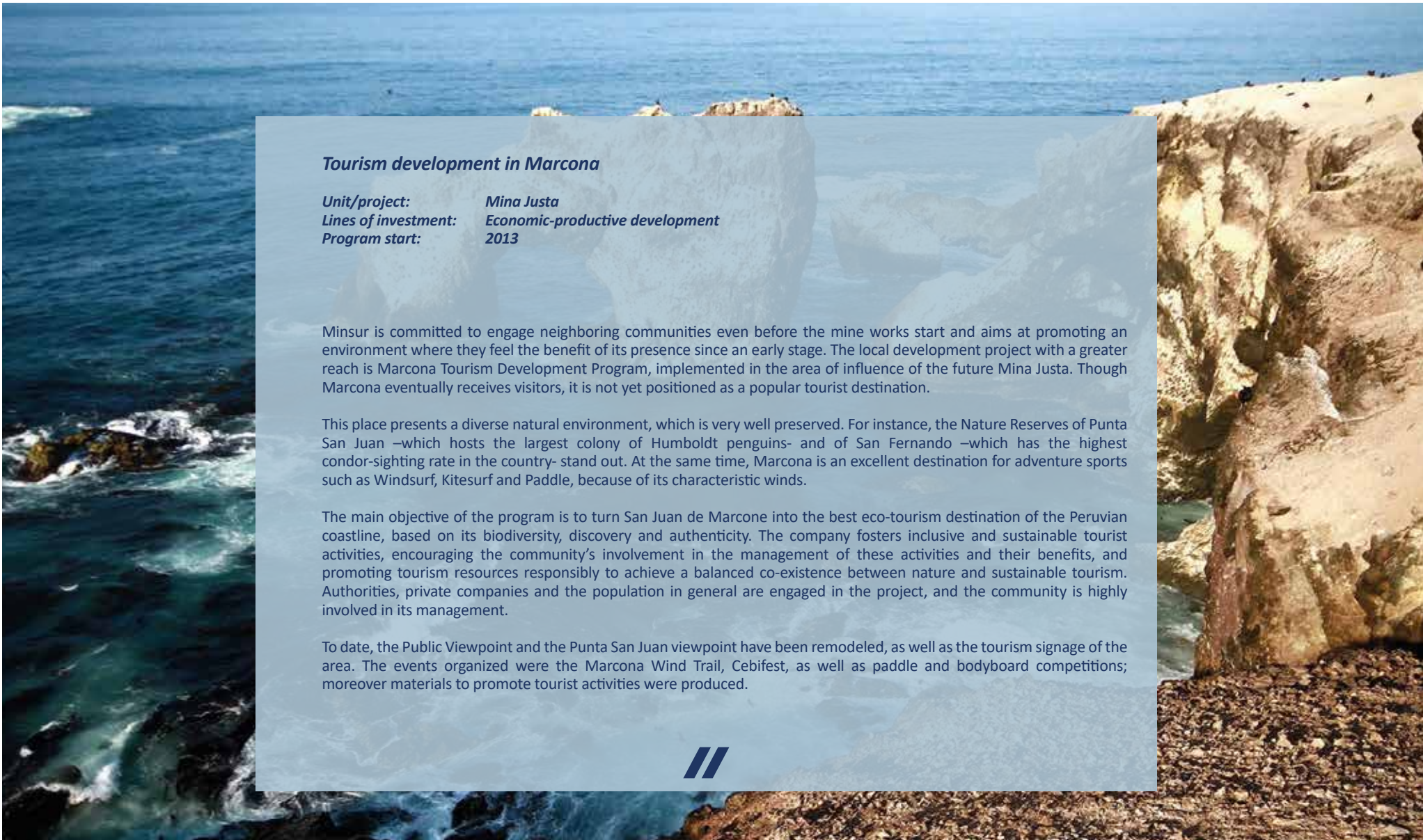
**Unit:** San Rafael MU  
**Lines of investment:** Health and nutrition  
**Program start:** 2016

Child development projects were conducted together with Sumbi NGO, Acción contra el hambre NGO (Action against hunger) and Aporta Foundation, aiming at reducing the levels of anemia and chronic malnutrition in Antauta and Ajoyani districts. These projects started with a diagnosis on the situation of early childhood in those districts.

