

**SUSTAINABILITY  
REPORT  
2018**





## MINSUR FOR SUSTAINABLE MINING (GRI 102-16)

### Sustainability Policy

Minsur develops individual and organizational actions aiming at protecting life and health, as well as the environment, respecting Human Rights and generating social value in the communities of the area of influence where our operations are carried out.

### Mission

Generating value by transforming mineral resources in a sustainable manner.

### Visión

Developing and operating world-class mining assets, as a benchmark in terms of safety, operational efficiency, socio-environmental responsibility and the development of people in all countries where we operate.

### Our Values

**Safety.** Acting safely at all times.

**Responsibility.** Acting responsibly in our relationship with society and the environment.

**Integrity.** Acting honestly, with solidarity and transparency.

**Commitment.** Assuming all challenges as our own.

**Excellence.** Doing things better, always.

**Trust.** Developing honest, open and respectful relationships.

### Assurance of our sustainability management

We joined the International Council of Minerals and Metals (ICMM) and the Responsible Minerals Initiative (RMI) with the objective of continuously improving our sustainability management. We have ISO 9001, ISO 14001, BASC and OHSAS 18001 certifications. Furthermore, we are in line with System B to improve suppliers' and contractors' social and environmental impact.



## MESSAGE FROM OUR GENERAL MANAGER (GRI 102-14)

For several years, it has been our aim that Minsur becomes a world-class company. Thus, our mining units and projects meet the highest operational and sustainability standards, which are the requirements set forth for mining activities in the modern world.

As a token of transparency, I am glad to present our fifth Sustainability Report to let you know our economic, environmental, social, ethical and good corporate governance performance.

2018 was very important for us, because we proudly became the first Peruvian and the third Latin-American mining company -as well as the world's first tin producer- entering to the Internal Council on Mining and Metals (ICMM). ICMM is an organization we share the same goals and principles with, since sustainability is the main pillar in our business strategy.

With the 10 principles of ICMM as our starting point, we strive to take actions and make decisions from a sustainability perspective. Thus, we have developed a strategy that, within a risk-management culture, allows mitigating our environmental impacts, ensuring our collaborators' and third parties' safety, fostering the development of leaders, promoting a culture of compliance and managing impacts to our communities.

In 2018 we sold 40 % of our subsidiary Cumbres Andinas, the holding company of Marcobre (owner of Mina Justa copper project), to our partner Alxar International SpA (Copec group). Furthermore, we closed Mina Justa financing for USD 900 million, with our Board of Directors approving its participation and entering into agreements supporting our obligations in the project.

On the economic front, 2018 was a positive year because of our good financial and operational results, led by a larger tin production at San Rafael mining unit (MU) and a rise in ferroalloys production at our subsidiary Taboca, and the lower cost of tin ore treated. We achieved an income of US\$108.2 million, exceeding by 35 % what we obtained in 2017, mainly due to excessive taxes paid in 2002. Furthermore, excluding the exchange difference, the results of subsidiaries and associates and the extraordinary effects in both years, the adjusted net income was US\$ 43.7 million, 2% lower as compared to 2017 <sup>1</sup>.

Safety is one of our main values and an essential pillar for sustainability. In 2018, we received several awards, such as the John T. Ryan prize and the National Mining Safety award granted by ISEM, to San Rafael mining unit and Pucamarca MU. In Brazil, our Pitinga unit received the Brazil Protection award 2018.

That same year we started a complete review of our health management system to align it with the highest international standards, and we strengthened our Health and Hygiene staff by incorporating a corporate hygienist engineer, who will coordinate with his/her team to implement the Occupational Health and Safety Master Plan and will monitor the actions carried out.

We also continued with our social investment programs, such as the SAMI initiative for Early Child development in Antauta and

<sup>1</sup>. Adjusted Net Income = Net income – earnings in Subsidiaries and associates – Exchange difference – extraordinary effects in 2017 (impairment Taboca, appreciation of Marcobre and sale of Rimac shares) and in 2018 (Sunat tax refunds)



Ajoyani, which was recognized by the Ministry of Development and Social Inclusion (Midis) as one of the 10 successful cases in reducing anemia and chronic child malnutrition in the country. Regarding our infrastructure investments through the works for taxes scheme, we funded the project for a greater provision of utilities in Antauta, Puno and we started the rehabilitation of the sewage and drainage system of Marcona district in Ica.

In Minsur, we make businesses with a permanent emphasis on environmental care and protection and the mitigation of our environmental impacts. Thus, in 2018 we measured our carbon footprint, which will serve as a baseline to assess our performance in the next years. Moreover, we conducted environmental control monitoring actions, under the supervision of oversight entities and we found out that we are below maximum permissible limits and we meet the environmental quality standards. It is worth highlighting that, during this period, we were not sanctioned with any penalties for violating any environmental laws or standards..

We will only reach our goal of becoming a world-class mining company if we work hand in hand with our collaborators. Thus, we focus on giving them the possibilities to grow and learn so that they contribute with the success of our company. In 2018 we continued with our talent management programs Supérate and +Líder, and we promoted our staff's growth with over 149,174 hours of training. Furthermore, we maintained good relationships with our employees that reflected on a year of absolute labor peace, with no strikes or stoppages.

We are in an ongoing improvement process in each one of our activities, and on our way of becoming a sustainable company committed with its stakeholders. I invite you to learn in greater detail the progress made and aspects developed in 2018 presented in this Sustainability Report, pursuant to the Global Reporting Initiative (GRI) and the ICMM principles.

**Juan Luis Kruger Sayán**  
**General Manager**

## CONTENTS

### MINSUR IN NUMBERS

#### WHO WE ARE AND WHAT WE BELIEVE IN

- Our projects: where are they exactly located?
- A matter of principles

#### ON THIS SUSTAINABILITY REPORT

- Scope and Boundaries

#### THE FUTURE IS NOW: MINSUR AND SUSTAINABILITY

- Admission into the ICMM
- Sustainability as a policy
- Our risk management

### SUSTAINABILITY IN OUR VALUE CHAIN

- Our customers
- Within everybody's sight: a new paradigm
- Our suppliers

### MINSUR AND THE ENVIRONMENT

- Water: the beginning of life
- Housekeeping: effluents and waste management
- Tailings and mining waste
- Material management
- Carbon footprint: a new milestone
- Energy management
- Biodiversity management
- Closure Plans

### SAFE SPACES: OCCUPATIONAL HEALTH AND SAETY (OHS)

- Managing occupational health
- Our OHS performance

### OUR PEOPLE: HUMAN MANAGEMENT

- Our collaborators in numbers
- We prioritize local employment
- Development of our collaborators

### WE ARE ALL COMMUNITY: OUR COMMITMENT TO THE COMMUNITIES

- Our government structure
- Economic Performance
- We act ethically and with integrity
- We respect human rights
- Voluntary Principles on Security and Human Rights
- Legal compliance management

### GOVERNANCE, TRANSPARENCY AND ETHICS

- Our government structure
- Economic Performance
- We act ethically and with integrity
- We respect human rights
- Voluntary Principles on Security and Human Rights
- Legal compliance management

### ANNEX

## MINSUR IN NUMBERS (GRI 102-7)

### Graphic. Our numbers in 2018



41 years



USD 693.733 million in sales



USD 86 million in taxes<sup>2</sup>



USD 2.395 million in investments for the community

2 Payments to the governments of Peru and Brazil.



56.14 h of training per collaborator in average



0 fatal accident



267,748 tCO<sub>2</sub>eq in Carbon footprint



2,690 collaborators

# 1. WHO WE ARE AND WHAT WE BELIEVE IN (GRI 102-1) (GRI 102-2) (GRI 102-3) (GRI 102-4) (GRI 102-5)

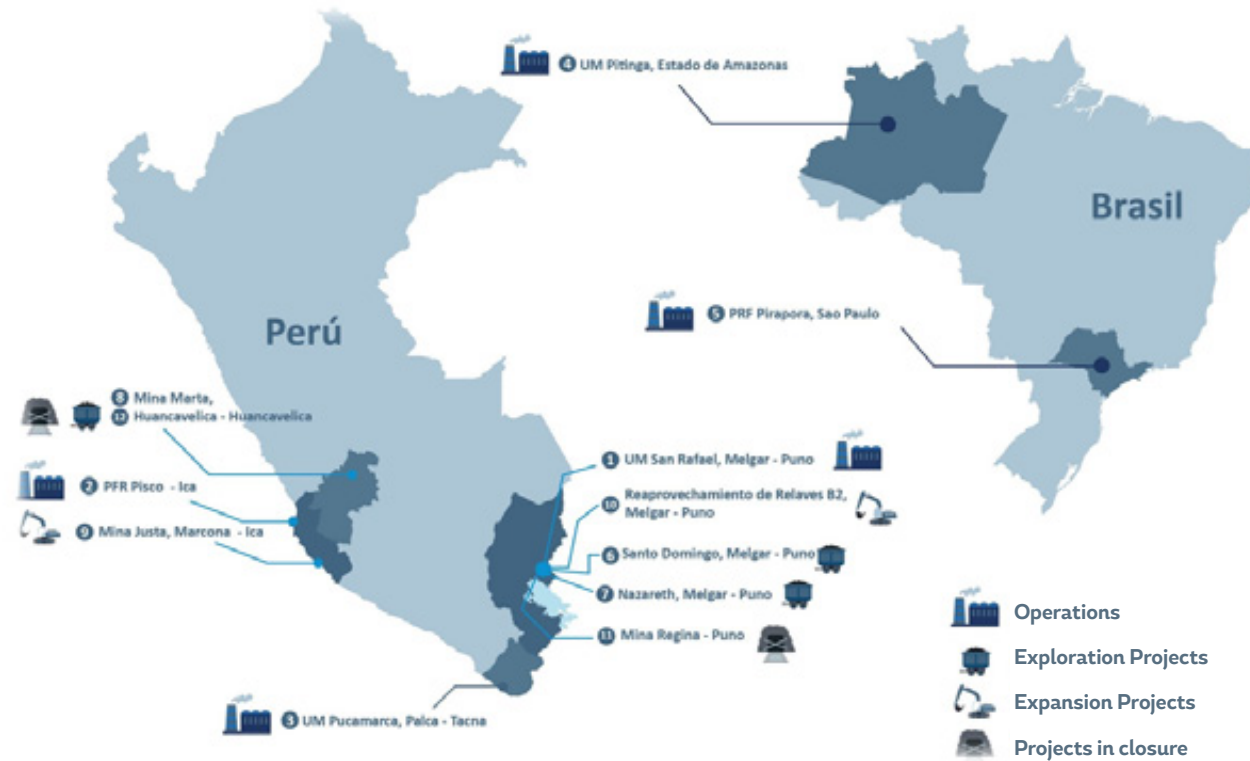
We are part of the Brea Corporate Group (Brea Group), one of the main and more diverse business conglomerates in Peru. Brea owns, through Brea Minería S.A.C, 99.99 % of common shares of Minsur S. A's capital and 6.31 % of its equity stocks.

Our origins date back to the beginning of the 20th century. Back then we were known as Lampa Mining Company, and we operated in Santa Barbara and San Rafael deposits. A few years later, in 1966, Minsur Sociedad Limitada was founded, and since 1977 we operate as Minsur S.A. (hereinafter, Minsur and/or the company). We specialize in exploitation, extraction, processing and marketing of minerals, mainly tin and gold.

We have operations in Peru and Brazil. In the national territory we have three: San Rafael and Pucamarca mining units (MU), as well as the Smelting Plant and Refinery (SPR) of Pisco. In Brazil we operate Pitinga MU and the SPR of Pirapora. Likewise, one of our main expansion projects is Mina Justa, which construction stage started in 2018 and it is expected to start operating by 2020.

Our mining concessions cover in total 248,452 hectares: 223,716 correspond to our operations in Peru and the remaining 25,125 to those in Brazil.

## Our projects: where are they exactly located?





### Our operations

N°	Location	Company	Unit / Project	Description
1	Puno, Perú	Minsur S.A.	San Rafael MU	Underground mine producing tin through concentration and flotation processes
2	Ica, Perú	Minsur S.A.	SPR of Pisco	Smelting plant and refinery of tin.
3	Tacna, Perú	Minsur S.A.	Pucamarca MU	Open pit mine producing gold and silver through absorption, desorption and recovery.
4	Amazonas, Brasil	Mineração Taboca S.A.	Pitinga MU	Open pit mine that produces tin, niobium and tantalum, through a concentration and flotation process
5	Sao Paulo, Brasil	Mineração Taboca S.A.	SPR of Pirapora	Smelting plant and refinery of tin

### Our exploration projects

N°	Location	Company	Unit / Project	Description
6	Puno, Perú	Minsur S.A.	Santo Domingo	Tin, silver, lead, zinc and gold explorations are conducted 40 km away from San Rafael MU
7	Puno, Perú	Minsur S.A.	Nazareth	Tin explorations are carried out to expand the mine life of San Rafael MU, which is 5km away
8	Huancavelica, Perú	Compañía Minera Barbastro S.A.C.	Mina Marta	Gold and copper explorations are carried out in the neighboring areas of Mina Marta that were not exploited before.

### Our expansion projects

N°	Location	Company	Unit / Project	Description
9	Ica, Perú	Marcobre S.A.C.	Mina Justa	Future copper mine with 16 years of mine life, which construction stage started in 2018 and it is expected to start operations in 2020.
10	Puno, Perú	Minsur S.A.	Tailings Reuse B2	Plant reusing tailings with high tin ore content that have been disposed into the B2 tailings dam. It started being built in 2018 and operations are expected to start in 2019.

### Our closing operations

N°	Location	Company	Unit / Project	Description
11	Puno, Perú	Minera Sillustani S.A.C.	Mina Regina	Mine at a closure stage since 2014. Closure is expected to be completed in 2019, and post-closure by 2029.
12	Huancavelica, Perú	Compañía Minera Barbastro S.A.C.	Mina Marta	Mine that was closed between 2014 and 2017. Since 2018 it is at a post-closure stage, which shall be completed by 2022.

Furthermore, we have several subsidiaries enabling us to ensure our growth and diversification.<sup>3</sup> But, how we do it?

3. Se Table of subsidiaries in Annex 1



### A matter of principles

Our values are the foundations supporting our standards as a company. Safety, responsibility, integrity, excellence and commitment are inseparable from our entire corporate strategy.

More than a statement of principles, it is a strong purpose. All our operations, actions and decisions are based on what we believe; we seek to create relevant opportunities, which may be achieved by individuals, companies and countries.

With this global perspective -but without losing sight of the local scope- all commitments we assume as a Company are closely related to the place where we operate. We understand that, being part of one of the main business conglomerates of Peru and the region, our actions have a great impact on both the economy and society, and also in sustainability and the country's growth, regardless of what country we are operating in.

However, our objective is not only referred to the minerals we work with or to the places we are operating in, it is also integrated to the historical moment we are living through. We know that our trajectory and decades of experience support us as a leading company in the sector, but we are aware of the changes that are currently taking place.

We are experiencing what many people call “the fourth industrial wave” and that means we need to be up to the new challenges and have the necessary flexibility as to adapt to new industrial, environmental and social standards.

On the other hand we are not strangers to the global socio-political context. We live in an era where large-scale State and corporate corruption scandals have seriously affected credibility of State and private businesses alike. Citizens' demands for transparency and accountability are strong and understandable. We are aware of this and thus we have made efforts in 2018 to strengthen our compliance system.

In this sense, the culture of integrity that has always characterized Minsur becomes even more relevant vis a vis our stakeholders, and the public opinion in general. Building trust and maintaining it is a task we are permanently devoted to at all stages of our corporate strategy. Traceability, accountability and openness have an increasingly important role in all our activities.



## 2. ON THIS SUSTAINABILITY REPORT

### Scope and Boundaries (GRI 102-3)(GRI 102-4)(GRI 102-45)(GRI-102-46)(GRI 102-48)(GRI 102-49)(GRI 102-50)(GRI 102-51)(GRI 102-52)(GRI 102-54)

This is our fifth annual sustainability report, and it has been made in accordance to the “core” option of the Global Reporting Initiative (GRI) standards, the GRI Mining and Metals Sector Supplement (MMSS) sectoral supplement, and pursuant to the principles of the International Council of Mining and Metals (ICMM).

PwC<sup>4</sup> was in charge of the external verification of this report and its verification letter is attached to this document. It covers Minsur’s operations in Peru, which include San Rafael MU, Pucamarca MU, SPR of Pisco, Mina Justa expansion project; and operations in Brazil, which include Pitinga MU and the SPR of Pirapora. When relevant, this Report refers to the exploration and expansion projects; as well as to the mines at a closure stage. It covers the period from January 1 to December 31, 2018.

Topics included in the report hereof explaining our economic, social and environmental performance are the result of a process followed to identify and prioritize relevant issues, both for the Company and for our stakeholders. This analysis was led by the Corporate Affairs management department and supported by several areas of the company.

4. The service was conducted by Gaveglío Aparicio y Asociados SCRL (a member of PwC)

### STAGE 1 REVIEW

- Based on the RobecoSAM\* Sustainability Yearbook 2018 and the list of companies adhering to the principles of the International Council on Mining and Metals (ICMM), Minsur selected 3 leading companies for the benchmark: Antofagasta Minerals, South 32 and Barrick.

### STAGE 2 IDENTIFICATION

- We conducted 12 interviews to our main management divisions to identify issues representing a risk or impact to the company.
- We reviewed documents such as our main policies, procedures and plans.
- We gathered and analyzed relevant expectations of our stakeholders: community (3 discussion panels), suppliers (13 online surveys), customers (12 online surveys) and collaborators (2 discussion panels with operators, 426 online surveys and 2 discussion panels with our staff)

### STAGE 3 PRIORITIZATION

Methodology used according to the case:

- To identify the most relevant topics for our stakeholders, we prioritized their more representative expectations.
- To identify our sustainability impacts, we conducted a risk/impact analysis using criteria such as: Strategy, Laws, Best practices, Benefit and Severity.

### STAGE 4 VALIDATION

The results of the materiality matrix were validated by our Manager of Corporate Affairs. We selected indicators to be reported based on these sustainability material topics.

As result of this process, we identified 34 material aspects, that can be reviewed in detail in the annexes of the document hereof.<sup>5</sup>

(GRI 102-40) (GRI 102-42) (GRI 102-43)

Trust is a long-term investment. And thus we consistently seek to consolidate it over time with all our stakeholders<sup>6</sup>. We gather their expectations and respond to their inquiries through constant -and always open- communication.

Abiding by international good practices included in the ICMM guides, we have channels that respond to different communication frequencies: from continuous interactions (intranet, e-mail and website) to annual processes (Sustainability reports, climate surveys and different committees).

In the table below we present the main communication and relationship-building mechanisms for each one of our stakeholders, as well as their main concerns.

<sup>5</sup> Annex 2

<sup>6</sup> Stakeholder identification is based on the following criteria: two-way impact, existence of any type of relationship with Minsur and the existence of a shared vision of development.

**Table. Communication channels with our stakeholders**

Stakeholders	Communication and relationship-building channels
<b>Collaborators and trade union</b>	Intranet, e-mail, digital bulletins, communications and notices, training, climate survey, website, committees, radio, Integrity channel, year-end event, Sustainability Report.
<b>Shareholders and investors</b>	Annual report, quarterly financial reports, open phone calls, websites, presentations.
<b>Customers</b>	Website, Integrity channel, Sustainability Report, meetings, mail, communications.
<b>Suppliers</b>	Website, Integrity channel, audits, orientation, training, annual survey, mail, meetings.
<b>Communities</b>	Permanent information offices, round tables (Antauta and Ajoyani, in Puno), committees, information talks, focus groups, participatory environmental monitoring, Integrity channel, complaint and grievances mechanisms, guided tours, prior consultation, annual survey, radio, letters and brochures, direct relationship.
<b>Civil society</b>	Sustainability report, website, guided tours, annual survey.
<b>Authorities and the State</b>	Audits, associations, dialogue and development round tables, coordination meetings and collaboration spaces, mail, annual report, sustainability report, annual report, annual survey.
<b>Media</b>	Interviews, guided tours, press releases, press conferences, reports.