We started working closely with the families and local authorities, orienting parents on the foundations of child development, nutrition and health; also providing training, conducting monitoring home visits and creating two playgrounds (community spaces for early stimulation), one in each district. In Ajoyani district, we also built greenhouses under the Chacra Productiva (Productive farm) concept, to allow families to access to a variety of food. As a result, between 2016 and 2017, the percentage of anemia in children younger than 3 fell from 98.8% to 76% in Antauta and from 66% to 37% in Ajoyani, according to the data provided by the healthcare centers (MINSAs) in the area.

Both projects –between 2016 and 2017- have encourage the sustained participation of the people and their authorities, including the organization of round tables with the participation of representatives of governmental programs, aiming at joining efforts and reaching long-term commitments.





**Tourism development in Marcona**

**Unit/project:** *Mina Justa*  
**Lines of investment:** *Economic-productive development*  
**Program start:** *2013*

Minsur is committed to engage neighboring communities even before the mine works start and aims at promoting an environment where they feel the benefit of its presence since an early stage. The local development project with a greater reach is Marcona Tourism Development Program, implemented in the area of influence of the future Mina Justa. Though Marcona eventually receives visitors, it is not yet positioned as a popular tourist destination.

This place presents a diverse natural environment, which is very well preserved. For instance, the Nature Reserves of Punta San Juan –which hosts the largest colony of Humboldt penguins- and of San Fernando –which has the highest condor-sighting rate in the country- stand out. At the same time, Marcona is an excellent destination for adventure sports such as Windsurf, Kitesurf and Paddle, because of its characteristic winds.

The main objective of the program is to turn San Juan de Marcone into the best eco-tourism destination of the Peruvian coastline, based on its biodiversity, discovery and authenticity. The company fosters inclusive and sustainable tourist activities, encouraging the community’s involvement in the management of these activities and their benefits, and promoting tourism resources responsibly to achieve a balanced co-existence between nature and sustainable tourism. Authorities, private companies and the population in general are engaged in the project, and the community is highly involved in its management.

To date, the Public Viewpoint and the Punta San Juan viewpoint have been remodeled, as well as the tourism signage of the area. The events organized were the Marcona Wind Trail, Cebifest, as well as paddle and bodyboard competitions; moreover materials to promote tourist activities were produced.



## Initiatives by unit and projects

The operation units and the exploration and expansion projects' managers design and implement their local development activities according to the specific needs in their areas of influence, thus they conduct independent initiatives. Mostly, these activities are developed under the economic-productive and education lines of investment. A summary of the main activities and their progress in 2017 is presented below.

### San Rafael MU

In 2017, San Rafael MU devoted great efforts to their relationship with the communities of its area of direct influence in the San Juan and Larimayo basins. A strategy was prepared, which implementation has allowed regaining spaces for dialogue, implementing activities and having a permanent presence. Furthermore, several initiatives were implemented to strengthen agricultural and livestock activities of the area, by building greenhouses (Antauta basin), implementation of fences (San Juan and Larimayo basins) and the expansion of the area suitable for pasture planting (San Juan basin).

Moreover, barns were built to protect animals and reduce the rate of mortality of vulnerable animals due to frosts and low temperatures (Ajoyani district) and two massive anti-parasite campaigns were implemented (Antauta and Ajoyani districts and Queracucho peasant community).

Minsur implemented enhancements on community water management working on community adaptation to water stress and climate change. For instance, building micro-dams, family reservoirs and implementing technified irrigation for pastures. By the end of 2017, these enhancements have resulted in more than one million cubic meters of water available for pasture irrigation.

Furthermore, livestock breeding families were trained on business management and technical skills for livestock production through fodder and sheep-breeding innovations (Larimayo and San Juan basins). Last but not least, a storage facility for alpaca fiber was inaugurated, for alpaca fiber storing and selection activities, which will be managed by the producers (Ajoyani district).

### SPR of Pisco

Workshops on social skills and leadership are conducted with the neighboring communities of the SPR of Pisco since 2015. These target local entrepreneurs in order to improve their business management capacities. In 2017, the unit's social management team started a program to promote comprehensive development of talented local professionals in order to improve their employability, and a similar program was conducted for adolescents aiming at increasing their self-esteem and strengthening their social skills and cultural identity.