We believe dialogue is the basis for understanding and constant learning, and we prove it. This Sustainability Report is the result of a process of dialogue<sup>7</sup> with our most relevant stakeholders. Thanks to these dynamics we were able to clearly identify some of our stakeholders' main expectations. And this is what we found:

<sup>7</sup> See Scope and Boundaries sub-chapter

**Table. Main expectations of our stakeholders**

Collaborators	Communities	Customers	Suppliers and contractors
Efficiently use water and promote its reutilization.	Design development programs for local goods and services.	Continue supporting communities.	Develop more mechanisms to prevent corruption.
Continue promoting values and the integrity channel to strengthen anti-corruption measures.	Continue promoting the development of communities.	Continue with occupational health and safety programs.	Penalize unfair competition among suppliers.
Ensure the necessary health and safety measures.	Invest in infrastructure for the communities	Transparency when providing product information.	Design additional mechanisms to save water.
Develop training and education plans for workers.	Promote joint water monitoring at the units with the communities.	Safeguard our customers' personal data.	Closely monitor impacts to biodiversity.
Receive more information on the benefits and compensations and how are they linked to performance assessments.	Foster the hiring of local skilled and unskilled workers.	Improve and communicate the risk management culture.	Continue measuring and managing emissions produced at our operations.
Spread information on Minsur's economic performance.	Increase investment in communities.	Inform transparently if fines and other penalties were received for environmental issues.	Ensure enforcement of environmental regulations.



(GRI 102-12) (GRI 102-13)

In addition, we have external commitments with organizations allowing our involvement and enabling access to best practices, research resources and development standards. We want to present some of the main entities to which we are currently linked to, both globally as well as in Peru and Brazil.

#### ITA

ITA (before ITRI) is a non-profit international organization representing the tin industry, which has the support of the world's main tin producers and smelters, Minsur among them. ITA's main objective is supporting and promoting the use of tin for existing and new applications.

As members of ITRI, we participated in the promotion of innovation in the tin industry, identifying responsible producers and promoting dialogue through the supply chain to create opportunities for interaction and investment. Thus, Minsur plays an active role in the industry discussions and trends, such as sustainability, climate change and energy efficiency.

#### ICMM

Since 2018 we are members of the International Council of Mining and Metals (ICMM), an agency gathering industry leaders for 18 years.

As active members of this Council we are committed to its 10 principles and corresponding performance expectations. Thus, we have to report and state our progress through our action plan with an emphasis on Governance, Environmental Impact and Community.

#### London Metals Exchange (LME) (United Kingdom)

Our Brazilian subsidiary, Taboca, has its brand Mamore listed in the London Metals Exchange (LME). The Company is subject to a quality assurance standard its product shall meet in order to have an LME-listed brand.

#### Sociedad Nacional de Minería, Petróleo y Energía (SNMPE) (Perú)

As a member of this entity, representing and gathering the main mining and energy companies, we participate in the discussions on public policies, laws, regulations and procedures affecting this business sector.

SNMPE is a private association and it promotes investment, ensuring both competitiveness, as well as the sustainable use of natural resources.

#### ALOXI – Alianza para obras por impuestos (PERÚ)

Through the “Works for Taxes” mechanism, the private sector and the State work together investing in public works.

Under this mechanism, private companies pay their income tax in advance to fund and directly implement public investment projects that have been prioritized by governmental agencies.

As part of this Partnership, Minsur offers key investment in infrastructure within its areas of influence in Peru.

#### Sindicato Nacional de la Industria de la Extracción del estaño (SNIEE) (Brazil)

Minsur, through its Brazilian subsidiary Taboca, is a member of SNIEE - Sindicato Nacional da Indústria da Extração do Estanho.

As a member of SNIEE, we are aligned with the tin industry in

Brazil, and we participate in discussions on updates to new mining regulations, smelting activities, the environment, labor laws, statistics, certificates of origin and other special documents related to this industry association.

#### Federación de Industrias del Estado de São Paulo (FIESP) (Brasil)

Minsur, through its Brazilian subsidiary, is a member of the FIESP, the Federation of Industries of São Paulo, an entity representing around 130,000 Brazilian industries in several sectors and distributed in 131 trade associations.

As a FIESP member, we participate in discussions on public policies, laws, regulations and procedures affecting the mining sector in Brazil. Similarly, we have access to discussions on laws and regulations specifically related to the mining sector, as well as statistics, documents and data on mining and other industries in Brazil.

### 3. THE FUTURE IS NOW: MINSUR AND SUSTAINABILITY

In the last 5 years, great changes have been produced in terms of sustainability not only at Minsur but also globally. For the moment, the United Nations (UN) has established 17 Sustainable Development Goals (SDG) for 2030, which require active engagement from governments, companies and civil society in general.

Citizen surveillance on consumption has also increased. “Where is this product sourced from?” is a question made by an ever growing number of customers every day in the world. This change of paradigm causes manufactures to be more self-critic and give a closer look to their supply chains. In this line, we ask ourselves: How are we operating?

Considering this questioning, we can state that the 2017-2018 period has been a period of introspection for Minsur; a time for critical assessment and prioritization. We understood that sustainability is a sine qua non requirement for our operating units to continue marketing our products, and to be able to continue operating.

In this regard, in 2018, the Board of Directors approved incorporating Sustainability to our business strategy, as one of its pillars. In this context, we defined Sustainability as operations meeting the highest Environmental, Stakeholder relationship, and Health and Safety standards.

The incorporation of this new pillar into Minsur’s strategy, gathers and makes visible what we have been doing as a company for 40

years, i.e. operating not only to obtain economic gains but also to make a positive impact in the places where we operate, both for people, and for the mining industry and the planet.

To achieve these objectives, however, it was necessary to review what we have, list what we need, and take notes of what we will require in the future. For instance, a challenge we have set for next year is the strengthening of management systems related to sustainability.

#### Admission into the ICMM

In line with this analysis and improvement process -and aiming at always being a leader in sustainability- we started the process to be admitted as a member of the International Council of Mining and Metals (ICMM) in 2017. Last but not least, we were admitted as a member of ICMM in April 2018, becoming the first mining company of Peruvian capitals, the third Latin American company and the first tin producer that has been admitted into this agency.

ICMM is comprised by 27 mining companies around the world. It was created in 2001 aiming at generating a commitment from the mining and metal industry towards sustainability for their long-term activities.

The Council is based on 10 principles and 8 position statements, which are mandatory standards that shall be applied by all member companies.

Both the ICMM principles and its position statements constantly



emphasize aspects that are part of Minsur's vision and strategy. Among them, we shall highlight the implementation and management of transparent business practices, sound corporate governance systems, as well as the incorporation of a sustainability vision applicable across company. All that, in addition to promoting the development and wellbeing of our stakeholders through innovation and sustainable practices.

The respect and defense of fundamental rights, as well as responsibly and sustainably protecting the environment, and building strong relationships with the communities and society in general, are also inseparable elements of the ICMM principles.

To ensure compliance with these principles and standards, all the members of the Council present a sustainability report using the Global Reporting Initiative (GRI) standards, which is then validated through an Assurance process established by ICMM.

As part of the admission process, we pledged to carry out specific sustainability-related actions established by a Group of Experts<sup>8</sup> who visited Minsur and assessed our sustainability performance.

This Group recommended implementing new management systems on issues such as Human Rights and Water. Furthermore, it established actions to improve the risk and social management systems. Fulfillment of this obligations shall be audited and reviewed by the same Group in May 2020.

8. The Group of experts does not belong to the ICMM organization. Based on an Audit Report -made, in our case, by KPMG- it assesses our operations and recommends the ICMM the admission, or not, of applicant companies into the organization and it states the requirements for such admission.



We are currently working in different actions and initiatives:

Principle/Statement	Action	Status
<b>Ethics and corporate governance (Principle 1)</b>	Identify and assess relevant international standards, codes and guidelines. Decide which of them will be part of Minsur's strategy.	Started
	Review the corporate management framework and ensure it comprises all sustainable elements.	To be started in 2019
	Complete a comprehensive framework for suppliers and contractors, including all selection procedures.	To be started in 2019
<b>Sustainable development (Principle 2)</b>	Start a program to address human right issues and incorporate this perspective to the corporate sustainability approach.	Started
<b>Human rights and labor rights (Principle 3)</b>	Develop a new management system to constantly measure, monitor and report social performance at all its operations. Within this system, define responsibilities for a proper and effective implementation related to human rights and community relations.	To be started in 2019
<b>Risk management (Principle 4)</b>	Develop a formal process to better identify, prioritize and address corporate risks for sustainable development. These shall be incorporated within the company's risk framework.	Started
	Adopt a policy of greater transparency in relation to (actual or potential) health and environmental risks or hazards for the communities associated to its activities.	To be started in 2019
<b>Occupational health and safety (Principle 5)</b>	Improve the health system, policies and standards to meet international levels. At the same time, it shall implement a health program for the communities with an insurance against potential effects of operations conducted therein.	Started
<b>Environmental management (Principle 6)</b>	Develop and implement air and water standards across the company. For water issues, establish a management system with indicators and appointing corporate responsible officials.	Started
<b>Impact to biodiversity (Principle 7)</b>	Understand and assess the company's biodiversity policies, in relation to international standards and conduct the corresponding ecosystem studies, as the case may be.	Started
<b>Social Management (Principle 9)</b>	Review the management approach, engagement, impact and social risk with the community and establish priorities for social development.	To be started in 2019
<b>Statement on climate change.</b>	Develop and implement a Comprehensive Climate Change Policy pursuant to the ICMM Position Statement and KPMG recommendations.	Started
<b>Relationship with Indigenous communities (Statement)</b>	Develop an analysis and statement on its policies and practices in relation to the ICMM position on indigenous peoples and mining, and international standards. Including a commitment towards indigenous peoples, culture, heritage and their land rights.	To be started in 2019



### Sustainability as a policy

We have a Sustainability Policy, which gathers our commitment to protect the environment, protect life and health, and build relationships with our neighboring communities.

We intend that all our actions and decisions consider sustainability elements and related risks, so as to produce as little impact as possible.

Currently, we manage sustainability in different ways.

- Mitigating our environmental impacts.
- Ensuring our collaborators' and third parties' safety.
- Fostering the development of leaders with a sustainability culture.
- Promoting a culture of compliance.
- Managing our relationships with communities and investing in their development.

Furthermore, our sustainability management is strengthened with ISO 9001, ISO 14001, BASC, and OHSAS 18001 certifications<sup>9</sup>. Moreover, we are aligned to Sistema B to improve our suppliers' and contractors' social and environmental impacts.

<sup>9</sup> Pitinga mining unit has not yet received the ISO 14001 and OHSAS 18001 certifications, however it operates in line with these standards and it will apply for these certifications in 2019.

### OUR AWARDS

**In 2018, we also received awards and recognitions in different fields.**

#### San Rafael MU

- John T. Ryan Trophy. First prize for its safety standards in Underground Mine category.
- ISEM National Mining Safety Contest. First prize in Underground Mine category.

#### Pucamarca MU

- John T. Ryan Trophy. First prize for its safety standards in open-pit mine category.
- ISEM National Mining Safety Contest. Safety Plaque of Honor for its second place in the open-pit mine category.

#### Health and Safety

- Excellence & Quality award for outstanding management of occupational risks and safety performance granted by La Positiva Seguros.
- 2018 Protection Brazil Award, granted to Pitinga operation in recognition of its third place in the health and safety information and communication category.

#### Research and development

- Award to the best research paper in the 2018 National Mining Congress (Conamin). Research on mining safety «Towards zero accidents, managing high-potential events in mining operations» presented by Minsur's Health and Safety Management.
- Award to the best research paper in the 2018 National Mining Congress (Conamin). «Increase in leach pad gold extraction» presented by Bryners Sarmiento, leaching engineer from Pucamarca MU.
- The Initiative for Early Childhood Development in Antauta and Ajoyani was recognized by the Ministry of Development and Social Inclusion (Midis) as one of the 10 successful cases to reduce anemia and chronic child malnutrition in the country.

**Our risk management** (Risk management) (GRI 103-2) (GRI 103-3)

Risk management is essential for our operations and sustainability. We intend that our management system is integrated to everyday operations, enabling business continuity. Thus, as part of our system review process and our admission to the ICMM, in 2018 we started assessing our existing risk-management system so that it reflects, is able to adjust to, and is consistent with our new business strategy.

Moreover, we reviewed the organizational structure of the risk department and we concluded that in 2019 it shall become part of the department of Corporate Affairs and Sustainability instead of being part of the area of Finances. Likewise, headcount and job profile analyses were conducted to make sure we have people with the proper skills to address the challenge.

We found out, based on ICMM observations, that the current system is pretty comprehensive and it allows identifying risks at our operations and appropriately managing them. However, it fails to provide real visibility of strategic and corporate risks.

Our current management model has the Risk Matrix as its central tool, which allows recording, prioritizing -according to their impact and likelihood-, and handling risks. In our Matrix we consider the following impact assessment criteria, all related to Sustainability:

Operation continuity	Economic impact	Environmental impact
Social impact	Reputational impact and media resonance	Physical or safety-related impact

Considering the nature of our industry, Minsur’s main risks are those which physical or safety-related impacts would be catastrophic or Very High. These types of risks are present at all mining units, thus we are constantly working to develop plans of action able to control the likelihood of occurrence and, when possible, reducing their impacts as much as possible.

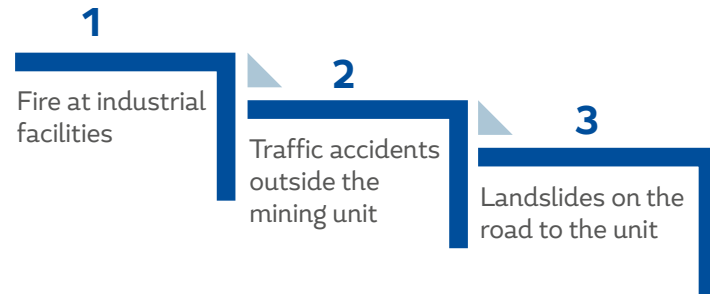
For 2019 we intend to continue -and to stress the significance of- identifying social, environmental and human rights risk in all our processes and value chains, to make sure we enforce the best practices.

We have identified and prioritized risks by type of impact.

<b>Extreme</b>	Those exceeding by far the acceptable limit, and which require urgent and immediate attention. Contingency plans are mandatory and shall reduce these risks to acceptable levels.
<b>High</b>	Those exceeding the acceptable limit, and which require proactive management, as well as detailed contingency plans.
<b>Medium</b>	Are those within the acceptable limits, and thus intensive monitoring is required.
<b>Low</b>	Are those below the acceptable limit, and intensive management is not required.

**Extreme risks**

We present below the 3 main extreme risk we found at all our units:



**High-impact risks**

We have identified the following high-impact risks across all our mining operations:

N°	High-impact risks
1	Accidents caused by mining equipment
2	Rockslide at intersections and main access roads
3	Accidents when transporting hazardous materials to the unit
4	Gas poisoning
5	Tailings dam failure
6	Explosive accidents
7	Fines or penalties imposed to Minsur

On the other hand, our mining units have analysts and risk committees to permanently identify new or emerging risks and monitor action plans of each MU.

We are committed to continue strengthening risk management and a culture of risk prevention in our Company, as well as in all our activities.



## 4. SUSTAINABILITY IN OUR VALUE CHAIN

The quality of our products and our customers' satisfaction are essential for the success of our commercial strategy. Hence, our sales team is in constant communication with our customers to discover ways to improve services and products we offer, especially those related to tin.

For that purpose we have questionnaires and we conduct an annual survey that allows identifying such needs. The survey is structured according to the 7 steps we deemed as "key moments" in the relationship with our customers. Through this survey we found out that our customers have a positive perception of Minsur and Taboca. Those items related to quality, commercial support and relationship-building particularly stand out.

However, we established as opportunities for improvement: the strengthening of Minsur's relationship with local customers; and the review of the delivery process and documents for Taboca.

### Our customers

In 2018, our products were exported to customers all around the world. The total gold produced in Pucamarca, as well as 45 % of our tin was exported to North America, while Europe imported 52% of our tin production and 39% of our ferroalloys.

Our tin customers belong to tinsplate, chemical and electronic welding-related industries; and our gold and silver customers are banks, traders and –sometimes– even the refineries we work with. In relation to ferroalloys (ferroligas, in Portuguese), our customers belong to the tantalum and niobium industry, among which the automotive and aerospace construction sectors stand out.

The tin ore we produce has been registered to the European Union regulatory system for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). This system requires that we provide information on the risks derived from substances, and on how they shall be controlled across the entire production chain. For gold marketing we kept the same dore refining strategy. Moreover, our gold buyers have the Good Delivery seal granted by the London Bullion Market (LBMA) –which certifies that gold and silver ingots meet strict quality requirements–, as well as the Commodity Exchange (Comex) certification.

For our ferroalloys, a long-term relationship with critical customers in the tantalum industry was consolidated in 2018, thus entering into long-term agreements. So, our objective for 2019 shall be developing a quality consolidation strategy for our two products, ferromniobium and ferrotantalum.

Similarly, we have started conversations with potential customers for the Mina Justa project.

### Within everybody's sight: a new paradigm

(Product life cycle) (GRI 103-2) (GRI 103-3)

A more rigorous media scrutiny with decentralized broadcast platforms together with the speed at which information currently travels have caused consumers to focus both in the final producer, but also in the entire chain of suppliers involved in the manufacturing of such product.

This shift of paradigm had a direct and real impact on the manufacturers of such products, as well as on their processes and transparency policies. In consequence, it also had an impact on MINSUR.





In that regard, changes and improvements we continuously implement in our Sustainability approach and management are proposed in response to these new requirements demanded by governments and international organizations representing producers and consumers.

One of the main regulations is related to conflict minerals. Tin and tantalum, which we produce, are considered as such. It is worth emphasizing that MINSUR's refineries -Pisco, Pirapora, and the tantalum refinery in Pitinga- have always been conflict-free certified.

In 2018, the Smelting Plant and Refinery of Pisco was the first tin refinery certified under the new RMAP (Responsible Minerals Assurance Process) protocol, formerly known as "Conflict-free Smelter Program". It is a certification based on the RMI (Responsible Mining Initiative) standards, which dates back to 2008 and engages over 380 companies around the world. This organization is in charge of providing the necessary tools and resources for the companies to make responsible decisions in conflict-affected and high risk areas.

It is also worth highlighting that the Refineries of Pitinga MU and Pirapora were once again conflict-free certified and will apply the new protocol during the next certification cycle.

In order to certify all our refineries, it was necessary to review our mineral supply processes and establish risk measuring mechanisms duly aligned to the parameters of the Organization for Economic Cooperation and Development (OECD) related to conflict mineral due diligence<sup>10</sup>, pursuant to regulations.

10. The OECD Due Diligence Guidance for Responsible Mineral Supply Chains.

Our new Responsible Supply Chain Policy was also approved. It establishes that the cassiterite treated to obtain tin, is sourced from our own mines and -unlike the former policy- it goes beyond minerals from the Democratic Congo Republic and it also includes those from high-risk countries.