### Pucamarca MU

Regarding the areas of influence of Pucamarca MU, several development activities were conducted with the peasant communities of Vilavilani, Palca and Ataspaca in 2017, which focused in productive capacity strengthening. Since 2010, the company contributes with annual funds for the social support of projects proposed by the Vilavilani and Palca communities. Within the framework of this fund, a technical assistance program to strengthening the productive chain of small animals was implemented in Vilavilani and Palca. Moreover, a 5 200 m<sup>3</sup> reservoir was built to store rainwater for irrigation of natural pastures in drought season.

In the Ataspaca community, we worked with 30 farmers to enhance productive capacities of their crops, optimize crop yields and increase farmers' income. Ataspaca has traditionally plant and harvest potatoes and corn for a long time, thus agriculture is a central part of their lives. As part of the project, we delivered farming inputs, we provided technical assistance and conducted workshops on land preparation, pesticide management and business management. These activities were implemented with a local development and gender equality approach.

### Pitinga MU

Hand in hand with the Presidente Figueiredo municipality, the local environmental team of Pitinga MU is working on a project for the creation and maintenance of a native plant nursery with native species of the Amazon region, aiming at raising awareness among the population on the significance of conserving and bringing back native plants to the area. By the end of 2017, the nursery had 442 000 seedlings of native plants ready to be donated to the local community.

### Exploration and expansion projects

The social management team of the future Mina Justa has been working together with artisanal fishermen of the area of influence, aiming at identifying sustainable alternatives to improve artisanal fishing. Thus, a floating wharf has been installed to temporarily replace the artisanal fishermen's wharf, currently under construction.

Regarding the Regina project, there are currently four development programs. Livestock breeding training and infrastructure programs were conducted in the Condoraque community, Quilcapuncu district. As part of this program a module was installed to show natural grasslands' conservation and recovery, training activities were conducted on livestock issues, and a community premises were built. In the Peña Azul community, livestock mesh fences for vicunas were improved as part of the infrastructure program. Moreover, in both communities, Condoraque and Peña Azul, a communication program was implemented aiming at spreading relevant information on Minsur's ongoing and future mining activities.

Within the framework of the Santo Domingo project, two animal health campaigns were conducted aiming at contributing to the preservation of livestock assets of rural families, members of the Association of Producers (APCASAE), by preparing animals for frost and rainfall seasons. In addition, 20 houses with thermal conditions were built and delivered to herding families living in the area of influence.

Last but not least, an ambulance was delivered to the community healthcare center of the neighboring community to the Marta project, thus improving its operating and logistic capacity to take care of patients; a presentation was conducted to explain the districts' population what is the progress of the mine closure plan. Also, members of the community and local businesses were hired to provide services, thus promoting local employment.

### Works for taxes

Last but not least, in Peru, Minsur participates in several public development works proposed by the authorities and people from the areas where it operates, under the works for taxes mechanism since 2016. This mechanism allows collaboration between the private and public sectors to reduce the country's existing infrastructure gap, quickly and efficiently. In this regard, the company funds and implements public works as a way of paying their income tax bill for the next fiscal year.



In 2017, Minsur managed three construction works:

### Sanitation works in Orurillo

Unit/Project: San Rafael MU  
 Type of work: Installation of drinking water service and latrines  
 Location: Cuchupujio peasant community, Orurillo district, Melgar province, Puno department  
 Implementation period: 2016 - 2017  
 Investment: USD 1.79 million  
 Number of beneficiaries: 179 families and 2 schools

### Sanitation works in Antauta

Unit/Project: San Rafael MU  
 Type of work: Improvement and expansion of basic sanitation services  
 Location: Antauta district, Melgar province, Puno department  
 Implementation period: 2017-2018  
 Total investment: USD 3.4 million  
 Number of beneficiaries: 3 686 persons