**Our suppliers**

(GRI 308 Supplier environmental assessment) (GRI 414 Supplier social assessment) (GRI 103-2) (GRI 103-3) (GRI 102-9) (GRI 308-1) (GRI 414-1)

For the sustained growth of our operations we need to have strategic partners representing the best market options.

Thus, in 2018 we published the Master Supply Chain Management Procedure, which establishes the guidelines for recording and maintaining suppliers' information in the SAP system of Breca Mining Division.

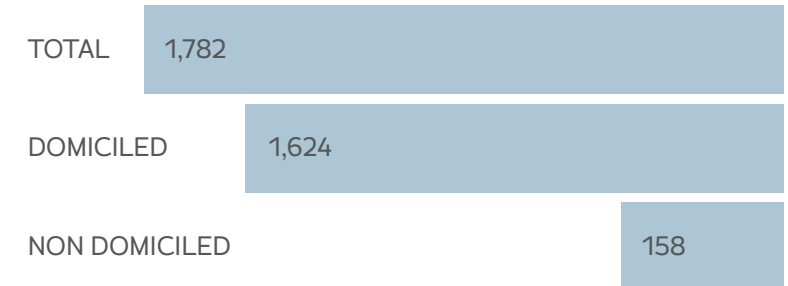
By the end of 2018, the company had 2,688 suppliers in total: 1,782 in Peru and 906 in Brazil. The details of procurement and turnover according to different parameters is presented in the following graphics and tables.

**Suppliers by procurement type**

In 2018 we worked with 1,782 suppliers. Out of these, 46 % supplied goods and 68 % supplied services. 238 suppliers provided both goods and services.

**Suppliers by place of origin**

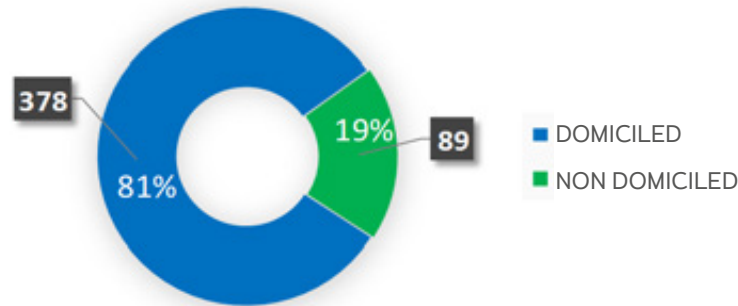
Out of 1,782 suppliers 91% are domestic suppliers and the remaining 9% are foreign suppliers.



Source: SAP

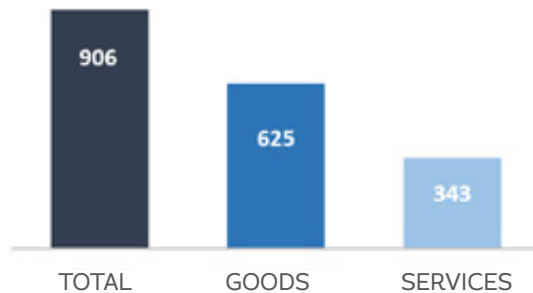
**New suppliers of Minsur**

In 2018, Minsur contracted 467 new suppliers<sup>11</sup>, 378 were domestic suppliers and 89 were foreign suppliers.



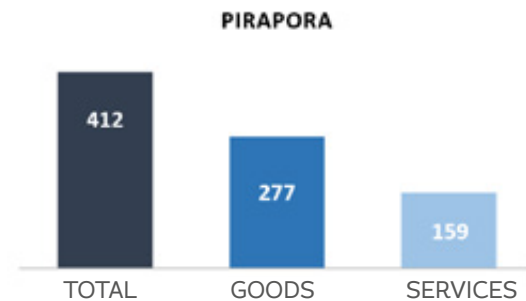
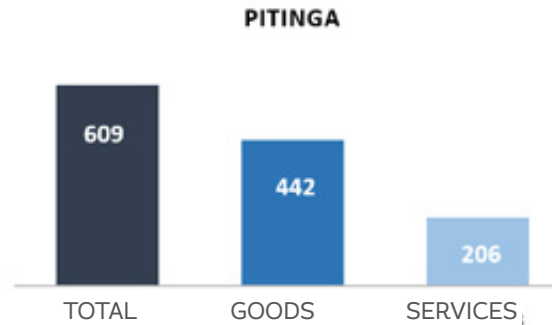
**Suppliers in Pirapora and Pitinga by type of procurement**

In 2018, Pitinga and Pirapora worked with 906 suppliers. Out of these, 69% supplied services and 38% goods. 62 suppliers provided both goods and services.



11. Only in Peru.

**Number of suppliers by procurement type in each MU:**



For further details on procurement and suppliers see the tables and graphics included as Annexes.<sup>12</sup>

12. Annex 3

**Several suppliers, a single standard**

Not only do we require that our suppliers adopt a behavior consistent with our strategy and corporate identity, but we also engage them actively. We seek, as minimum requirements, that they fully commit to our internal policies and procedures, specially abiding by the Corporate Code of Ethics and Conduct and domestic laws into force in the countries where we operate

Furthermore, before the contract is awarded, our suppliers go through a financial verification process conducted with an external assessment tool. Our strategic suppliers are subject to an annual approval process, which also evaluates sustainability-related issues, such as labor conditions, environmental practices, occupational health and healthy, quality and social responsibility.

Aiming at knowing impacts and risks involved in the service they provide, suppliers shall describe in detail the activities involved in the service delivery. Suppliers posted in our operating units shall also prepare an Environmental management plan, including environmental practices and commitments, as well as objectives and contingency actions.

One of the obligations we have as part of the ICMM admission process is improving our pre-screening process for good and service suppliers, and being able to monitor those deemed as high-risk suppliers. In line with this requirement, in 2018 we started a pilot process with B- Corp and its tool called Mide lo que importa (Measure what matters).

The questionnaire includes questions on four subjects: the environment, occupational health and safety, relationship with

communities and governance. The questionnaire is totally consistent with our sustainability strategy, and it will allow us identifying what is our suppliers' situation in relation to these subjects.

For 2019 we intend to have more suppliers answering this questionnaire so that we can build our baseline. Then, we will be able to identify where we shall work closer with our supply chain to help suppliers improve their sustainability performance.

### Measure what matters program

- In 2018 a pilot was conducted with 100 companies which were invited to complete a survey on sustainability issues, such as Governance, Collaborator management, Environmental management and community management.
- The companies who participated obtained an average 74.6% result in all categories.
- The section where they stood out the most is the one related with workers' issues, which measures the impact made by the company on workers' health, safety and wellbeing. In this section they scored 24.2, with 20.7 being our baseline.
- They also stood out in the community section with 22.8 over 19.5. This section measures their commitment to and impact on diversity, employment and community services.
- In the environment section, which measures the environmental impact, supply chain emissions and distribution channels, the score was 20.4 over 10.
- In the customers section the score was below the baseline, 5.5 over 9.9. It is worth noting, however, that this category is not applicable to several participating companies.
- **Impact areas of the diagnosis "Measure what matters" Annex 4.**

## 5. MINSUR AND THE ENVIRONMENT (GRI 102-11)

In Minsur, we focused on minimizing and mitigating our environmental impacts and work in the development of efficient solutions for this type of challenges.

Last year we have reviewed our environmental standards, not only because it is one of the obligations we assumed with the ICMM, but also because we are aware of the relevance acquired by subjects such as climate change, water access and the protection of biodiversity in the last 3 years.

Moreover, in 2018 aiming at improving our environmental performance, we reviewed 11 of our environmental management standards and 14 of our environmental operational standards. Results will be approved in 2019 to be then implemented.

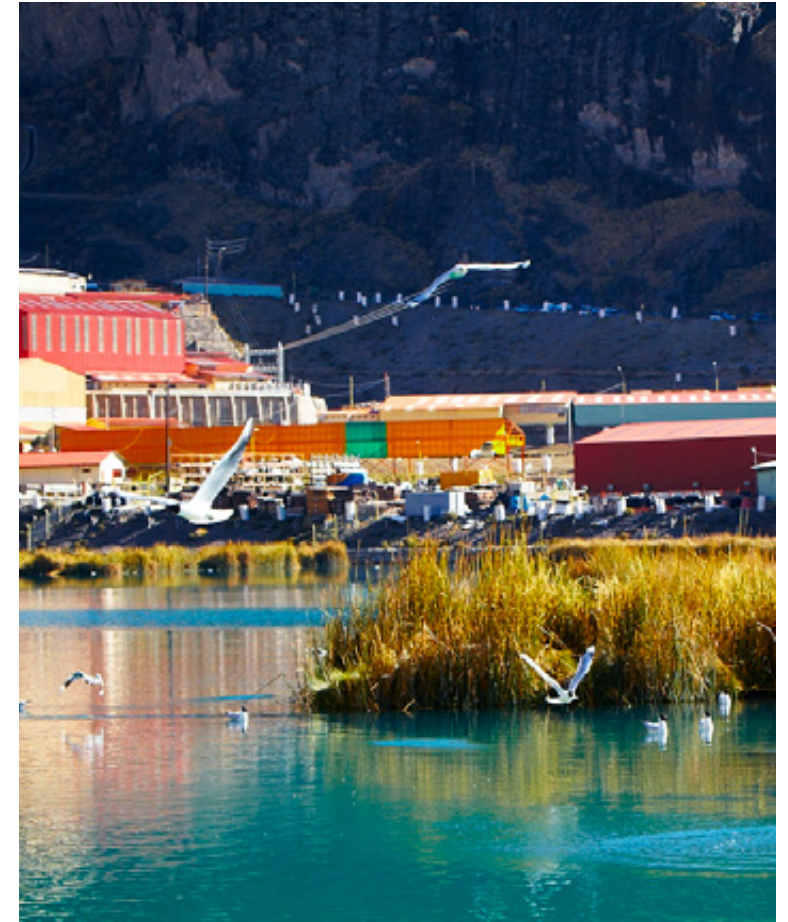
These new standards abide by the regulations of the countries where we operate, as well as by international standards. We will thoroughly review our water, air, biodiversity and climate change standards in order to specifically meet the Group of Experts' requirements. Afterwards, these shall be communicated to the entire organization, and the staff of our operations shall be trained for their implementation.

### Steps to follow

Though we continued applying the Environmental Management System in 2018, which is comprised by 5 Fundamental Pillars -water, permits and planning, environmental management, socioenvironmental management and rehabilitation and closure -, the Environmental Department was reorganized for a better management.

Thus, at the corporate level we had a Corporate Environmental and Permit management department until August 2018. In September 2018, this department was split in two and it currently has two new Managers who report to the Director of Corporate Affairs and Sustainability.

- Permit Manager.- Responsible for the Permit Pillar, which includes obtaining the necessary permits so that the Mining units and refineries can work properly, as well as those for exploration and construction projects.
- Environmental Manager.- In charge of enforcing the other four pillars, as well as reviewing the Environmental Performance Index, creating environmental indicators and rehabilitation and closure of operations.





At the mining units, permits and environmental management duties are still jointly managed.

In 2018 we continued assessing environmental impacts throughout all the stages of the mine life. For that purpose, we have the following tools:

**Internal Audits**

Conducted to establish compliance of our operations with the Environmental Management System and applicable legal requirements, and to validate the EMS effectiveness. If below-standard performance is detected, the unit's or project's Environmental Supervisor shall implement the corrective actions required in the final audit report and, then, it shall report the result of implementing these actions. Cross-audits are also conducted.

**Environmental performance indicators**

On a monthly basis, Environmental Supervisors record and assess environmental performance indicators (EPI). Through these, environmental impacts and potential risks are measured and monitored. These indicators are reported to the Environmental Manager in montly meetings to identify and define improvements to be implemented.

**Environmental monitoring**

Monitoring points have been established in the areas of influence of our mining units and projects for permanent assessment of noise and air, soil and water quality, by competent authorities. Complementarily, participatory environmental monitoring has been implemented in certain units engaging communities of direct influence.

**Environmental supervision**

Our environmental performance is periodically supervised by the Agency for Environmental Assessment and Enforcement (OEFA) in Peru; Instituto de Proteção Ambiental do Amazonas (IPAAM) in Amazonas region, and Companhia Ambiental do Estado de São Paulo (CETESBI) in Sao Paulo region, Brazil. The objective is verifying the fulfillment of laws, environmental management tools, permit processes, mandates or provisions issued by competent agencies, as well as with other sources of auditable environmental obligations.

Our Pirapora, Pisco, Pucamarca and San Rafael operations have received the ISO 14001 certification, which provides a framework to protect the environment. Though Pitinga MU has not yet received such certification all our operations and projects have the same Environmental Management System (EMS), which was designed pursuant to this standard. Regarding Mina Justa, aiming at receiving international funds for its construction, this operation adjusted its management system to the International Finance Corporation (IFC) standards, and its objective is applying for ISO 14001 once it starts operating.

**Water: the beginning of life** (GRI 303: Water) (GRI 103-2, GRI 103-3)

We are aware of the significance of using water responsibly. Thus, it is our priority to update our water management standards and indicators.

As a principle, the infrastructure of all our units uses water as efficiently as possible. Furthermore, at all our units we reuse and recycle much of the water we use and we implement several savings initiatives.

The environmental staff of our operating units control water quality and quantity through monthly, quarterly or biannual monitoring activities, pursuant to MINSUR standards and the commitments assumed with competent authorities and the operating unit.

Beyond the legal requirements, we monitor different water bodies, such as lakes, gorges and rivers, for a more efficient control of the unit's water management.

When reviewing our water standard in 2018, we also reviewed

the indicators we work with. These shall be approved in 2019 and reported internally during the first quarter of that same year. It shall be disclosed to the public in the 2019 Sustainability Report, which will be published in 2020.

**Innovation and knowledge**

In November 2018 we were one of the 20 companies selected worldwide by Massachusetts Institute of Technology (MIT) to jointly work in a project called Operations Lab.

It is a laboratory for innovation challenges led by post-graduate students of different sectors. Minsur was one of the chosen companies among 70 applicants, and we participated in two projects: one of them called: How do we optimize the use of water in the Pisco plant? This project, visits and its implementation shall continue in 2019.

As we pointed out, our watchword is protecting water and seeking more efficient ways to use it to prevent larger impacts. In this line, we seek innovative solutions for Mina Justa project, which has been designed to operate with seawater, which does not need to be desalinated.

Likewise, in our Pucamarca mining unit, where we currently use groundwater obtained from wells, we received license to use surface water from the Azufre river, which due to its chemical characteristics is not suitable (without any treatment) for human consumption or agricultural activities. Thus, we built the water neutralization plant aiming at treating the river's acid water and -gradually- stop using groundwater for this operating unit.

To disseminate and explain water management issues to the communities of our areas of influence, we organized participatory monitoring at some of our units; though it is worth mentioning, that it is a practice that we seek to implement at all our units. Not only we want to inform people that we are using water responsibly, but we also want them to learn how all of us can use this resource in a more sustainable way.

The following are some examples of what our mining units do to save water and use it efficiently, aiming at reducing our impact.

**PISCO**

In the SPR of Pisco, water saving initiatives were promoted, particularly when operating the Ausmelt furnace, specifically for the gas cooling system. This initiative shall continue being implemented since this system uses near 50% of the total water consumed by the SPR. In the water treatment industrial area, transfer circuits were strengthened to reduce evaporation, as well as water recirculation. It is worth indicating that all water used in the SPR is recirculated during the process; there are no purges.

In 2018 a specialized company conducted an hydrogeological study and a numerical modeling of the aquifer aiming at determining a supply curve for the smelting plant. This allowed us developing pre-feasibility and feasibility studies, as well as detailed engineering studies to install a seawater desalination plant to replace water in drains and wells with desalinated water.

### **SAN RAFAEL**

USD\$120.000 were invested in San Rafael MU to update the 2018 study on the comprehensive water balance prepared by Amphos 21. The results aimed at making recommendations for water management and control in the unit, as well as to present supporting documents to the authorities. Water of the Tailings dam III is still being recirculated for the metallurgical process and water treated in the domestic wastewater treatment plant is reused for irrigation for dust control.

We would also like to highlight that in San Rafael 35% of water is recycled in each cycle, and a cognitive solution jointly developed with Microsoft was recently installed. It allows monitoring water quality 24 hours a day at the point of discharge of San Rafael, using a camera with an artificial intelligence (AI) system that allows observing and analyzing water quality.

### **PUCAMARCA**

Several actions to reduce water consumption were developed in Pucamarca MU, for instance a major events pond (MEP) during the wet season, or irrigation in the lower lifts of the leaching pad which allowed reducing water retention therein. We also used shade balls in the rich solution pond to prevent evaporation.

### **PITINGA**

Since December 2018, Pitinga has surface water withdrawal points and domestic wastewater discharge points, as part of the provision of better standards and regulations.

In 2018 a specialized company was hired to install flowmeters, in order to measure the amount of groundwater withdrew from the two existing wells. These measures will enable Pitinga MU staff to better control the use of water, and thus establish measures to reduce, reuse, recycle water, and use it more efficiently in this operating unit.



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

**Table. Water withdrawal by source (thousand m<sup>3</sup>/year)**

Source	San Rafael MU		Pucamarca MU		SPR Pisco		Mina Justa		Pitinga MU		SPR Pirapora		Total 2017	Total 2018
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018		
Surface water	1,257.00	1,933.20	0.00	0.66	0.00	0.00	0.00	0.00	4,000.90	8,918.10	0.00	0.00	5,257.90	10,851.95
Ground-water	1,521.00	7,627.44	407.90	369.23	198.50	247.83	10.40	80.38	0.00	0.00	93.80	79.62	2,231.60	8,404.50
<b>Total</b>	<b>2,778.00</b>	<b>9,560.63</b>	<b>407.90</b>	<b>369.89</b>	<b>198.50</b>	<b>247.83</b>	<b>10.40</b>	<b>80.38</b>	<b>4,000.90</b>	<b>8,918.10</b>	<b>93.80</b>	<b>79.62</b>	<b>7,489.50</b>	<b>19,256.45</b>

**Table. Recycled and reused water in 2018 (thousand m<sup>3</sup>/year)**

Indicator	San Rafael MU	Pucamarca MU	SPR Pisco	Mina Justa	Pitinga MU	SPR Pirapora	Total
Water withdrawal volume	9,560.63	369.89	247.83	80.38	8,918.10	79.62	19,256.45
Recirculated and recycled water volume	7,354.52	6,623.58	77.01	15.53	58,211.46	0.00	72,282.09
Percentage of recirculated and recycled water	16,915.15	6,993.47	324.83	95.91	67,129.55	79.62	91,538.54
Total volume of consumed water	43%	95%	24%	16%	87%	0%	79%



**Table. Water use intensity (thousand m<sup>3</sup> of collected water/ t of ore treated)**

Indicator	San Rafael MU	Pucamarca MU	SPR Pisco	Mina Justa	Pitinga MU	SPR Pirapora
Intensity	6.27	0.0098	0.0041	0.00	2,501	147

For further details on water management, see Annex 5: Water Management Report in line with the ICMM Practical Guide to consistent water reporting.

(GRI 306 Effluents and waste) (GRI 103-2) (GRI 103-3)

### Housekeeping: effluents and waste management

Protocols, regulations and standards to prevent negative impacts to the environment are useless if we fail to maintain the continuous enforcement of such standards in the waste management process. Thus, as a first step, we continuously raise awareness among our units' staff on proper generation and disposal of solid waste during production, maintenance, logistics, etc.

As far as logistics is concerned, our units have a solid waste collection program led by a specialized contractor. Different methodologies are applied at our units for solid waste collection, transport and disposal in authorized landfills or treatment plants.

In our Peruvian units, such companies are authorized by the General Direction of Environmental Health of Peru. In Brazil, we have different systems for our operations in Pirapora and Pitinga. In the latter, the landfill is managed by the Infrastructure department, which operates pursuant the license requirements and laws of Amazonas state. In Pirapora do Bom Jesus, domestic waste is disposed in a landfill owned by Essencis, which is authorized by the Environmental Agency of São Paulo.

### Several strategies for several projects

Domestic effluents (blackwater) of SPR of Pisco are treated in a wastewater treatment plant (WWTP) and used to irrigate the living fence defining the property's boundaries. Moreover, in 2018, the place for input delivery (from Lima to Pisco) was changed, and the amount of packaging materials (plastic and timber) was reduced.

Furthermore, in 2018 we started migrating from chemical to

biodegradable products, such as organic solvents, fat removers, etc. , promoting a culture of paper reutilization in our offices, and using more online presentations and e-mails.

In Pucamarca MU used oil waste generated was recycled, and other waste -such as geomembrane, metallic items, pipes, timber and cardboard- was reused. Timber used in the mine was donated to and reused by the communities. In 2018 a process was initiated with the Ministry of the Environment to properly dispose mercury produced in Pucamarca to Switzerland as hazardous waste to be stabilized to cinnabar.

In addition, in line with the Socio-environmental principle of our EMS, we worked with the communities to raise awareness on the significance of recycling and the proper disposal of waste. These activities, which included a school recycling contest called "Recycle, Create and Win", were carried out with the participation of schools from Vilavilani, Palca and Ataspaca communities.

In San Rafael MU, as part of its commitment to the objectives of the UN Environmental Program (UNEP), a Zero Plastic campaign was strengthened and a project to reuse organic waste to produce organic fertilizer (humus and bio-compost) was initiated. Moreover, effluents and waste generated were monitored to be reused and recycled.

The selection study to adjust the San Rafael MU's Effluents Treatment System to Environmental Quality Standards (EQS) was initiated in 2018. This process considers meeting the quality and quantity requirements at the point of discharge, and it will be done in 3 stages: the plant current operating conditions (stage 1),

strategic growth of operating unit and expansion projects (stages 2 and 3), associated to their implementation terms and individual effluent contributions to the current system.

It is estimated that the studies shall be completed by the end of 2019, to be applied to an amendment of the environmental impact study and start construction and commissioning of stage 2 (main stage) by the end of 2021.

In Marcobre, solid waste is stored and accumulated in the Central Warehouse of Solid Waste, and it is finally disposed in a safely manner into a landfill or security landfill by a Solid Waste Operating Company (SWOC) duly authorized by the competent authority. In 2018 only domestic effluents were stored in septic tanks located in the Project area, and a duly authorized SWOC was in charge of its vacuum collection and final disposal into an external landfill.

In the SPR of Pirapora, industrial effluents are stored in a pond and then incorporated to production, thus closing the circuit. Domestic effluents go to the Effluents Treatment Station (ETS) which uses an ultrafiltration membrane, to be then reused in toilets, for washing purposes, etc. Domestic effluents discharged into water bodies are quarterly monitored to verify they meet the MPL.

Hazardous waste produced is stored in the Waste Central, and then sent to be treated. Non-hazardous waste is also destined to landfills, except for recyclable waste and oil use for cooking. Recycled waste is donated to AVMARE, a cooperative from the region which provides livelihoods for 30 families. Used cooking oil is donated to Triangulo Institute, which transforms part of it into ecological soap to be distributed to Taboca workers.

Pitinga has 14 ETSs to treat domestic effluents, where the MPLs are analyzed every two months by an accredited laboratory. Industrial effluents are destined to be treated.

Hazardous waste is separated in the operating areas, and then temporarily stored in the Waste Central, to be collected and transported to Manaus for incineration. Organic waste is sent to landfills, and recyclable waste is separated and recycled in Manaus.

**See tables with additional figures in the Annexes. (Annex 6) (GRI 306-1 306-2)**

- **Table: discharge volume**
- **Effluents discharges by quality**
- **Amount of hazardous and non-hazardous waste**

### **Tailings and mining waste**

**(MM3)**

Our commitment is having tailings dams or dumps with no impacts to the environment, which shall be closed down pursuant to the corresponding environmental standards once operations are finished.

Our aim is minimizing surface waste disposal and maximize waste reutilization. It is worth mentioning that we are currently preparing a specific policy to manage our operations' industrial waste, which shall be approved in 2019.

In all our units, mining waste is disposed in areas specifically designed and adapted to receive waste, keeping it stable and with the minimum environmental impact. Then, such waste is used as mine backfilling material.

Our B2 project aims at reusing tailings of high ore content in San Rafael MU. As part of this project a new tailings dam, called B4, will

be built to dispose tailings after the new processing. Construction works will be completed in 2019 and it will meet the highest engineering and safety standards.

All significant structures for tailings containment, as well as dumps or landfills, are periodically designed and monitored. Implicit risks are assessed and reported directly to the Senior Management.

It is worth pointing out that these measures and actions meet the standards of the Mining Association of Canada (MAC), which promotes the Initiative Towards Sustainable Mining with standard operating procedures for several issues, for instance tailings management. Moreover, we have a geotechnical engineer and staff devoted to tailings management.

Since the end of 2017, all our units have a geotechnical engineer in charge of monitoring all tailings and bodies of water in the MU, aiming at identifying any risk and implement the appropriate control measures since the beginning to prevent any inconveniences. This work is conducted pursuant to the safety standards of the Canadian Dam Association, to which we monthly report the infrastructure status.

**Table of waste amounts in Annex 7**

**Material management** (GRI 301 Materials) (GRI 103-2) (GRI 103-3)

Sustainability is our concern in each stage of our production chain. That includes the materials with which we work. Minsur uses materials that are regulated (controlled) by different governmental agencies<sup>13</sup>, thus we have them fully identified in our supply system.

These inputs have procedures for reception, storage, delivery and management that are independent from those for non-controlled materials. Besides, our legal compliance audits include verification of compliance related to controlled materials.

Controlled Material management is in charge of the Head of Planning and Inventory control, responsible for ordering, extending, including or disposing controlled materials, in coordination with Minsur's legal department. In all cases, requirements shall be met before purchase, storage and disposal.

In 2018, we have sought to be more efficient in managing materials.

Table. Main materials used by Minsur in production processes 301-1<sup>14</sup>

Material	Unit	2017	2018	Variation
Reagents	T	12,438	11,506	Reduced due to lower smelter production
	L	396	117	Reduced due to lower smelter production
	m3	15'712,921	7,124	Reduced due to lower smelter production
Lubricants	T	72	34	Similar, offset between units of measurement
	Gal	5,109	7,590	Similar, offset between units of measurement
Fuels <sup>14</sup>	Gal	3'621,545	3'492,078	-
	Mb	903,126	543,059	Reduced due to lower smelter production
Explosives	T	111,879	95,774	Reduced due to lower production in San Rafael MU
plastic items	T	9,125	297	-
Pipes	T	142	67	Less piping works in Pucamarca
Timber items <sup>15</sup>	T	1,056	781	Reduced because timber use reduction policy started being implemented

13. Agencies such as OSINERMIN, SUCAMEC, SUNAT, MEM, IPEN.

14. This table does not include information on Pirapora and Pitinga units in Brazil.

15. Peruvian law states that 5% of total diesel shall be biodiesel, and in Brazil the law requires 8%.

16. Timber is deemed a renewable material.



Material	Unit	2017	2018	Variation
Iron bars	T	1,995	1,901	-
Steel bags	T	3,966	3,899	-
Concrete	T	20,234	21,934	-
Limestone	T	13,112	10,529	Reduced due to lower limestone consumption in Pucamarca
Carbon	T	25,193	13,008	Reduced due to less smelter production
Others	T	20,538	19,509	-

#### Carbon footprint: a new milestone (GRI 305 Emissions) (GRI 103-2) (GRI 103-3)

Reducing emissions is essential in our commitment to reduce our impact on climate change. And concerning this problem, specific and immediate actions worth more than statements. Thus, in 2018 we measured for the first time our carbon footprint with ISO 14064-1 standards and the GHG Protocol of our 2017 and 2018 emissions.

The results of these two measurements allow us establishing a baseline to work from to achieve our goal to reduce our carbon footprint, as well as preparing the necessary plans to be implemented in future years.

**Table. Results of measuring our 2017 and 2018 carbon footprint** (GRI 305-1) (GRI 305-2) (GRI 305-3) (GRI 305-4)

Scopes	Result (in tCo <sub>2</sub> eq)	
	2017	2018
Scope 1: Direct emissions	202,039.60	212,431.29
Scope 2: Emissions due to power consumption	39,600.85	39,725.89
Scope 3: Indirect emissions	13,368.08	15,590.31
<b>Total Carbon Footprint</b>	<b>255,008.53</b>	<b>267,747.49</b>

**Table. Results of emissions produced in Mina Justa (tCo<sub>2</sub>eq)**

Scopes	Result (in tCo <sub>2</sub> eq)
	2018
Scope 1: Direct emissions	16,616.25
Scope 2: Emissions due to power consumption	0.00
Scope 3: Indirect Emissions	9,295.60
<b>Total emissions generated</b>	<b>25,911.85</b>

For additional figures related to this measurement see the tables in the Annex section. (Annex 8)

### Energy management (GRI 302 Energy) (GRI 103-2) (GRI 103-3) (GRI 302-1)

Minsur works to design strategies to manage our impact on climate change. Thus, we focused on consuming energy more efficiently, and reducing our emissions to the environment. For that purpose, we record and monitor the levels of consumption in all our units and projects.

Furthermore, we implement good energy management practices such as changing lighting systems with LED technology, a vehicle preventive maintenance program, among other specific actions in each unit.

**Further energy management numbers can be consulted in Annex 9.**

### Biodiversity management

Caring for the planet is also caring for all its living beings. In Minsur we develop biodiversity impact assessments prior to the development of our operations, complying with the regulatory frameworks and abiding by our environmental management pillars.

It is worth mentioning that none of our units or projects are located within protected areas and/or natural or cultural heritage sites.

We ensure that our environmental staff has the necessary tools, develop their skills and receive training. Thus, aiming at fulfilling our obligations with ICMM and our action plan, in December 2018 we provided training on this subject to our entire environmental staff (Corporate staff, and those of our mining units and explorations).

The course objective was training the staff on key concepts of biodiversity management and the ICMM Principles. Specifically, the workshop aimed at opening a conversation on the challenges

of mining operations and biodiversity, as well as presenting to the staff the guidelines, commitments and statements of the ICMM Principles. Furthermore, the staff received tools to incorporate ICMM Principle 7 (Impact on biodiversity) in their Units and/or Projects.

In Mina Justa impacts are managed with the measures included in the Environmental Management Plan approved in the Amendment to the Environmental Impact Assessment and in the Biodiversity Action Plan (BAP) that is part of the IFC assessments on compliance with performance standards as part of the financing process.

The main actions conducted in Mina Justa included the relocation of tillandsias in areas affected by earth removing works and construction activities, as well as the studies on guanacos to show cumulative impacts on their habitat caused by the project and neighboring activities. An analysis of cumulative impacts on sea life in relation to underwater noise in the San Juan Bay, and biodiversity monitoring in the project area and in an area of the San Fernando National Reserve, close to the project, were also included.

Though Pitinga MU is not located in any conservation areas, we strictly applied a no-intervention policy since the concession is close to the Uatumã Natural Reserve, in the northern area of the Amazon region. Considering this, there is a procedure to raise awareness among all people circulating in the premises of Pitinga unit.

In addition, periodical biological monitoring activities were conducted in the operations pursuant to environmental

management tools and the commitments assumed with the communities.

### Closure Plans

Closing operations cause economic, social and environmental impacts. But, besides our project closure and rehabilitation actions, we are interested in our legacy for the areas where we operate. Thus, in all our operations we assumed a commitment to comply with the provisions for the implementation of progressive closing, final closure and post-closure activities, to guarantee physical, geochemical, hydrological and biological stability of components. We meet the highest international standards and we are in line with the ICMM mine closure guide.

These commitments are documented in the mine closure plans, which are regularly reviewed to ensure more reliability and good results for future generations.

### Mina Regina

Currently, Mina Regina is in the final closure stage (which started in 2014), aiming at achieving physical, geochemical, hydrological, biological and social stability. Thus, closure of mining components that were part of old mining activities conducted by the former owner is carried out.

This process comprises the closure of a tailings dam, rehabilitation of a lake, closure of a water intake with drainage and infrastructure components -such as the old concentration plant-, closing of mining works and implementation of an industrial water treatment plant to meet the maximum permissible limits (MPL) pursuant to Peruvian laws.

Regina MU has a closure plan for mining environmental liabilities approved by the Ministry of Energy and Mining (MEM), which states that the final closure stage will be completed in 2019 and the post-closure stage in 2029. The main achievements in 2018 were the cleaning of the impacted lake, almost totally, and the closure of water intakes and landfills.

#### **Mina Marta**

It was acquired in 2005, through the subsidiary Compañía Minera Barbastro SAC. After reviewing profitability of the existing operation, in 2013 it was decided to stop operations and starting the closure procedure. This process was initiated pursuant to the closure plan approved by the MEM.

It is worth mentioning that Mina Marta has a mine closure plan also authorized by the MEM. The closure stage was completed in December 2017, and in 2018 the post-closure procedure started, which should end by 2022. Rehabilitation and maintenance standards for closed components have been met this year.

#### **San Rafael MU**

The mine closure plan of San Rafael MU was updated in 2018, incorporating the new design of the paste backfilling for the operations. It is worth mentioning that Minsur is one of the few operations in the world that has achieved integrating impurities from the mine's concentrate and its treatment at the SPR of Pisco. The treated impurities return to the mine through a paste backfilling process that -at the same time- is good for the operation's safety and operating costs.

Closure plans of Pucamarca and San Rafael MU shall be updated in 2019 to include the new approved components.

Last but not least, Marcobre presented in 2018 the first amendment to Mina Justa closure plan, which should be approved in the first quarter of 2019.



## 6. SAFE SPACES: OCCUPATIONAL HEALTH AND SAETY (OHS) (GRI 403 Occupational health and safety) (GRI 103-2) (GRI 103-3) (GRI 403-1)

Our main value is safety at all levels. And people are our main priority, since we know we operate in a high-risk industry. For that reason, we have not recorded any fatalities since 2015 and we are considered the world's fourth safest mining company.

How do we do it? We have an Occupational Health, Hygiene and Safety Management System based on the international standard OHSAS 18001<sup>17</sup> and comprised by 14 management standards and 21 operating standards. The process to verify compliance with this system in Peru and Brazil operations was completed in late November.<sup>18</sup>

In addition to that, we have Occupational Health and Safety Committees (OHSC) in our operations, pursuant to the laws of each country. These committees are jointly formed, i.e. with the participation of employer representatives and collaborators. They operate at the highest level and represent 100% of our workforce.

We have listed below some of our main actions referred to health and safety promotion in our company in 2018.

- We completed the semi-virtual health and safety training program called the School for Health and Safety Leaders, including 6 modules and 120 hours of training. Through this program we strengthened the technical knowledge and soft

17. Our San Rafael MU, Pucamarca MU and the SPR of Pisco were recertified under OHSAS 18001 standard with Bureau Veritas in 2018.

18. An average 87 % was obtained for compliance with management standards and 85% for compliance with operating standards. This verification process was led by an external specialized audit company.

skills of those responsible for occupational health and safety in Minsur.

- Our management reviewed all Investigation Reports on high potential events (HPE).
- We prepared the management standard for worker's lodging or housing.
- We strengthened the Safety observers program "Miners protecting miners", which aims at recognizing and promoting safe behaviors at work, as well as proactively correcting unsafe behaviors. This program engaged 200 collaborators.
- We developed campaigns to prevent injuries to fingers and hand: "Zero in in your hands 2018".
- We held the II Meeting of Strategic Partners of Breca Mining Division, rewarding our contractors with the best safety and sustainability performance.

Within this context, as we noted at the beginning of this Report, our health and safety management has been recognized in 2018 with the John T. Ryan Award and ISEM National Mining Safety prize, granted to San Rafael MU and Pucamarca MU, correspondingly. In Brazil, Pitinga MU received the 2018 Brazil Protection Award.

We know, however, that health and safety are concepts that go hand in hand if they aim at being sustainable. Creating a safe work environment is worthless if people's health is not addressed meeting the same standards.

### Managing occupational health (GRI 403 Occupational health and safety) (GRI 403-3)

Due to Minsur admission at the ICM, in 2018 we started a complete review of our health management system to adjust it to the highest international standards. We have made a gap analysis on where we stand and where we want to go in relation to this.

With this new information we have been able to recognize our improvement opportunities in health management, and thus we have established a baseline from which we will identify actions and measure improvements to be implemented.

On the other hand, in the second quarter of 2018, the Corporate Health and Hygiene staff was strengthened with the incorporation of a corporate hygienist engineer. This professional shall be in charge of implementing a sound hygiene management system to help the prevention of occupational diseases, advising hygienists posted to our mining operations, coordinating with them the implementation of the Master Plan on Occupational Health and Hygiene, and monitoring implemented actions.

Moreover, we developed other occupational health and hygiene management actions in 2018:

- Preparation and dissemination of the 10 Commandments of Health: 10 habits for a healthy life.
- Preparation of an occupational hygiene diagnosis in Minsur operations.
- Medical campaigns related to health and healthy lifestyles, such as dental, ophthalmologic, and vaccination (influenza and tetanus) campaigns, and for the detection and control of chronic diseases.
- Monitoring of physical (noise, vibration, temperature) and chemical (total and respirable dust, silica, carbon monoxide, etc.) agents, as well as of ergonomic risks.



- Development of awareness-raising programs on hearing, respiratory and skin protection; and also trainings on specific occupational health issues. For instance: the correct use of personal protection equipment, first aid, load handling, fatigue and drowsiness control and protocols to assist victims of poisoning with hazardous chemical substances.

It is worth mentioning that our mechanics, production workers, welders, heavy and/or light machinery operators, drillers and driller assistants, service assistants, among others, are exposed to work activities with high incidence or risk of suffering specific illnesses. Moreover, we have established pneumoconiosis and hearing loss as the greatest risks.

**Our OHS performance** (GRI 403-2)

As we mentioned, in 2018 we did not reported any fatal accidents in our operations for the third consecutive year, and 9 accidents resulted in loss of days (7 in Peru and 2 in Brazil), out of which 3 (33.3%) were our employees and 6 were third parties. None of these accidents resulted in permanent disability.

We also had 33 recordable injuries (20 in Peru and 13 in Brazil), out of which 14 (42.4 %) were our employees and 19 were third parties. Therefore, we reduced by 53% the Recordable Injury Rate (RIR) as compared to 2014.

It is worth establishing that, although we have been reducing the number of recordable injuries in the last five years, in 2018 lost-time injuries increased from 3 to 9. Concerning safety matters, every day we are at the starting line, thus it is our goal to reduce the number of lost-time injuries to 2017 levels and continue reducing recordable injuries.

**Table. Accident Indicators between 2014-2018**

Indicator	2014	2015	2016	2017	2018
Fatal accidents	0	1	0	0	0
Lost-time injuries	9	4	7	3	9
Recordable injuries	70	60	39	33	33

**Graphic. Recordable injury frequency rate**



For additional indicators related to this subject, see the tables in the Annex section of the document hereof. Annex 10

## 7. OUR PEOPLE: HUMAN MANAGEMENT (GRI 401 employment GRI 103-2 GRI 103-3)

The purpose of transcendence is essential in our sustainability strategy. Thus, we require all people involved in our operations, collaborators and suppliers, to be attuned to our culture and encouraged to give the best of themselves.