### School infrastructure works in Paracas

Unit/Project: SPR of Pisco  
 Type of work: Enhancement of Education Services of School I.E.N °24 22716 «Carlos Noriega Jiménez»  
 Location: Santa Cruz settlement, Paracas district, Pisco province, Ica department  
 Total investment: USD 4.36 million  
 Implementation period: 2017-2018  
 Number of beneficiaries: 6 955 persons

Up to 2017, the company invested over USD 2.5 million in Works for Taxes. Despite some delays in their implementation and delivery, this mechanism will continue facilitating and speeding up investments in the country's public infrastructure. According to the approved schedule, for 2018 Minsur plans to significantly increase investment in this type of works (see graphic 7.3.1). Moreover, it aims at establishing associations with companies sharing the same areas of influence to implement high-impact projects and benefit more people.

Graphic 7.3.1.

### Investment in Works for taxes per year







# /8. GRI INDEX/



(GRI 102-55)

**GRI Content Index**

GRI Standard	Disclosure	Page number(s)	Omission
GRI 101: Foundation 2016			
General Disclosures			
	Organizational profile		
	102-1 Name of the organization	2, 3, 8	-
	102-2 Activities, brands, products, and services	8, 10, 21	-
	102-3 Location of headquarters	2	-
	102-4 Location of operations	10-17	-
	102-5 Ownership and legal form	8	-
	102-6 Markets served	21	-
	102-7 Scale of the organization	9, 10-17, 31, 44	-
	102-8 Information on employees and other workers	44-47	-
	102-9 Supply Chain	21-22	-
	102-10 Significant changes to the organization and its supply chain	10-17	-
	102-11 Precautionary Principle or approach	61	-
GRI 102: General Disclosures 2016	102-12 External initiatives	23	-
	102-13 Membership of associations	23	-
	Strategy		
	102-14 Statement from senior decision-maker	4-5	-
	102-15 Key impacts, risks, and opportunities	35	-
	Ethics and integrity		
	102-16 Values, principles, standards, and norms of behavior	18-19	-
	102-17 Mechanisms for advice and concerns about ethics	39-40	-

GRI Standard	Disclosure	Page number(s)	Omission
	<b>Governance</b>		
	102-18 Governance structure	30-31	-
	102-30 Effectiveness of risk management processes	35 -37	-
	<b>Stakeholder engagement</b>		
	102-40 List of stakeholder groups	24	-
	102-41 Collective bargaining agreements	50	-
	102-42 Identifying and selecting stakeholders	24	-
	102-43 Approach to stakeholder engagement	25, 27-28, 78-80	-
	102-44 Key topics and concerns raised	24-25, 28, 80	-
<b>GRI 102: General Disclosures 2016</b>	<b>Reporting practice</b>		
	102-45 Entities included in the consolidated financial statements	31	-
	102-46 Defining report content and topic Boundaries	27-28	-
	102-47 List of material topics	28	-
	102-48 Restatements of information	3	-
	102-49 Changes in reporting	3	-
	102-50 Reporting period	3	-
	102-51 Date of most recent report	3	-
	102-52 Reporting cycle	3	-
	102-53 Contact point for questions regarding the report	2	-
	102-54 Claims of reporting in accordance with the GRI Standards	3	-
	102-55 GRI content index	90-95	-
	102-56 External assurance	3, 96	-
<b>Economic Performance</b>			
	103-1 Explanation of the material topic and its Boundary	31-34	-
<b>GRI 103: Management approach 2016</b>	103-2 The management approach and its components	31-32	-
	103-3 Evaluation of the management approach	31-32	-
<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed	31-34	-

GRI Standard	Disclosure	Page number(s)	Omission
<b>Investment in explorations (Minsur1)</b>			
	103-1 Explanation of the material topic and its Boundary	15, 34	-
GRI 103: Management approach 2016	103-2 The management approach and its components	15, 34	-
	103-3 Evaluation of the management approach	15, 34	-
<b>Risk management</b>			
	103-1 Explanation of the material topic and its Boundary	35-37	-
GRI 103: Management approach 2016	103-2 The management approach and its components	35-37	-
	103-3 Evaluation of the management approach	35-37	-
<b>Ethics and reputation</b>			
	103-1 Explanation of the material topic and its Boundary	37-40	-
GRI 103: Management approach 2016	103-2 The management approach and its components	37-40	-
	103-3 Evaluation of the management approach	37-40	-
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	37-38	-
<b>Human rights</b>			
	103-1 Explanation of the material topic and its Boundary	38-39	-
GRI 103: Management approach 2016	103-2 The management approach and its components	38-39	-
	103-3 Evaluation of the management approach	38-40	-
GRI 412: Human Rights Assessment 2016	412-2 Employee training on human rights policies or procedures	38-39	-
<b>Indigenous Peoples rights</b>			
	103-1 Explanation of the material topic and its Boundary	39	-
GRI 103: Management approach 2016	103-2 The management approach and its components	39	-
	103-3 Evaluation of the management approach	39-40	-
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	39	-