In our organization people from different cultures and backgrounds come together, with different professional experiences and skills, who contribute with diverse perspectives. Therefore, it is our priority to identify leaders, promote their development and provide them with fair work conditions, so that the goals proposed are achieved as a team.

For that purpose, our Human Resources department works constantly aiming at strengthening the performance of our human capital through a strategy that reflects the significance of meritocracy, talent, culture and leadership.

Our Attraction and Selection policy establishes the main guidelines to recruit the best available talent according to the profiles and skills required in its strategy. Besides recruitment processes in the external market, we develop programs to give priority to our internal talent.

We also have a compensation policy allowing us to properly manage labor costs and reward our collaborators in a competitive way. For that purpose, we consider the reference market, fairness in accordance to each job position's level, and our budgets.

Likewise, our Policy of Benefits defines the guidelines to offer a positive work experience through conditions that encourage our

collaborators. Some of the main benefits our company offers are: Health insurance, life insurance since the first day of work, and cancer insurance.

### Our collaborators in numbers (GRI 102-8) (GRI 401-1) (GRI 405-1)

By the end of 2018 the company had 2,690 collaborators in total, 1,577 in Peru and 1,113 in Brazil. 92 % of our collaborators are men and 8% are women, with a significant 7% increase in relation 2017. In Minsur we are aware that women representation in the company is low and we are focused on increasing the number of female collaborators promoting gender equality.

#### Anexo 11

### We prioritize local employment (Local employment) (GRI 103-2) (GRI 103-3)

In Minsur we aim at building a strategy that prioritizes local employment under fair conditions and so we will consolidate our position as an agent generating opportunities and local benefits.

This strategy allows us controlling unsatisfied expectations of the local population, thus strengthening their commitment and building consensus with our key social organizations.

We strive to inform the neighbors of different job opportunities on a timely, transparent and sustainable manner. Furthermore, we focus on training and certifications to improve their skills.

Within our main management tools we have:

- Corporate Standard for local employment. It aims at ensuring effective management and fair processes for the recruitment of local workers, by promoting and distributing benefits for local employment.

- Corporate procedure for the recruitment of local workers. Its main objective is making it feasible to meet the local employment standard and prioritize job opportunities in the project's activities for people in the area of direct and indirect influence. The procedure standardizes local recruitment and promotes credibility and trust among the local population.

Furthermore, our operations and projects have Local Employment Committees, which have enabled greater trust through the monitoring of recruitment processes targeting applicants from local communities. Thus, its proper implementation is ensured.

For instance, there are 2 Committees at San Rafael MU and 1 at Pucamarca. Besides, the B2 project has generated job opportunities for young people from Antauta in the preliminary works and for the construction of the concentrating plant.

**Table<sup>19</sup> . Local employment figures GRI 203 -1**

Minsur				
	UM San Rafael (Puno)	PFR Pisco (Ica)	Mina Justa (Marcona)	UM Pucamarca (Tacna)
Total local collaborators	53	103	68	26
Total de Co-laboradores locales	53	103	68	26

<sup>19</sup>. It does not include figures of our units in Brazil.

**Development of our collaborators** (GRI 404 Training and development) (GRI 103-2)  
(GRI 103-3)

We encourage the professional development of our collaborators giving them the opportunity to participate in several training programs. Thus, all our operations have people in charge of managing training and development processes, as well as of assessing performance according to the corporate guidelines.

**+ Líder Program**

To achieve our vision of being a world-class Peruvian company, we need leaders. That is how the +Líder program was born. It has three components for different target groups.

The first is focused on our Senior Management, both of our administrative offices and of our operations. In 2018, courses were designed offering the leaders the tools they need to effectively manage internal communications and talent attraction. The other two groups were focused on middle ranked officials and professionals. For that, we had the support of the Universidad Peruana de Ciencias Aplicadas (Peruvian University of Applied Sciences-UPC), which gave lectures on conflict management and cognitive flexibility.

**Supérate Program**

We continued implementing our Supérate program ("Improve" or "Become a better professional"), devoted to train our operators on technical skills for their daily activities. Each year, we select and support some of our collaborators, among technicians and operators, for the development of their competencies and skills. Trainign is in charge of Tecsup institute.



Thanks to these efforts in 2018 we gave more than 149 thousand hours of training, as detailed in the tables below:  
GRI 404 -1

**Table. Training hours by gender**

	2017	2018	2017	2018
Gender	N.o of hours of training		Average hours	
male	164,156	119,855	75.6	48.96
female	8,453	29,319	53.8	140.17
<b>Total</b>	<b>172,609</b>	<b>149,175</b>	<b>74.4</b>	<b>189.13</b>

**Table. Training hours by job category**

Level	Position	2017 Hours of training	2018	2017 Average hours	2018
Officials	Directors	-	440.00	33.60	31.40
	Managers	-	4178.50	39.80	51.00
Employees	Supervisors, heads and leaders	-	12776.20	81.90	57.00
	Self leading professionals (engineers analysts)	-	24530.00	56.90	49.70
Technicians/workers	Technicians	-	21964.30	85.00	54.00
	Workers	-	85265.70	77.30	59.40

In that same line, in order to ensure that our staff grows and improves, we consider it relevant to assess their performance and validate the level of compliance with their individual objectives (goals guiding our collaborator that are in line with the company's strategy), as well as their competencies (behaviors and soft skills).

Our Performance Management System has an impact on the responsibility of leaders as real people managers. This means that, if their team underperforms they -as leaders- shall also receive a negative score that will affect their annual bonus. In 2018, 100 % of our collaborators above the employee level are subject to a performance assessment.

**Table. Performance assessment of our collaborators**

Level	Position	Percentage of assessed collaborators
Officers	Directors	100 %
	Managers	100 %
Employees	Supervisors, heads and leaders	100 %
	Engineers and analysts	100 %
Technicians/workers	Technicians	0 %
	Workers	0 %

## 8. WE ARE ALL COMMUNITY: OUR COMMITMENT TO THE COMMUNITIES (GRI 413 Local communities) (GRI 103-2) (GRI 103-3)

### Management and strategy

Our social management allows us generating value in a sustainable way, effectively contributing to the development of the populations located in the area of influence of our operations and projects.

In 2015, MINSUR established a Social Management strategy up to 2018. We consider it has reached such a level of maturity that we are now capable to consolidate a model of permanent and open dialogue with the communities.

Notwithstanding the above, in 2018 we continue working based on our three pillars, incorporating new approaches aiming at developing a new strategy in 2019 that will allow us to continue building relationships based on trust and generating value in the communities where we operate.

### Effective relationship

We want neighboring communities to know and participate in a legitimate and sustainable model of social interaction, targeting the generation of development opportunities for the community and the company. Before starting our mining operations we build relationships of trust through transparent dialogue and respect to the local culture and the environment.

### Social investment

We contribute to the sustainable development of neighboring communities, by strengthening local capacities, from a gender, social inclusion and interculturality approach. We consider specific needs of each community we have a relationship with. Furthermore, we promote strengthening of local institutions and governability, and thus we work under a multi-actor approach (State-company-communities).

### Social risk monitoring

Local development activities in the communities allows for knowledge in their concerns to be able to respond to them. This enables a permanent monitoring of social risks with a preventive and timely response approach.

The existing Social Management System also needed to be reviewed, improved and adapted to the new challenges posed by the communities, as well as to be in line with the ICMM recommendations.

We needed to establish better impact measurements for our development projects, identifying risks for our communities and continue empowering our staff.





Hence, 19 social management standards have been prepared in 2018. These shall be implemented progressively in our units starting in 2019. The alignment between the different mining units and countries has not yet been achieved, but it is planned to be completed in 2019.

### Our community relations

Management of communities in our areas of influence is focused on creating long-term relationships, from early stages of a mine life cycle. Thus, different engagement and communication mechanisms are used, which nature varies according to the operating unit or project, and depending on several factors, such as stakeholders involved, their customs, specific risks in the area and local laws.

Our mining projects have an Environmental Impact Assessment (EIA) that identifies their impact on the natural and social environment; and also a Citizen Participation Plan (CPP) proposing different consultation mechanisms with the communities. Furthermore a public hearing may be convened prior to project approval.

Each one of our mining units in Peru have at least one permanent information office for people of neighboring communities to approach and communicate with the company. The SPR of Pisco has one office in Pisco city (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).

In Brazil, because of the specific nature of the relationship we have with our communities, we have other communication channels (such as those described in chapter 2 of the Report hereof), but

similarly to our information office they intend to promote an open and permanent communication.

Another significant relationship-building mechanism is comprised by forums for dialogue and agreement, and annual surveys, which serve to get to know the communities' opinion on projects and operations, as well as organizing information events.

Regarding the agreements entered into with our communities, we have to emphasize the formal agreements with them, such as the framework agreement on interinstitutional cooperation with Antauta district to establish a formal partnership to seek and implement development alternatives. Our social management staff ensure these agreements are met at all times.

### Our local emergency plans (Emergency Preparedness) (GRI 103-2) (GRI 103-3)

In Minsur we give value to the Awareness and Preparedness for Emergencies at Local Level (APELL) program, which aims at developing a preparedness and response plan to any industrial events engaging the community, the company and the local government. The implementation of this program is related to a risk management culture that focuses on the mine and the community, both for risk identification and also for planning the solution.

So, we seek to implement the guidelines of this program in all our units, starting with our Marcobre unit. In 2018 we began implementing the first stages conducting several workshops in Marcona with the participation of our unit's collaborators. Subjects such as key concepts of the APELL program, identification of stakeholders for the process, construction and risk map, among others, were assessed therein.

Moreover, as part of our emergency response management in 2018 we conducted a fire risk study in all our operations in line with the NFPA 122<sup>20</sup>. The process was conducted by an external company to implement the necessary fire controls, focusing on critical infrastructures. Furthermore, we activated a Committee with our Senior Management to monitor the implementation of recommendations on a quarterly basis.

We make sure that all operations have an Emergency Response and Management Plan and conduct periodical drills and exercises related to this plan. An in-house service was provided in San Rafael MU, Pucamarca MU, Pitinga MU and Mina Justa by external specialists exclusively devoted to give support for emergency response, as well as a firefighting vehicle.

In addition, from the Corporate Health and Safety Management we started updating the Crisis Management Plan at a Corporate level with the validation of crisis scenarios. We held a Crisis Management Workshop with the Executive staff in Lima and the leaders of San Rafael, Pucamarca, Pisco, Pitinga, Pirapora and Mina Justa operations.

Among other actions implemented in 2018 we have:

- Implementation of road checkpoints near Juliaca, Sayan, Tacna, Manaos and Pisco cities, in the access roads to San Rafael, Pucamarca, Pitinga and Mina Justa. These posts have specialists to check that road safety standards and procedures are met.
- The staff posted in the checkpoints has been trained to assist in case of emergencies in the road, outside the MU, such as vehicle rescue, first aid, control of hazardous materials spills, either caused by accidents or natural phenomenon.

<sup>20</sup>. Standard on fire prevention and control in mining activities

- Actions of mutual support with firefighting squads of neighboring areas to our operations were implemented, such as joint drills.
- In the Pisco operating unit, we organized guided tours to the smelting plant and refinery for the families of our collaborators and students, as well as awareness-raising talks on safety outside of work for them to act safely in their everyday lives and with their families. Lectures on fire prevention, first aid, electric hazards, fall prevention, healthy diet, sun protection, etc.

(Cultural Heritage) (GRI 103-2) (GRI 103-3) (GRI 411 Rights of Indigenous populations) (GRI 103-2) (GRI 103-3) (GRI 411-1)

### The significance of our legacy: cultural heritage and respect to indigenous populations

In this section we present how we are in line with Principle 3<sup>21</sup> of ICMM and its Statement on Indigenous peoples and mining, which refers to the respect for the culture and heritage of our communities and indigenous populations. Under this vision we aim at building constructive relationships based on mutual respect, trust and mutual benefit.

#### Cultural Heritage

As part of our cultural heritage management policies, Minsur is committed to comply with the regulatory framework, and particularly, with archaeological laws. Thus, we hired the services of specialized companies to help us protecting cultural goods or archaeological sites we may find in our operations and projects. For instance, in San Rafael MU, we protected an area of cave paintings in the lower part of Chogñacota gorge.

21. Principle 3 of ICMM: Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities.

Furthermore, we prepare budgets to implement archaeological monitoring projects, apply for Certificates of non-existence of archaeological remains (CIRA, in Spanish), conduct research and rescue projects, and give weekly archaeological orientation to the staff removing soils.

In our Marcobre unit, as part of the archaeological rescue commitments, we organized activities such as the delivery of rescued archaeological remains (pottery, shell remains, and lithic materials) to the Decentralized Culture Direction of Ica and information talks for the citizens of Marcona district. Moreover, together with the Killa Urpi consultant, we presented the book *Rescatando el pasado* (Rescuing the past), which describes the results of two archaeological rescue projects conducted in 2017.

#### Respect for our indigenous population

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

Pitinga MU is located in the northern area of Brazil Amazon region, next to the Federal Reserve of Waimiri-Atroari indigenous community. This territory comprises over 2.5 million hectares, and received the permanent reserve legal status in 1989.

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.

Before visiting Pitinga facilities, all staff, as well as contractors and visitors receive information on the protocol to access the reserve. This document establishes guidelines, such as 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.

For the moment, our other operations in Peru and Brazil are not located in territories with indigenous peoples.

It is important to point out that in 2018, a working group on indigenous populations was created with members of the legal, environmental and social management departments, in charge of adjusting our policies and procedures to the ICMM standards and propose MINSUR’s position regarding the relationship with indigenous populations to be approved by the Senior Management.

#### Local Procurement (GRI 204 Procurement practices) (GRI 103-2) (GRI 103-3) (GRI 204-1)

Creemos en las comunidades en las que operamos. Por ello, We believe in the communities where we operate. Thus, hiring the services of local services allow us consolidating as a generator of local opportunities and benefits. So, we strengthen our commitments and agreements with our key stakeholders to address potential social pressure by the population.

In our Corporate Policy for procurement and contracts we establish the guidelines that all good and service suppliers -including local ones- shall follow. Marcobre unit has a local good and services procurement policy and procedure, as well as a Plan to disseminate job opportunities that allow us efficiently manage our local purchases. Currently there is no local purchase indicator, because the meaning of what is local varies from one MU to other.

### Development of local suppliers in Marcona

Training was provided, with the support of Cenfortur, to hotels, restaurantes and catering services that provide or have provided services to the project. The objective is for them to be able to serve other companies or tourists once Marcobre no longer requires their services. Moreover, working with the Communications, and Occupational Health and Safety staff of Marcobre, and the Marcona Chamber of Commerce, we conducted the workshop «The ABC of the local supplier», which objective was explaining the population the steps and requirements to become suppliers of the project.

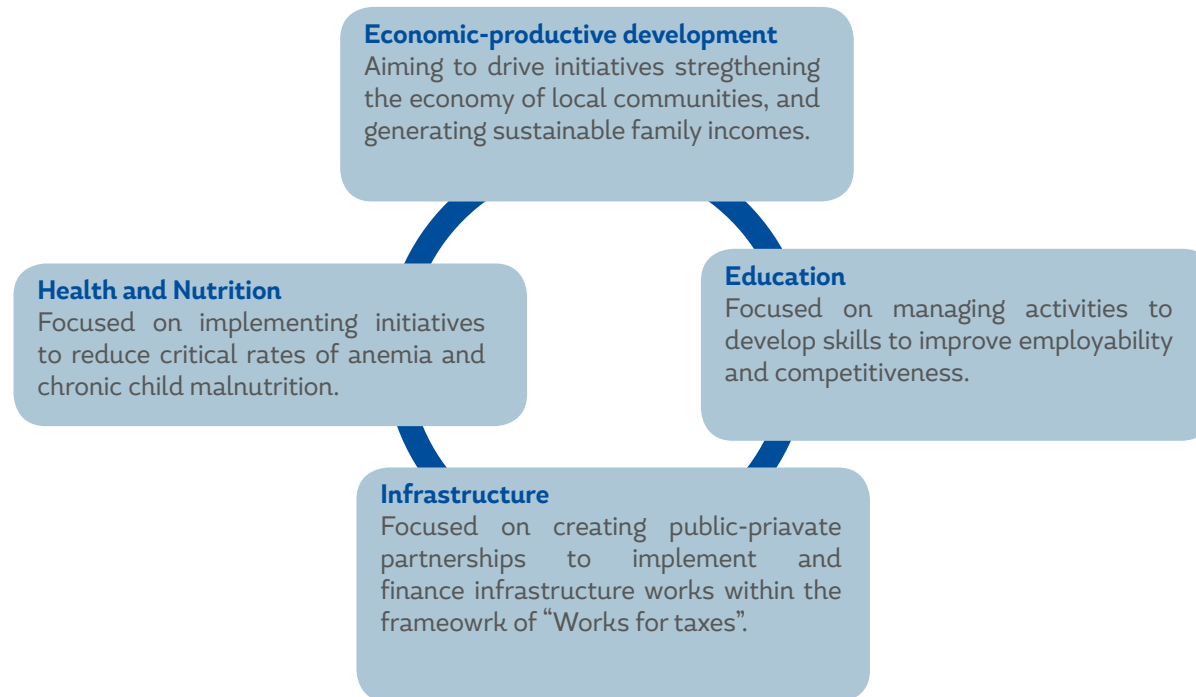
### Social investment programs and initiatives (GRI 413 Local communities) (GRI 103-2) (GRI 103-3) (GRI 413-1)

Contribution to social, economic and institutional development of our communities is vital for our company’s growth. In Minsur, we develop social investment programs and activities and we contribute to the sustainable development of neighboring communities by strengthening local capacities, from a social inclusion and interculturality perspective.

For that purpose, we consider specific needs of the communities we have a relationship with, and the promotion of a multi-actor approach (State-community-company).

Our local development programs and activities are implemented based on four lines of investment:

#### Graphic. Our social investment lines



All operating units and exploration projects design and implement their local development programs and activities according to the specific needs of their areas of influence, and thus their initiatives are independent. The majority of these programs and activities are designed within the investment lines for economic-productive development and education, and the main programs are SAMI, Fibra Emprendedora (Fiber entrepreneurship) and Sumaq Maki.

### SAMI

This early childhood care program aims at reducing the rates of anemia and chronic child malnutrition in Antauta and Ajoyani district. For that purpose, we have been working closely with the local families and authorities, orienting parents on the foundations of child development, nutrition and health. Moreover, we offer trainings, monitoring home visits and playgrounds, as community spaces for early stimulation.

This program is developed since 2016 in the area of influence of San Rafael MU.

### “Fibra emprendedora”

Program developed with a group of 70 High-Andean women from the communities of Antauta and Anjoyani districts and the peasant community of Queracucho.

With this program we help women to commercialize products made of fine artisanal alpaca, highly valued in the national market and in Europe and the United States, where they have already exported part of their production.

We empower these women through training on business management, technical issues and soft skills.

This program is developed since 2014 in the area of influence of San Rafael MU.

### Sumaq Maqui

Project that promotes social inclusion and self-esteem of people with different abilities, entrepreneurs of the Association of Artisans Sumaq Maqui. We are able to support them with courses on jewelry techniques, business management and entrepreneurship so that they can generate additional income and learn new skills.

This program is developed since 2015 in the areas of influence of the SPR of Pisco.

It is worth highlighting that in 2018 the SAMI program was recognized by the Ministry of Development and Social Inclusion (Midis) as one of the 10 successful cases in reducing anemia and chronic child malnutrition in the country.

The program, which was developed together with Acción contra el Hambre (Action against hunger), reduced anemia rates in children younger than 3 from 98% to 48% in Antauta, Puno, and from 66% to 13% in Ajoyani, Puno.

DIT is a multisectoral initiative with the active participation of the Municipalities of the area, local health community agents, Cuna+, Vaso de leche (Glass of milk) Committees, Qali Warma, DEMUNA, among others.

Among other activities developed in the units and projects, the following stand out:

- Comprehensive productive development programs are implemented across the river basins in San Rafael MU, for instance: the livestock fences project in the San Juan, Larimayo and Antauta basins; the barn project in Antauta basins and in Ajoyani district. Campaigns and folkloric events were supported, such as school campaigns, animal health campaigns and the Qocha Raymi.
- Productive projects continued being implemented in Pucamarca MU, such as the strengthening small animals breeding and marketing skills in the peasant community of Vilavilani, and the strengthening of food crop capacities in the peasant community of Palca. In addition, a water reservoir was built for irrigation of 5,200 m<sup>3</sup> and 3 greenhouses were built in the schools of the Vilavilani and Palca communities.

- In the SPR of Pisco we promoted the eradication of domestic violence in partnership with the Emergencia Mujer (Woman Emergency) Center (CEM, in Spanish) of Pisco; we strengthened the capacities of vulnerable populations, together with the Blind people's association los Ojos del Alma (Ailoda, in Spanish), and developed social and job skills of our local entrepreneurs and prioritized collaborators, through socio-psychological techniques.
- In Marcobre, through the Training for Life program we trained the Marcona population on skills related to different sectors, that are not necessarily linked to the mining industry, so that they can work in other companies and reduce project dependency.  
We also organized a Diploma course for 50 teachers of different schools of the district under an Agreement with the Marcelino Champagnat University, UGEL of Nazca and the Committee for Local Education Coordination (Cocoel).
- In the Santo Domingo project, short-term programs were developed, such as animal health campaigns and pastures cultivated for the benefit of 300 farmers; a school campaign in coordination with the schools and the parents association (Apafa), and a health campaign that impacted 310 people. Furthermore, 8 livestock fairs were supported in the Ñuñoa district, for the benefit of 600 farmers, and warm houses were built for 30 beneficiaries of the Agricultural Production Cooperative (CAP) Huaycho.
- In Mina Regina some training and infrastructure programs were conducted in the Condoraque community. The second stage of the module installation for the recovery of pastures was completed, installation of a productive module for technical breeding of trout and trainings on mechanized shearing were also carried out.

- Different programs were developed in the peasant community of Tinyaclla in Marta MU, such as the improvement of livestock protection services (alpaca and sheep), as well as training on knitting (with needles) and/or crochet offered to the women of the community. Furthermore, support was provided for the treatment of anemia in children under 5, and a friaje (cold waves) campaign was organized, as well as the construction of a community center.

#### Investing in public works (GRI 203 Indirect economic impacts) (GRI 103-2) (GRI 103-3) (203-1)

Since 2016, in Peru, we participated in several public works proposed by the authorities of and people living in the areas where we operate. We do this under the "Works for Taxes" mechanism.

This mechanism allows collaboration between the private and public sectors to reduce, promptly and efficiently, the country's existing infrastructure gap. In this regard, the company funds and implements public works as a way of paying their income tax bill for the next fiscal year. Once works are completed, the public treasury delivers a certificate that may be used to pay the income tax.

#### Graphic. Works for Taxes in 2018

##### SANITATION WORKS IN ANTAUTA

MU/project: San Rafael MU  
 Type of work: expansion of basic sanitation services  
 Location: Antauta district, Melgar province, Puno department  
 Total investment: USD 3.4 million  
 Number of beneficiaries: 3,686 people

##### SANITATION WORKS IN MARCONA

MU/Project: Mina Justa-Marcobre  
 Type of work: rehabilitation of the sewage and drainage system of Marcona district  
 Location: San Juan de Marcona district  
 Total investment: 20'255,203.92 soles  
 Number of beneficiaries: 2,000 people

##### SCHOOL INFRASTRUCTURE WORKS IN PARACAS

MU/Project: SPR Pisco  
 Type of work: enhancement of education services of School I. E. Carlos Noriega, UG Santa Cruz  
 Location: Santa Cruz settlement, Paracas district, Pisco province, Ica department  
 Total investment: USD 4.36 million  
 Number of beneficiaries: 6,955 people



## 9. GOVERNANCE, TRANSPARENCY AND ETHICS

### Our government structure

Sustainability is also soundness of principles and consistency in performance. We know that our internal policies, standards and codes help us contributing to consolidate credibility and trust from within.

Our corporate governance practices are based on the principles of the Code of Good Corporate Governance for Peruvian corporations, stipulated by the Securities authority (SMV), with an emphasis on the rights of shareholders, the General Board meeting, the Board of Directors and the Senior Management, as well as on the implementation of risk-related policies and compliance; and the transparency of information.

Our corporate government is led by the Board of Directors, which establishes the governance principles and help us providing guidance on policy-making, implementation methodology and assurance of alignment with the Group's vision. It is comprised by a President, a Vice-President and five directors, one of which is independent, and also two alternate Directors.

The Board of Directors has two specialized Committees.

- Strategy and Performance Management Committee.- In charge of orienting the Corporate Management strategy proposal, validating the progress of strategic projects and monitoring performance of each business division.
- Audit, Risk and Compliance Committee.- Supervises that the company's internal control system works properly and that the established policies are complied with. It also monitors the measures taken to address existing risks.

The Senior Corporate Management is led by a General Manager, six Directors and a Corporate Manager. Within this scope, the General Manager is supported by a series of Executive Committees inside key management departments in the implementation of policies, standards and corporate operations. In 2018, it had the support of eight committees and an Advisory Council, holding regular meetings with them.

Our subsidiary Cumbres Andinas S.A.C. has a Board of Directors comprised by representatives of Minsur S.A. and the new shareholder Alxar International SpA, who reach agreements pursuant to the Cumbre Andinas Shareholders Agreement, its By-laws and the Corporations Act. It is worth mentioning that Marcobre S.A.C. has no Board of Directors, and thus the company is led by the General Management.

### Economic Performance (GRI 201 Economic performance) (GRI 103-2) (GRI 103-3)

In the last five years we managed economic performance with an approach based on cost control, optimization of work capital, creating operational efficiencies and increasing productivity of operating units.

We implement a tight management to reach an optimum economic performance, meeting the most demanding standards of ethics and transparency and generating value for all our stakeholders: collaborators, suppliers, shareholders, the government, communities, among others. The following table shows the direct economic value generated by Minsur, and how it was distributed to generate economic value for our stakeholders.

**Table. Direct economic value generated, distributed and retained consolidated (million USD)<sup>22</sup> (GRI 201-1)**

	2016	2017 <sup>23</sup>	2018
Economic value generated	623,474	706,176	765,109
Net sales	617,048	672,100	693,733
Income from financial investments	5,048	11,626	70,385
Fixed asset sales and investments	1,378	22,426	951
Economic value distributed	-510,688	-600,287	-542,282
Operational costs	-275,674	-282,205	-270,485
Wages and workers' benefits	-119,931	-128,211	-133,440
Payments to capital providers	-37,819	-102,397	-49,965
Payments to the government	-75,857	-84,849	-85,997
Investments in the community	-1,407	-2,625	-2,395
Retained economic value	112,786	105,889	222,827

It is worth emphasizing that Minsur is committed with promoting better governance of the non-renewable resources extractive sector. The Extractive Industry Transparency Initiative (EITI) plays a fundamental role, as a global strategic alliance between governments, extractive companies (mining, oil and gas), civil society groups and international organizations. Thus, transparency criteria are used for the payments these companies make to governments, and for income received by governments, so that these resources are used to foster development.

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

23. In 2017 published data were restated

Under the leadership of the Ministry of Energy and Mining (MEM), Peru adhered to this initiative and then, with the support of mining, oil and gas companies, and of civil society organizations, Peru prepared several reports on the generation, distribution and use of resources from extractive industries, in which we actively participated. To date there are 6 national reports. You may access the last report [here](#).

### We act ethically and with integrity

(GRI 205 Anticorruption) (GRI 103-2) (GRI 103-3) (GRI 205-3) (GRI 102-16) (GRI 415 Public policies) (GRI 103-2) (GRI 103-3)

Through our [Código Corporativo de Ética y Conducta](#), we establish a model of behavior for our collaborators, contractors and suppliers based on honesty and integrity. This Code is currently being reviewed to adopt new standards and tendencies.

Furthermore, we have an Anti-corruption and Bribery Policy, a Fraud Risk Prevention policy, and a Manual for the prevention of asset laundering and the financing of terrorism. We also have a corporate compliance official, a Corporate Compliance Committee, and a Legal and Regulatory Compliance Manager.

We promote compliance and a culture of ethics through an annual compliance program that comprises criminal risk prevention actions, as well as prevention of non-ethical conducts and corporate risks inside the organization. In 2018 we conducted trainings on our Code of Ethics and Conduct and main policies in all our operating units and subsidiaries to raise awareness and strengthen the knowledge of our collaborators on these subjects.

It is important to mention that we have a “zero tolerance” policy concerning non-authorized donations and political contributions.

In 2018 no corruption cases were reported in our companies.

### Status of investigation complaints filed in 2018

The total number of complaints received was 98, and 91 of them were resolved (88 were investigated and 3 were dismissed).

The types of complaints received were:

- 49 complaints for mistreatment and harassment at work
- 32 complaints for policy violations
- 15 complaints for conflicts of interests
- 2 fraud complaints

### Integrity channel

Our collaborators, suppliers, contractors and the public in general may communicate their concerns or report infringements, such as conflicts of interest; inappropriate use of confidential information; infringement of corporate standards; human rights violations, among others. The channel is accessible through several means including postal mail, e-mail, website, voicemail, fax, call center or personal interview.<sup>24</sup>

Our Integrity Channel is managed by an external operator in order to ensure impartiality and confidentiality. This operator sends anonymously gathered information 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.

24. For more information on Minsur's, Marcobre's or Taboca's integrity channel visit the website: <https://www.canaldeintegridad.com/>

If, after our investigation process it is proved that an infringement was produced, the relevant measures shall be applied in accordance with the labor laws and the company's internal policies.

### We respect human rights

(GRI 405 Diversity and equal opportunities) (GRI 406 Non-discrimination) (GRI 408 Child labor) (GRI 409 Forced labor) (GRI 406-1) (GRI 412 Human Rights assessment) (GRI 103-2) (GRI 103-3) (GRI 408-1) (GRI 409-1)

We reaffirm it: people are our main concern. Thus, we have a [Human Rights policy](#), which explicitly states our commitment to provide safe and dignified jobs, free of child or forced labor, sexual harassment, as well as any other form of discrimination based on race, religion, color, sexual orientation or of any other kind. Furthermore, a mechanism to protect from and prevent sexual harassment has been explicitly included in our Code of Ethics and Conduct, and Internal Work Regulations.

In Minsur no human rights violations have been reported in our units or our supplier's operations. In our Taboca units, two cases of discrimination were confirmed through our Integrity Channel; as a result of investigations the collaborators involved in the discrimination incident were separated from the company.

In 2018 a course on Ethical Culture was organized, which comprises several subjects related to our Corporate Code of Ethics and Conduct, including the respect for Human Rights and the Integrity Channel. The program was conducted as a mandatory training for all our operations. So, 2,369 hours of training were provided on these subjects, which represent 41% of our total collaborators in that year.

**Table. Training on Ethical culture and Compliance (2018) (no data of 2017) (GRI 412-2)**

	San Rafael MU	Pucamarca MU	SPR Pisco	Mina Justa	Lima	Ta-boca	Total
Percentage of participation	79 %	97 %	56.22 %	6 %	100 %	0	41 %
Number of participants	502	305	125	22	230	0	1,185

We have created a Task Force, comprised by the staff of Legal, Labor Relations and Supervision management divisions, Directions, Contracts department, Contract Head Office and Corporate division, and the Coordinator of Legal Compliance to manage compliance with labor obligations in our value chain. This working group analyzes and monitors reviews of legal compliance prepared by the Coordinator of Legal Compliance after visiting each mining unit.

In 2018 we worked in the preparation of a policy document on this subject, which will be distributed inside the company, so that internal users of services provided by third parties and contractors become aware of the liability and penalties they would be subject to if outsourcing is distorted.

This same year, a task force was formed with representatives of the Legal, Property Security, Social and Corporate Affairs Management divisions, aiming at identifying where MINSUR really

stands regarding international human rights law, as well as what are the gaps and the main existing risks. This work, conducted together by an external group of specialists, will allow implementing the necessary changes to enhance the protection of human rights of our workers, contractors and communities.

In addition, Marcobre started implementing the Voluntary Principles and conducted trainings, risk identification workshops, implementation of action plans, among others. This work shall then be aligned with the results of the consultancy made by the HR task force.

**Freedom of association and collective bargaining**

(GRI 407 Freedom of association and collective bargaining) (GRI 103-2) (GRI 103-3) (GRI 102-41) (GRI 407-1)

Under the framework of the Law on Collective Labor Relations, our company ensures the respect of fundamental rights of trade-union freedom and collective bargaining, and reaffirms its value by promoting a climate of wellbeing. We have an Operational Plan for Employee Relations, which included improvements in our relationship with trade unions.

As part of the plan we provide training to union officials and our leaders on collective bargaining. Furthermore, we conduct monthly meetings with union leaders aiming at providing information on production, costs and reserves of each unit. Our objective is offering a clear panorama for the decisions they would make with our collaborators.

These guidelines are also extended to our suppliers. For that purpose, in the Labor Relations division we have a Compliance specialist that will be in charge of verifying that all contractors meet the labor laws into force.

In 2018, San Rafael signed a collective agreement, while in the case of Pisco and San Rafael, bargaining agreements were valid for two years, from 2017 to 2019.

To date, trade unions have formed in three units:

**Table. Number of unionized personnel**

	SPR Pisco	San Rafael MU	Pucamarca MU
% de unionized collaborators	73 %	67 %	27 %
% of collaborators affected by collective agreements	87 %	76 %	76 %

**Voluntary Principles on Security and Human Rights**

(GRI 410 Security practices) (GRI 103-2) (GRI 103-3) (GRI 410-1)

In Minsur, more specifically in Mina Justa, we have actively worked to incorporate the Voluntary Principles in Security and Human Rights (VPSHR) into our organization’s DNA. These international principles establish a framework of conduct for extractive companies that ensures respect for human rights and mitigates potential conflicts with local communities, focused on the surveillance staff and law enforcement agencies.

Concerning our projects in Peru, we abide by the national laws. The National Superintendence for the control of Security Services, Arms, Ammunition and Explosives for civilian use (Sucamec) enacted Resolution No 572-2018-Sucamec. This Resolution governs the use of force by security personnel and establishes a basic training and development plan of 60 academic hours for the security staff.

In 2018, we worked with only one security contractor, J&V Resguardo-Liderman, which provided services in all our mining units, plants and refinery. This company developed a VPSHR procedure that provides for the training required by Sucamec, and trained the entire surveillance staff posted in our mining units, plants and refineries.

Our units in Brazil will follow the same path for these matters in 2019.

### Legal compliance management

(GRI 307 Environmental compliance) (GRI 419 Socio-economic compliance)  
(GRI 103-2) (GRI 103-3)  
(GRI 307-1) (GRI 419-1).

Minsur operates pursuant to the laws into force in the countries where mining activities are developed. In Peru and Brazil we have regulatory management mechanisms, that ensure the proper management of concessions, permits, authorizations, legal obligations and commitments established in the environmental management tools (EMT), such as environmental impact assessments (EIA) and mining and environmental liabilities closure plans, among others. Plans of actions shall be established in the event that any deviations are identified, so that they are treated and adapted.

Besides, Legal and Regulatory Management conducts reviews of legal compliance each year and monitors internal findings for them to be documented and corrected, and it also shall send periodical notices on fulfillment of obligations to the officials responsible of the different departments.

By the end of 2018, Minsur has not received any significant fines and/or non-monetary penalties for the breach of laws or regulations. At the end of the fiscal year we have 17 ongoing sanctioning administrative procedures for which a conservative provision was made. Despite that we have enough arguments to reduce the provisioned amounts, we estimate a total provision of S/939,975.00.

Furthermore, we have four ongoing contentious administrative processes. In three of them the company's Statement of Administrative Responsibility is questioned, without fines, and for alleged infringements.

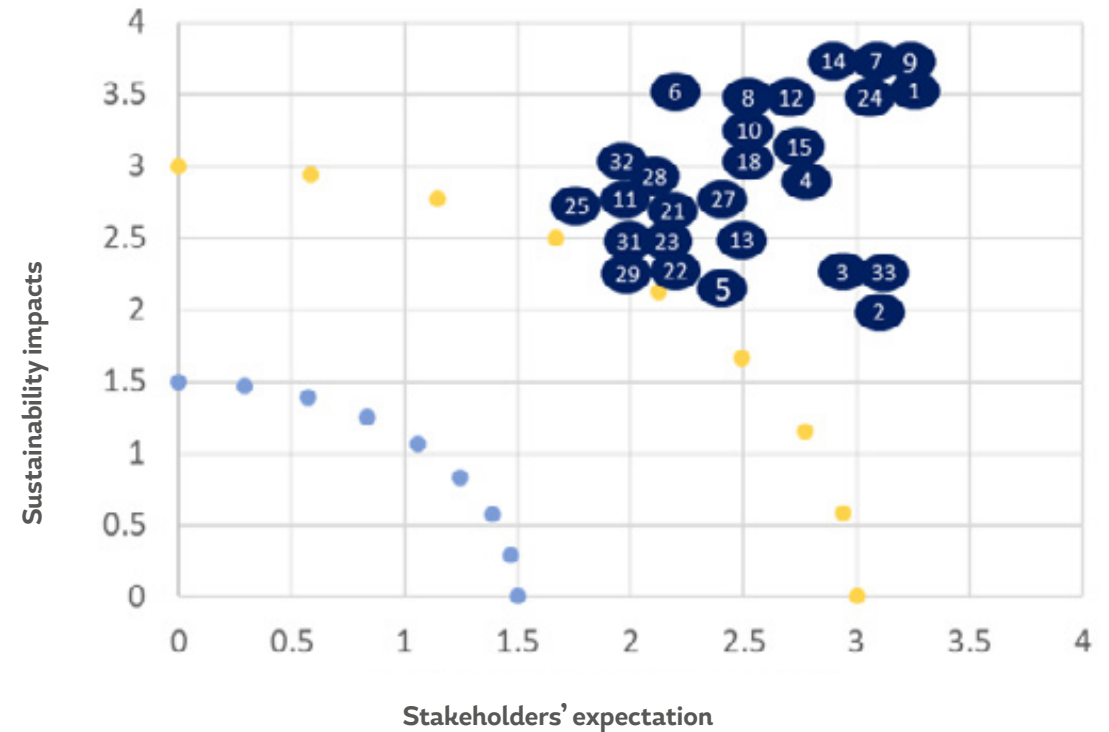


## Annexes

### Annex 1: Table “Our Subsidiaries” Our subsidiaries

Subsidiary	Investments of the subsidiary
Minera Latinoamericana S.A.C.	Has investments in Mineração Taboca S.A. and its subsidiary, which operates Pitinga MU and the SPR of Pirapora in Brazil. It also has investments in Minera Andes del Sur S.P.A., a Chilean company devoted to mining exploration, and in Inversiones Cordillera del Sur Ltda. and subsidiaries, which is shareholder of a business conglomerate mainly devoted to cement production and marketing in Chile.
Cumbres del Sur S.A.C.	Has investments in Minera Sillustani S.A.C. and in Compañía Minera Barbastro S.A.C., Peruvian mining companies. By the end of 2018, Barbastro has projects at the stage of exploration, and Sillustani at the closure stage (Mina Regina).
Cumbres Andinas S.A.C.	Has investments in Marcobre S.A.C., a Peruvian company of the mining sector implementing the Mina Justa project.  In 2018, Cumbres Andinas S. A. C. changed its shareholding structure through the sale of a share package. As a consequence, our company reduced its share and went from having 99.98% of the social capital of Cumbres Andinas S.A.C. to have 60% of it, whereas Alxar International SpA acquired the remaining 40 %.