GRI Standard	Disclosure	Page number(s)	Omission
<b>Legal compliance</b>			
	103-1 Explanation of the material topic and its Boundary	41	-
GRI 103: Management approach 2016	103-2 The management approach and its components	41	-
	103-3 Evaluation of the management approach	41	-
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	41	-
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	41	-
<b>Talent development</b>			
	103-1 Explanation of the material topic and its Boundary	48-49	-
GRI 103: Management approach 2016	103-2 The management approach and its components	48-49	-
	103-3 Evaluation of the management approach	48-49	-
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	48-49	-
<b>Work culture (Minsur2)</b>			
	103-1 Explanation of the material topic and its Boundary	49-50	-
GRI 103: Management approach 2016	103-2 The management approach and its components	49-50	-
	103-3 Evaluation of the management approach	49-50	-
<b>Health and safety</b>			
	103-1 Explanation of the material topic and its Boundary	52-57	-
GRI 103: Management approach 2016	103-2 The management approach and its components	52-57	-
	103-3 Evaluation of the management approach	52-57	-
GRI 403: Occupational Health and Safety 2016	403-1 Workers representation in formal joint management-worker health and safety committees	52	-
	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	57-59	-

GRI Standard	Disclosure	Page number(s)	Omission
<b>Water and water quality</b>			
	103-1 Explanation of the material topic and its Boundary	61-62, 64	-
GRI 103: Management approach 2016	103-2 The management approach and its components	61-64	-
	103-3 Evaluation of the management approach	61-64	-
	303-1 Water withdrawal by source	64-65	-
GRI 303: Water 2016	303-2 Water sources significantly affected by withdrawal of water	64-65	-
	303-3 Water recycled and reused	64-65	-
<b>Effluents and waste</b>			
	103-1 Explanation of the material topic and its Boundary	61-62, 66-67	-
GRI 103: Management approach 2016	103-2 The management approach and its components	61-63, 66-67	-
	103-3 Evaluation of the management approach	61-63, 66-67	-
	306-1 Water discharge by quality and destination	66	-
GRI 306: Effluents and Waste 2016	306-2 Waste by type and disposal method	67-68	-
	306-3 Significant spills	66	-
<b>Materials</b>			
	103-1 Explanation of the material topic and its Boundary	61-62, 69	-
GRI 103: Management approach 2016	103-2 The management approach and its components	61-63, 69	-
	103-3 Evaluation of the management approach	61-63, 69	-
GRI 301: Materials 2016	301-1 Materials used by weight or volume	69	-
<b>Emissions</b>			
	103-1 Explanation of the material topic and its Boundary	61-62, 70	-
GRI 103: Management approach 2016	103-2 The management approach and its components	61-63, 70	-
	103-3 Evaluation of the management approach	61-63, 70	-

GRI Standard	Disclosure	Page number(s)	Omission
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	70	During 2017, Minsur did not measure its carbon footprint. In 2018, the company will start measuring this indicator in Peru, which will be published in the next sustainability report.
<b>Energy</b>			
	103-1 Explanation of the material topic and its Boundary	61-62, 71	-
GRI 103: Management approach 2016	103-2 The management approach and its components	61-63, 71	-
	103-3 Evaluation of the management approach	61-63, 71	-
GRI 302: Energy 2016	302-1 Energy consumption within the organization	71-73	-
<b>Biodiversity</b>			
	103-1 Explanation of the material topic and its Boundary	61-62, 74	-
GRI 103: Management approach 2016	103-2 The management approach and its components	61-63, 74	-
	103-3 Evaluation of the management approach	61-63, 74	-
GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	74	-
<b>Local communities</b>			
	103-1 Explanation of the material topic and its Boundary	76	-
GRI 103: Management approach 2016	103-2 The management approach and its components	76-81	-
	103-3 Evaluation of the management approach	76-81	-
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	76-88	-