### Annex 2: Materiality Graph Minsur Materiality Graph





### To whom we owe ourselves: our stakeholders

(GRI 103-1)

The material topics included in this Report; their coverage and related stakeholders are detailed below:

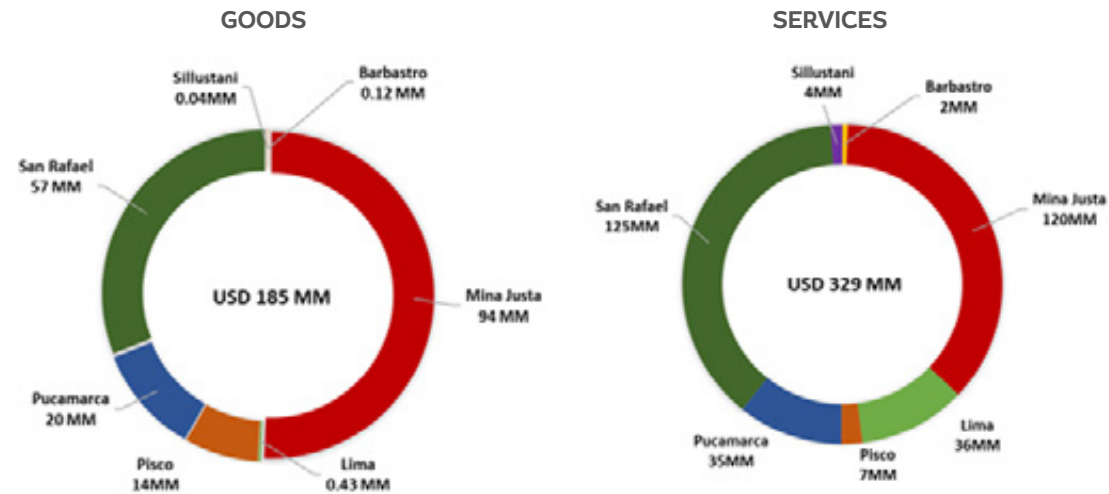
**Table. Minsur's material issues and related stakeholders**

MATERIAL ISSUES				
GRI MATERIAL ISSUES		STANDAR SERIES (GRI 102-47)	BOUNDARIES (GRI 102-46)	STAKEHOLDERS (GRI 102-44)
1	GRI 201: Economic performance	GRI 200: Economic	Internal	Shareholders and investors, collaborators and union trade
2	GRI 203: Indirect economic impacts	GRI 200: Economic	Internal and external	Shareholders and investors, authorities and State, customers, collaborators and union trade, communities, contractors and suppliers, media and civil society.
3	GRI 204: Procurement practices	GRI 200: Economic	External	Contractors and suppliers.
4	GRI 205: Anticorruption	GRI 200: Economic	Internal and external	Shareholders and investors, authorities and State, customers, collaborators and union trade, communities, contractors and suppliers, media and civil society.
5	GRI 301: Materials	GRI 300: Environmental	Internal and external	Collaborators and trade union, contractors and suppliers.
6	GRI 302: Energy	GRI 300: Environmental	Internal and external	Collaborators and trade union, contractors and suppliers.
7	GRI 303: Water	GRI 300: Environmental	Internal and external	Collaborators and trade union, contractors and suppliers.
8	GRI 304: Biodiversity	GRI 300: Environmental	Internal and external	Collaborators and trade union, contractors and suppliers.
9	GRI 305: Emissions	GRI 300: Environmental	Internal and external	Collaborators and trade union, contractors and suppliers.
10	GRI 306: Effluents and waste	GRI 300: Environmental	Internal and external	Collaborators and union trade, contractors and suppliers.
11	GRI 307: Environmental compliance	GRI 300: Environmental	Internal and external	Contractors and suppliers.
12	GRI 308: Supplier's environmental assessment	GRI 300: Environmental	External	Contractors and suppliers.
13	GRI 401: Employment	GRI 400: Social	Internal	Collaborators and trade union.
14	GRI 403: Occupational health and safety	GRI 400: Social	Internal and external	Collaborators and trade union.
15	GRI 404: Training and Education	GRI 400: Social	Internal	Collaborators and trade union.

16	GRI 405: Diversity and equal opportunities	GRI 400: Social	Internal	Shareholders and investors, authorities and State, collaborators and trade union, communities, contractors and suppliers.
17	GRI 406: Non Discrimination	GRI 400: Social	Internal and external	Shareholders and investors, authorities and State, collaborators and trade union, communities, contractors and suppliers.
18	GRI 407: Freedom of association and collective bargaining.	GRI 400: Social	External	Contractors and supplier.
19	GRI 408: Child labor	GRI 400: Social	External	Contractors and suppliers.
20	GRI 409: Forced labor	GRI 400: Social	External	Contractors and suppliers.
21	GRI 410: Security practices	GRI 400: Social	Internal and external	Collaborators and trade unions, contractors and suppliers.
22	GRI 411: Rights of the indigenous population	GRI 400: Social	External	Communities.
23	GRI 412: Human Rights Assessment	GRI 400: Social	Internal	Collaborators and trade unions.
24	GRI 413: Local Communities	GRI 400: Social	External	Communities.
25	GRI MM: Mine closure plans	GRI 400: Social	Internal and external	Shareholders and investors, authorities and State, customers, collaborators and trade union, communities, contractors and suppliers, media, Society
26	GRI MM: Emergencu plans at local level	GRI 400: Social	Internal and external	Shareholders and investors, authorities and State, collaborators and trade union, communities, contractors and suppliers, society.
27	GRI 414: Supplier social assessment	GRI 400: Social	External	Contractors and suppliers.
28	GRI 415: Public policies	GRI 400: Social	External	Authorities and State, collaborators and trade union.
29	GRI 419: Socioeconomic regulatory compliance	GRI 400: Social	Internal and external	Shareholders and investors and customers.
30	Investment in explorations	NO GRI	Internal and external	Shareholder and investors, contractors and suppliers.
31	Risk management	NO GRI	Internal and external	Collaborators and trade union, contractors and suppliers.
32	Product life cycle	NO GRI	Internal and external	Collaborators and trade unions, contractors and suppliers.
33	Local procurement	NO GRI	Internal and external	Collaborators and trade unions, communities.
34	Cultural Heritage	NO GRI	Internal	Shareholders and investors, authorities and State, customers, collaborators and trade union.

**Annex 3: MINSUR PROCUREMENT: TYPE OF PROCUREMENT BY MINING UNIT**

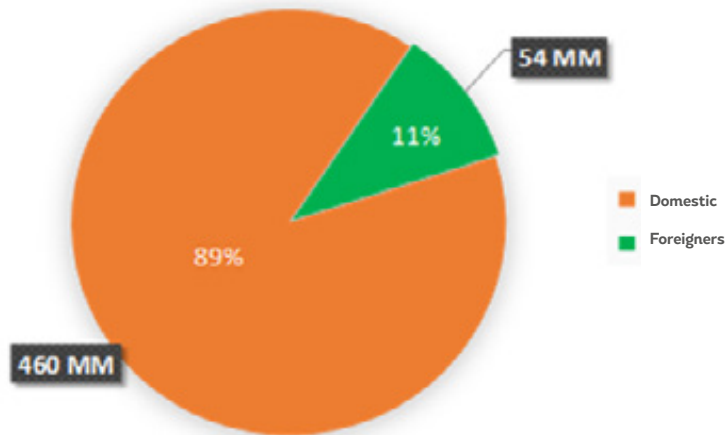
	Barbastro	Mina Justa	Lima	Pisco	Pucamarca	San Rafael	Sillustani	Total
Goods	116,393	93,672,989	432,597	13,551,257	19,917,553	57,370,257	43,428	185,104,475
Services	1,792,201	120,348,354	35,731,502	6,980,253	34,972,123	125,170,099	3,995,339	328,989,871
<b>Total (USD)</b>	<b>1,908,594</b>	<b>214,021,343</b>	<b>36,164,100</b>	<b>20,531,510</b>	<b>54,889,676</b>	<b>182,540,356</b>	<b>4,038,767</b>	<b>514,094,346</b>



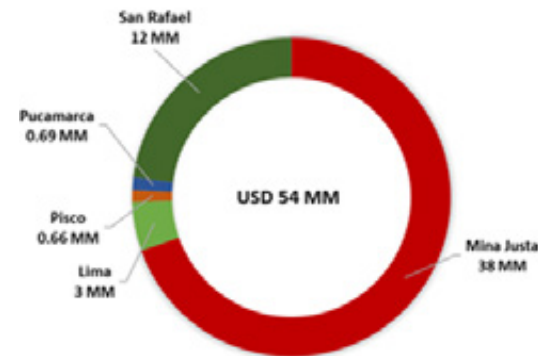
**MINSUR PROCUREMENT BY PLACE OF ORIGIN** (GRI 204-1)

	Barbastro	Mina Justa	Lima	Pisco	Pucamarca	San Rafael	Sillustani	Total
Foreign		37,806,318	2,670,154	661,340	686,079	12,489,966		54,313,857
National	1,908,594	176,215,025	33,493,946	19,870,170	54,203,597	170,050,391	4,038,767	459,780,489
<b>Total (Valor USD)</b>	<b>1,908,594</b>	<b>214,021,343</b>	<b>36,164,100</b>	<b>20,531,510</b>	<b>54,889,676</b>	<b>182,540,356</b>	<b>4,038,767</b>	<b>514,094,346</b>

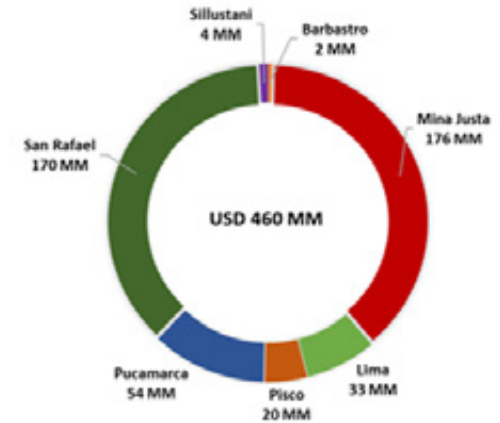
Amount (USD) according to place of origin



Foreigners



Domestic



## Annex 4. Impact areas of the Measure what matters diagnosis

(GRI 308 Supplier Environmental Compliance) (GRI 103-2) (GRI 103-3)  
(GRI 414 Supplier social assessment) (GRI 103-2) (GRI 103-3)



### GOVERNANCE

It refers to practices that ensure that the company lasts over time. Is located in:

- company mission
- inclusion
- relationship with interest groups
- governance structure
- governance / transparency of company practices



### COMMUNITY

Evaluate the relationship with suppliers, diversity and the relationship with the local community of the company. Measure practices and policies regarding

- community service and donations
- employment creation
- inclusion of vulnerable populations
- gender equality
- practices with suppliers.



### WORKERS

Consider how the company benefits its workers through

- compensation
- Benefits
- training and shared ownership
- work environment
- internal communications
- corporate culture
- Labor flexibility
- occupational health and safety



### ENVIRONMENT

Inquire about the environmental performance of the company through its facilities, practices and operations. Questions about:

- materials and resources used
- use of energy and generation of emissions and waste
- transport and distribution chains of the company (if applicable to the company)
- the environmental impact of the supply chain (if applicable to the company)



**Annex 5 . Report on water management in line with the Practical Guide to consistent water reporting of ICM** (GRI 303 Water) (GRI 103-2) (GRI 103-3)

On water interaction

Unit	Main operational activities affecting water
San Rafael MU	Operation of underground mine and concentration plant:
	Exploration projects
SPR Pisco	Heap leaching process.
	Ore treatment for the adsorption, desorption and recovery process.
SPR Pirapora	Ausmelt furnace operation.
	Operation of auxiliary systems.
UM Pitinga	Ore concentration and processing
PFR Pirapora	Slag reprocessing, load preparation, cooling towers, tin and slag cooling process.
Unit	Main uses of water for consumption purposes
San Rafael MU	Operation in underground mine and concentrating plant:
	Exploration projects:
	For the camp
	Road irrigation
	Use of water by the population
Pucamarca MU	Irrigation of ore in the leaching pad.
	Mineral treatment for the ore adsorption, desorption and recovery process.
	Camps, canteen and offices.
	Exploration activities.
SPR Pisco	Ausmelt furnace process gas cooling.
	Colling of air compressor, casting wheel and burners.
	Slag granulation.

Pitinga MU	Concentration, mineral processing and metallurgy (furnace cooling), washing the pieces, vehicles and equipment Canteen and lodging facilities
SPR Pirapora	Use in operational processes Meal preparation, cleaning and hygiene
<b>Unit</b>	<b>Main sources of water (withdrawal)</b>
San Rafael MU	Estancococha lake Groundwater: Polay intake at 4730 level Larancota gorge Suyrococha lake. Other sources of water (Water mirror in the BIII tailings dam, domestic and wastewater treatment plant)
Pucamarca MU	Groundwater from 7 wells. Surface water of Azufre river commission in FY 2018.
SPR of Pisco	Groundwater from 03 wells and 08 drains
Pitinga MU	Igarapés 7 de septiembre Igarapé Poraquê Igarapé Poaero Pitinga River Igarapé PACA Igarapé Ouro Preto Igarapé Violeiro
SPR Pirapora	Groundwater, bore hole

- Main water discharge (See GRI 306-1 content)
- Total withdrawal volume (See GRI 303-1 content)
- Total discharge volume by destination (See GRI 306-1 content)
- Total consumption volume (See water management section)

## On risks and opportunities

Unit	Significance of water risk for water value and performance
San Rafael MU	In San Rafael MU there is no risk of water scarcity. According to the studies on water availability the operating unit has available water in lakes and groundwater. Concerning the sources of groundwater, there is enough water availability from the drainage of underground mining works for the metallurgical process.
Pucamarca MU	The unit's area has low rainfall rates, which is an adverse condition to recharge wells and other water bodies in the area. Thus it is important to use water resources efficiently.
SPR Pisco	Significance is high due to water scarcity in the areas where the Smelter & Refinery operates.
Pitinga MU	Water is vital for the company, because not only it is important for the productive process, but it also is essential in administrative processes. The water withdrawal system and water availability are enough for business continuity.
SPR Pirapora	Water is vital for the company, because not only it is important for the productive process, but it also is essential in administrative processes. The water withdrawal system and water availability are enough for business continuity.
Unit	Water related risks and opportunities
San Rafael MU	Water consumption does not affect the community of influence.
Pucamarca MU	Riesk: Potential groundwater stress.
	Opportunity: Construction of a neutralization for water withdrew from the Azufre river to supply the MU's water needs.
	Opportunity: Reutilization of wastewater to irrigate roads in the operating areas.
SPR Pisco	Risk: located in a desert area.
	Opportunity: Proximity to the coastline to install a desalination plant.
	Opportunity: Continue with identified improvement opportunities, tests to rise the temperature of incoming gases to the baghouse filter, improvements to the gas cooling lances of the Ausmelt furnace, use of saving elements in the tap water network, recovery of water steam generated during the slag granulation process.
	Opportunity: Completing the initiative to receive or have available water sources other than well drains (water producing company and/or installation of a desalination plant).
Pitinga MU	Opportunity: improve withdrawal control
SPR Pirapora	Opportunity: we have a water recirculation system and authorized groundwater withdrawal, with no need of changes in our storage and withdrawal systems.

Unit	Operations in areas of water scarcity
San Rafael MU	No areas of water scarcity have been reported in our operating unit in 2018.
Pucamarca MU	In our mining division, Pucamarca MU is the one with less available water for its operations, which is an opportunity to prevent discharges to the environment, and wastewater is recirculated to be used in our operations.
SPR Pisco	It is located in areas of water scarcity.
Pitinga MU	Operations are not conducted in areas of water scarcity.
SPR Pirapora	Operations are not conducted in areas of water scarcity.
Unit	Water basin or river basin stress level (from very high 5 to very low 1)
San Rafael MU	Risk level 1
Pucamarca MU	Risk level 4
SPR Pisco	Risk level 2
Pitinga MU	Risk level 1
SPR Pirapora	Risk level 1: Very low
Unit	Global water risk profile, stated in water risk level (from very high 5 to very low 1) by operating unit
San Rafael MU	Risk level 1
Pucamarca MU	Risk level 3
SPR Pisco	Risk level 2
Pitinga MU	Risk level 1
SPR Pirapora	Risk level 1

On our commitment and response

- Incorporation of water to our strategy (See section: Water management)
- Corporate water management (See section: Water management)
- Promoting stakeholder engagement (See section: Water management)
- Average water consumption efficiency (See GRI 303-1 content)

Unit	Operational risk and opportunity management
San Rafael MU	<p>In 2018, we have worked updating the Water Balance of San Rafael MU, aiming at updating the current water management system of San Rafael MU, updating the hydrological plan, tabulating and analyzing historical records on incoming and outgoing water flow readings of San Rafael MU's main components, in order to ensure environmental water management in our unit.</p> <p>The Hydrogeological study to prove groundwater availability of San Rafael MU was prepared in 2018 – for which we obtained authorization to increase groundwater consumption from 75 to 185.9 l/s for the plant.</p>
Pucamarca MU	<p>The main risk in Pucamarca MU is supplying water for mining operations, thus a neutralization plant was installed to treat water from Azufre river and ensure the amount of water required in the mine.</p> <p>Pucamarca MU will maintain its “zero discharges” policy, to continue having the opportunity to reuse wastewater in its operations.</p>
SPR Pisco	<p>The identified risk is a water deficit in relation to the supply curve obtained from the hydrogeological study.</p> <p>A project to use desalinated water self-produced or supplied by third parties shall be developed.</p>
Pitinga MU	Recirculation management measures were implemented.

#### Annex 6: Housekeeping: effluent management and waste (GRI 306-1) (GRI 306-2) (GRI 306-3)

Table. Volume of effluents by discharge type (thousand m<sup>3</sup>/ year)

Type of discharge	San Rafael MU		Pucamarca MU		SPR Pisco		Mina Justa		Pitinga MU		SPR Pirapora		Total 2017	Total 2018
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018		
Industrial discharge	7,908.50	8,675.90	0.00	0.00	0.00	0.00	0.00	0.00	7458.20*	0.00	0.00	0.0	15,366.70	8,676.00
Domestic discharge	38.20	57.68	0.00	0.00	10.50	7.76	0.10	0.00	182.50	175,404.40	9.70	10.03	241.00	175,480.06
<b>Total</b>		<b>8,733.58</b>	<b>0.00</b>	<b>0.00</b>	<b>10.50</b>	<b>7.76</b>	<b>0.10</b>	<b>0.00</b>	<b>7933.20</b>	<b>175,404.40</b>	<b>9.70</b>	<b>10.03</b>	<b>15,607.70</b>	<b>205,267.79</b>



**Table. Water discharge by quality and destination**

Unit	Discharge destination	Water quality	Treatment method
San Rafael MU	Chogñacota gorge	Water for irrigation and animal consumption	Chemical treatment in tailings dam
	Caquene gorge	Water for irrigation and animal consumption	Activated sludge and membrane treatment
SPR Pisco	Irrigation of green areas	Water for irrigation	Activated sludge
Pitinga MU	Igarapé Poaeiro	Water for recreation	Biological
Pirapora MU	Body of water	Water to be discharged in a body of water according to maximum permissible limits	Anaerobic filter/ Activated sludge / Oxidation pond / ultrafiltration membrane

No significant spills were produced in our projects and operations in 2018.