## **/9. EXTERNAL ASSURANCE/**



# DECLARACIÓN DE ASEGURAMIENTO



## DECLARACIÓN DE ASEGURAMIENTO DE SGS DEL PERÚ S.A.C. ACERCA DEL "INFORME DE SOSTENIBILIDAD 2017" DE MINSUR S.A.

### NATURALEZA Y ALCANCE DEL ASEGURAMIENTO

SGS del Perú fue contratado por MINSUR S.A. para llevar a cabo un aseguramiento independiente de su "Informe de Sostenibilidad 2017". El alcance del aseguramiento, basado en la metodología de Aseguramiento de Reportes de Sostenibilidad de SGS, incluye el texto y los datos del 2017, contenidos en este informe. El Informe abarca las operaciones bajo control directo de MINSUR S.A. (MINSUR) y sus empresas subsidiarias bajo su control operativo: Minera Latinoamericana S.A.C. y Cumbres Andinas S.A.

La información en el "Informe de Sostenibilidad 2017" de MINSUR y su presentación son la responsabilidad de los directores y la gerencia de MINSUR. SGS del Perú no ha participado en la preparación de ningún material incluido en el "Informe de Sostenibilidad 2017". Nuestra responsabilidad es expresar una opinión acerca del texto, datos, gráficos y declaraciones dentro del alcance del aseguramiento, detallado a continuación con la intención de informar a todas las partes interesadas de MINSUR.

El Grupo SGS ha desarrollado un conjunto de protocolos para el Aseguramiento de Comunicaciones de Sostenibilidad basándose en las mejores prácticas dadas en los Estándares *Global Reporting Initiative* (referida de aquí en adelante como GRI) y el estándar de aseguramiento ISAE3000. Estos protocolos dan diferentes opciones de niveles de Aseguramiento, dependiendo del contexto y la capacidad de la Organización Informante.

Este informe ha sido asegurado utilizando nuestros protocolos para la evaluación de la veracidad del contenido y su alineamiento con los Estándares GRI para Reportes de Sostenibilidad (2016) a un nivel limitado. El aseguramiento comprendió una combinación de investigación previa, entrevistas con colaboradores estratégicos; revisión de la documentación, registros y datos; y la evaluación del informe para la alineación con los Estándares GRI. Se visitó la Oficina Corporativa en San Borja; ya que en esta sede se compilan los datos y se prepara la información a reportar. Data financiera tomada del informe financiero previamente auditado de manera independiente, no ha sido revisada nuevamente a la fuente como parte de este proceso de aseguramiento.

### DECLARACIÓN DE INDEPENDENCIA Y COMPETENCIA

El Grupo de compañías de SGS es el líder mundial en inspección, análisis y verificación, operando en más de 140 países y prestando servicios que incluyen la certificación de los sistemas de gestión; auditorías y capacitación en asuntos de calidad, ambiental, social y éticos; aseguramiento de reportes de sostenibilidad y verificación de gases de efecto invernadero. SGS del Perú afirma su independencia de MINSUR, estando libre de sesgo y conflictos de interés con la organización, sus subsidiarias y partes interesadas.

El equipo de aseguramiento fue montado con base en su conocimiento, experiencia y calificaciones para esta tarea; y estuvo compuesto por una Auditora Líder de Aseguramiento de Reportes de Sostenibilidad y de Verificación de Inventarios de Gases de Efecto Invernadero, registrada en IRCA (*International Register of Certificated Auditors*) en Sistema de Gestión Ambiental, Calidad, Seguridad y Salud Ocupacional, y Sistema Social; además de una Auditora de Soporte.

### OPINION DE ASEGURAMIENTO

Sobre la base de la metodología descrita y a la verificación realizada, no hemos observado circunstancias que nos indique que la información y datos contenidos en el "Informe de Sostenibilidad 2017" verificado no sean confiables y no provean una justa y equilibrada representación de las actividades de sostenibilidad de MINSUR en el 2017. El equipo de aseguramiento opina que el informe puede ser utilizado por las partes Interesadas de MINSUR. Creemos que la organización ha elegido un nivel de aseguramiento apropiado para sus necesidades. En nuestra opinión, el contenido del informe cumple con los requisitos de los Estándares GRI publicados en el año 2016, con Opción Esencial.



This document is issued by the Company subject to its General Conditions of Certification Services accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. The authenticity of this document may be verified at <http://www.sgs.com/en/Our-Company/Certified-Client-Directories/Certified-Client-Directories.aspx>. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

# DECLARACIÓN DE ASEGURAMIENTO



## CONCLUSIONES, HALLAZOS Y RECOMENDACIONES, RESPECTO A LOS ESTÁNDARES GRI

El informe de MINSUR, "Reporte de Sostenibilidad 2017", está alineado adecuadamente a los Estándares GRI, Opción Esencial. El compromiso con los grupos de interés, los aspectos materiales y los límites de la organización han sido apropiadamente definidos de acuerdo a los Principios de Reporte GRI para Definición de Contenido del Reporte.

Como resultado de la auditoría se encontraron las siguientes fortalezas en MINSUR:

- Felicitemos a Minsur S.A. por haber sido admitida recientemente en el Consejo Internacional de Minerales y Metales (International Council of Mining and Metals – ICMM); siendo la primera y única Empresa Peruana en lograr ingresar al ICMM.
- Se han implementado acciones de valor compartido, tales como, las mejoras en el manejo hídrico comunitario, los proyectos de desarrollo "Fibra Emprendedora", "Sumaq Maqui" y "SAMI", el apoyo al desarrollo turístico de Marcona y las "Obras por Impuestos".
- Encontramos una actitud positiva del Equipo de Asuntos Corporativos y del personal entrevistado, que brindaron alta disponibilidad para las entrevistas y entregaron la información de soporte oportunamente.
- MINSUR mostró evidencias de la alta prioridad que tiene la Seguridad y Salud Ocupacional dentro de la Empresa, mostrando una tendencia de reducción de accidentabilidad en los últimos 5 años.
- Reconocemos el esfuerzo de mantener las certificaciones ISO 14001 y OHSAS 18001 para la mayor parte de sus operaciones, y el objetivo de lograr la certificación en los sitios faltantes.

Se identificaron oportunidades de mejora durante el proceso de auditoría para consideración en futura gestión y reporte, incluyendo:

- Sería beneficioso realizar una auditoría interna del Informe GRI, incluyendo los datos reportados, para identificar posibles desviaciones antes de la auditoría de aseguramiento.
- Se recomienda sistematizar la recolección de información para facilitar el proceso de elaboración del informe.
- Considerar calcular la huella de carbono de cada empresa y sitio incluidos en el presente Informe GRI, para anticiparse a futuras regulaciones de cambio climático en los países en que operan.
- Para los proyectos de desarrollo con comunidades, se podría incluir el Código Corporativo de Conducta y Ética de MINSUR, para el cumplimiento a lo largo de la vida de los proyectos de las condiciones laborales, los derechos humanos y la gestión ambiental.
- Sería importante realizar el registro de la marca SusTINable, propia de MINSUR para el estaño.
- En vista que el trabajo local es un tema material para las comunidades, considerar desagregar la información de los proveedores y de sus empleados, para reflejar con mayor exactitud los porcentajes de empleo local.
- Para reportes futuros, obtener la información requerida para poder complementar el indicador de Tasa de Ausentismo.

*URSULA ANTÚNEZ DE MAYOLO CORZO*

**Ursula Antúnez de Mayolo Corzo**  
**Auditora Líder de Reportes de Sostenibilidad**  
**SGS del Perú S.A.C.**  
**28 de Mayo del 2018**  
**www.sgs.com**

This document is issued by the Company subject to its General Conditions of Certification Services accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein. The authenticity of this document may be verified at <http://www.sgs.com/en/Our-Company/Certified-Client-Directories/Certified-Client-Directories.aspx>. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