Table. Amounts of hazardous and non-hazardous waste and type of disposal (t/year)

Type of disposal	San Rafael MU		Pucamarca MU		SPR Pisco <sup>24</sup>		Mina Justa		Pitinga MU		SPR Pirapora		Total 2017	Total 2018
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018		
<b>Hazardous waste</b>														
Recycling	94.66	98.87	46.30	54,78	5.50	0.00	0.00	0.00	63.00	69.00	3.00	2.00	117.80	220.00
Landfill outside the unit	286.11	346.32	54.8	40.67	22.30	0	1.5	18.79	0	0	0	0	364.71	405.78
Incineration	0	0	0	0	0	0	0	0	65.6	50.75	0	5.96	65.6	56.96
<b>Subtotal</b>	<b>380.77</b>	<b>445.19</b>	<b>101.10</b>	<b>95.45</b>	<b>27.80</b>	<b>30.81</b>	<b>1.5</b>	<b>18.79</b>	<b>128.6</b>	<b>119.75</b>	<b>3</b>	<b>7.96</b>	<b>642.77</b>	<b>717.95</b>
<b>n-hazardous waste</b>														
Reuse	0.00	122.46	0.00	168.25	0.00	0.00	0.00	0.000	12.7	0.00	0.00	0.32	-	-
Recycling	1094.40	1350.60	1414.70	0.00	183.50	0.00	0.00	0.00	67.30	42.24	11.50	5.53	-	-
Composting	0.00	9.30	46.90	53.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-
Incineration (burning of mass waste)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.80	138.84	0.00	0.00	-	-
Landfill outside the unit	115.20	135.13	54.90	155.57	0.00	0.00	3.40	183.4	74.10	90.06	57.70	53.84	-	-
Landfill located at the unit	363.80	368.83	0.00	0.00	0.00	0.00	0.00	0.00	182.50	0.00	0.00	0.00	-	-
<b>Subtotal</b>	<b>1574.40</b>	<b>1985.93</b>	<b>243.50</b>	<b>377.66</b>	<b>183.50</b>	<b>260.71</b>	<b>3.40</b>	<b>183.40</b>	<b>403.40</b>	<b>271.14</b>	<b>69.00</b>	<b>59.69</b>	<b>2,477.20</b>	<b>3,138.92</b>
<b>Total</b>	<b>1955.17</b>	<b>2430.79</b>	<b>344.60</b>	<b>473.11</b>	<b>211.30</b>	<b>291.52</b>	<b>4.90</b>	<b>202.19</b>	<b>532.00</b>	<b>390.89</b>	<b>72.00</b>	<b>67.65</b>	<b>3,119.97</b>	<b>3,856.87</b>

25. The SPR Pisco records hazardous and non-hazardous waste by type of waste, but measurement by type of disposal has not yet been implemented.

**Annex 7:****Table. Amount of tailings generated**

Operation / Project	Results
San Rafael MU	1,09 million tons of tailings were generated in 2018, 35% of which were used as backfilling material inside the mine. Waste generated was disposed in a landfill properly prepared for these purposes, but part of that volume (17,019 m3) was also used as detrital backfilling material inside the mine.
Pitinga MU	5.8 million tons of tailings were generated in 2018.
SPR Pisco	21,760 tons of discard slag were produced in 2018, and were disposed in the corresponding storage area. In addition, 6,486 MT of ground slag were sent to San Rafael to be used in the backfilling mix to be used inside the mine.
Pucamarca MU	5.7 million tons of gravel were generated in 2018, which have been piled in a Heap Leach Pad. Also, 3.2 million tons of waste were produced and disposed in a landfill.
Mina Justa	Mine waste generated when clearing the area amounted to 2.6 million tons in 2018, and it is being disposed in a landfill designed for this purpose.

**Annex 8: Tables on carbon footprint (GRI 305-1) (GRI 305-2) (GRI 305-3) (GRI 305-4)****Table. Variation of emissions by unit as a result of their carbon footprint**

Unit	Variation	Analysis
Lima Office	139.3%	The main source of emissions, air travelling, has increased considerably (x3).
Pucamarca MU	6.7%	A larger consumption of fuel for mobile machinery was recorded. Furthermore, electricity consumption grew (+8%).
SPR Pisco	1.4%	Though emissions fell due to a reduced use of the Thermal Central, this effect was diluted due to a larger consumption of fuel for stationary machines and of coal as a reducing agent.
San Rafael MU	-6.3%	Fuel consumption for contractor's mobile machinery fell, and there was also a drop in electricity consumption (-3%).
Pitinga MU	13.1%	Electric generators' fuel consumption grew considerably, because hydroelectric generation fell during the dry season.
SPR Pirapora	11.4%	The use of coal as a reducing agent grew considerably (+37%)

**Table. Annual tCO<sub>2</sub>eq/treated ore ratio**

Indicator	San Rafael MU		Pucamarca MU		Pitinga MU	
	2017	2018	2017	2018	2017	2018
Footprint from scope 1 and 2 emissions (tCO <sub>2</sub> eq)	52,320.36	48,629.46	19,644.26	20,920.98	81,010.08	91,892.94
Footprint from scope 2 and 3 emissions (tCO <sub>2</sub> eq)	58,332.25	54,659.55	20,538.33	21,924.37	84,087.07	95,091.73
Treated ore (t)	1'700,443.28	1'084,699.87	7'801,777.32	8'242,116.47	6'944,971.00	7'052,052.73
Scope 1 and 2	0.031	0.045	0.003	0.003	0.012	0.013
Scope 1, 2 and 3	0.034	0.050	0.003	0.003	0.012	0.013

**Table. Annual tCO<sub>2</sub>eq/ore produced ratio**

Indicator	San Rafael MU		Pucamarca MU		Pitinga MU		SPR Pisco		SPR Pirapora	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Footprint from scope 1 and 2 emissions (tCO <sub>2</sub> eq)	52,320.36	48,629.46	19,644.26	20,920.98	81,010.08	91,892.94	80,617.93	81,706.15	7,887.08	8,841.43
Footprint from scope 2 and 3 emissions (tCO <sub>2</sub> eq)	58,332.25	54,659.55	20,538.33	21,924.37	84,087.07	95,091.73	81,019.05	82,187.87	9,785.94	10,902.25
Ore produced (t)	46,457.40	48,407.42	6.01	6.60	17,610.50	17,947.17	18,121.24	18,339.28	6,581.55	6,498.22
Scope 1 and 2	1.13	1.00	3,270.63	3,168.59	4.60	5.12	4.45	4.46	1.20	1.36
Scope 1, 2 and 3	1.26	1.13	3,419.48	3,320.56	4.77	5.30	4.47	4.48	1.49	1.68

**Table. Biogenic emissions (tCO<sub>2</sub>eq)<sup>26</sup>**

		Lima	Pucamarca MU	SPR Pisco	San Rafael MU	Pitinga MU	SPR Pirapora
2017	Direct CO2 emissions from biomass burning	5.53	779.07	73.78	1,050.48	3,632.79	19,415.59
	Indirect CO2 emissions from Biomass burning	8.44	103.69	59.82	869.35	76.71	11.02
	<b>Total</b>	<b>13.97</b>	<b>882.76</b>	<b>133.60</b>	<b>1,919.83</b>	<b>3,709.50</b>	<b>19,426.61</b>
2018	Direct CO2 emissions from biomass burning	4.81	831.64	101.46	912.41	5,190.94	19,629.84
	Indirect CO2 emissions from biomass burning	11.62	112.30	74.55	848.86	67.45	12.93
	<b>Total</b>	<b>16.43</b>	<b>943.94</b>	<b>176.01</b>	<b>1,761.27</b>	<b>5,258.39</b>	<b>19,642.77</b>

<sup>26</sup> In 2018 Mina Justa generated 636.46 tCO<sub>2</sub>eq of CO<sub>2</sub> emissions from biomass burning.



## Annex 9: Energy management (GRI 302-1)

Table. Fuel consumption per funete (GI)

Consumption	San Rafael MU		Pucamarca MU		SPR Pisco		Mina Justa		Pitinga MU		SPR Pirapora	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Fuel consumption from non-renewable sources	8,916,352.40	249,887.00	201,051,703.90	227,813.86	424,8207.30	5,159.58	2,877,221.20	262,942.08	355,568,356.20	130,462.00	No registra diésel	0
Fuel consumption from renewable sources [1]	469,281.70	12,764.00	10,581,668.60	11,998.14	223,589.90	221.77	151,432.70	14,199.85	18,714,124.00	6839.00	Does not register diesel	Does not register diesel
<b>Total</b>	<b>9,385,634.10</b>	<b>262,651.00</b>	<b>211,633,372.50</b>	<b>239,812.00</b>	<b>447,1797.20</b>	<b>5,381.34</b>	<b>3,028,653.90</b>	<b>277,141.93</b>	<b>374,282,480.20</b>	<b>137,301.00</b>	<b>0</b>	<b>0</b>

Table. Fuel consumption by type (GI)

Consumption	San Rafael MU		Pucamarca MU		SPR Pisco		Mina Justa		Pitinga MU		SPR Pirapora	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Diesel	9,385,634.00	255,283.00	211,633,373.00	239,348.00	4,471,797.00	4,435.31	3,028,654.00	263,725.0	374,282,480.00	136,784.00	00.0	0.00
LPG	218,609,475.00	7,369.00	1,446,053.00	70.00	997,718.00	946.04	0.00	433.9	746,805.00	517.00	00.0	0.00
Natural Gas	0.00	0.00	0.00	0.00	183,829,679.00	0.00	0.00	0.0	0.00	0.00	00.0	0.00
Fuel	0.00	0.00	332,314.00	394.00	0.00	0.00	0.00	12,982.0	3,805,942.00	0.00	0.00	0.00
Coal	0.00	0.00	1,441,800.00	0.00	0.00	0.00	0.00	0.0	8,867,284.00	0.000	128,278,682.00	0
<b>Total</b>	<b>227,995,109.00</b>	<b>262,651.00</b>	<b>214,853,540.00</b>	<b>239,812.00</b>	<b>189,299,194.00</b>	<b>5,381.34</b>	<b>3,028,654.00</b>	<b>277,140.9</b>	<b>387,702,511.00</b>	<b>137,301.00</b>	<b>128,278,682.00</b>	<b>0</b>

**Table. Fuel consumption by source (GJ)**

Consumption	UM San Rafael		UM Pucamarca		PFR Pisco		Mina Justa		UM Pitinga		PFR Pirapora	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Total fuel consumption	227,995,109.00	262,651.00	214,853,540.00	239,812.00	189,299,194.00	5,381.34	3,028,654.00	277,140.90	387,702,511.00	137,301.00	128,278,682.00	0
Total electricity consumption	546,820.90	532,189.41	67,789.30	73,133.20	91,494.00	90,197.10	630.70	555.30	947,973.00	550,980.00	139,058.10	139,058.10
Total energy consumption	228,541,929.90	794,840.50	214,921,329.30	312,945.20	189,390,688.00	95,578.47	3,029,284.70	277,696.20	388,650,484.00	688,281.00	128,417,740.10	139,058.05

Total fuel consumption 2017	1,151,157,690.00
Total fuel consumption 2018	1,611,051.50
Total electricity consumption 2017	1,793,766.00
Total electricity consumption 2018	1,001,753.60

**Annex 10: Health and Safety Performance (GRI 403-2)**
**Table. OHS indicators for employees by region and gender <sup>27</sup>**

Region	Gender	Accidents with medical treatment	Accidents with work restrictions	Lost-day accidents	Recordable injury frequency rate (RIFR)	Lost-day rates (LDR)	Incidence rate of Occupational disease (IROD)	Severity rate (SR)	Fatalities resulting from occupational accidents	Fatalities resulting from occupational diseases
Lima, Peru	Male	0	0	0	0.00	0.00	0.00	0.00	0	0
	Female	0	1	0	11.50	0.00	0.00	0.00	0	0
Ica, Peru	Male	1	2	0	1.86	6.33	0.00	31.63	0	0
	Female	0	0	0	0.00	0.00	0.00	0.00	0	0
Tacna, Peru	Male	0	0	0	0.00	0.00	0.00	0.00	0	0
	Female	0	0	0	0.00	0.00	0.00	0.00	0	0
Puno, Peru	Male	0	2	1	2.08	6.38	0.00	31.92	0	0
	Female	0	0	0	0.00	0.00	0.00	0.00	0	0
Sao Paulo, Brazil	Male	1	0	1	3.70	52.19	0.00	260.93	0	0
	Female	0	0	0	0.00	0.00	0.00	0.00	0	0
Amazonas, Brazil	Male	1	3	1	2.63	7.79	0.00	38.93	0	0
	Female	0	0	0	0.00	0.00	0.00	0.00	0	0

<sup>27</sup> Employee: is a person who has an employment relationship with the Company pursuant to national laws or enforcement practices

**Table. OHS indicators for suppliers by region and gender <sup>28</sup>**

Región	Gender	Accidents with medical treatment	Accidents with work restrictions	Lost-day accidents	Recordable injury frequency rate (RIFR)	Fatalities resulting from occupational accidents	Fatalities resulting from occupational diseases
Lima, Peru	Male	0	0	0	0.00	0	0
	Female	0	0	0	0.00	0	0
Ica, Peru	Male	0	1	2	1.86	0	0
	Female	0	0	0	0.00	0	0
Tacna, Peru	Male	1	1	1	2.41	0	0
	Female	0	0	1	55.30	0	0
Puno, Peru	Male	2	2	2	1.17	0	0
	Female	0	0	0	0.00	0	0
Sao Paulo, Brazil	Male	0	1	0	8.06	0	0
	Female	0	0	0	0.00	0	0
Amazonas, Brazil	Male	2	3	0	3.06	0	0
	Female	0	0	0	0.00	0	0

<sup>28</sup> 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 example, for suppliers/contractors).

**Annex 11: Figures of our collaborators (GRI 102-8) (GRI 401-1)(GRI 405-1)**  
**Table. Number of collaborators by employment agreement, region and gender**

Employment agreement	Gender	PERU				BRASIL		Total	
		Ica	Marcona	Tacna	Lima	Sao Paulo	Amazonas		
Permanent agreement	Male	550	212	142	218	129	209	775	2,235
	Female	13	3	32	9	40	36	45	178
	Total	563	215	174	227	169	245	821	2,414
Temporary agreement	Male	3	2	137	32	7	0	0	181
	Female	2	0	5	5	0	0	0	12
	Total	5	2	142	37	7	0	0	193
Foreign	Male	0	0	3	0	0	2	8	13
	Female	0	0	0	0	0	0	0	0
	Total	0	0	3	0	0	2	8	13
Interns	Male	0	0	3	1	3	0	0	7
	Female	1	0	1	0	1	0	0	3
	Total	1	0	4	1	4	0	0	10
Pre-Profesional Trainee	Male	2	0	3	0	2	1	0	8
	Female	0	0	0	0	1	1	0	2
	Total	2	0	3	0	3	2	0	10
Youth job-training program	Male	0	0	12	0	0	2	18	32
	Female	0	0	3	0	0	0	15	18
	Total	0	0	15	0	0	2	33	50
<b>TOTAL</b>		<b>571</b>	<b>217</b>	<b>341</b>	<b>265</b>	<b>183</b>	<b>251</b>	<b>862</b>	<b>2,690</b>



**Table. Number of collaborators by employment agreement, gender and region**

Type of Employment Agreement	Gender	PERU					BRASIL		Total
		Puno	Ica	Marcona	Tacna	Lima	Sao Paulo	Amazonas	
Full time	Male	555	214	300	251	141	211	784	2,456
	Female	16	3	41	14	42	36	45	197
	Total	571	217	341	265	183	247	829	2,653
Partial time	Male	0	0	0	0	0	3	18	21
	Female	0	0	0	0	0	1	15	16
	Total	0	0	0	0	0	4	33	37
<b>TOTAL</b>		<b>571</b>	<b>217</b>	<b>341</b>	<b>265</b>	<b>183</b>	<b>251</b>	<b>862</b>	<b>2,690</b>

**Table. Number of collaborators by gender, region and age**

Gender	Age	PERU					BRASIL		Total
		Puno	Ica	Marcona	Tacna	Lima	Sao Paulo	Amazonas	
Male	<30	27	6	52	27	19	46	179	356
	30-50	355	150	228	211	99	131	493	1667
	>50	173	58	20	13	23	37	130	454
	Total	555	214	300	251	141	214	802	2,477
Female	<30	1	0	15	6	8	10	26	91
	30-50	14	2	25	8	29	23	29	146
	>50	1	1	1	0	5	4	5	19
	Total	16	3	41	14	42	37	60	213
<b>TOTAL</b>		<b>571</b>	<b>217</b>	<b>341</b>	<b>265</b>	<b>183</b>	<b>251</b>	<b>862</b>	<b>2,690</b>

Throughout 2018, we hired 627 new collaborators: 400 in Peru and 227 in Brazil. Out of this, 88 are women and 539 are men. The majority of people hired are between 30 and 50 years old.

The detailed breakdown of collaborators' recruitment and turnover is presented below:

**Table. Number of recruits in 2018 by region, gender and age**

Gender	Age	PERU			BRASIL			
		Puno	Ica	Marcona	Tacna	Lima	Sao Paulo	Amazonas
Male	<30	6	1	34	9	5	18	49
	30-50	32	2	201	29	18	12	96
	>50	3	0	14	1	1	2	6
	Total	41	3	249	39	24	32	151
Female	<30	0	0	9	3	4	5	19
	30-50	6	0	15	1	4	9	11
	>50	0	0	1	0	1	0	0
	Total	6	0	25	4	9	14	30
<b>TOTAL</b>		<b>47</b>	<b>3</b>	<b>274</b>	<b>43</b>	<b>33</b>	<b>46</b>	<b>181</b>

Table. Turnover number and rate in 2018 by region, gender and age

Edad		PERU								BRASIL					
		Lima		Ica		Tacna		Puno		Marcona		Sao Paulo		Amazonas	
Gender		F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
Number	< 30 años	0	2	0	0	1	6	0	3	0	1	5	18	19	49
	30 - 50	7	22	0	3	2	29	1	26	6	15	9	12	11	96
	> 50 años	1	1	0	1	0	2	0	10	0	5	0	2	0	6
Rate (%)	< 30 años	0.0%	8.0%	0.0%	0.0%	33.3%	16.2%	0.0%	7.7%	0.0%	4.8%	35.7%	56.3%	63.3%	32.5%
	30 - 50	87.5%	88.0%	0.0%	75.0%	66.7%	78.4%	100.0%	66.7%	100.0%	71.4%	64.3%	37.5%	36.7%	63.6%
	> 50 años	12.5%	4.0%	0.0%	25.0%	0.0%	5.4%	0.0%	25.6%	0.0%	23.8%	0.0%	6.3%	0.0%	4.0%

### Annex 12- Table of correlation with ICMM principles

Since 2018 we are bound to the 10 principles of the International Council on Mining and Metals (ICMM) and to the framework of sustainable development established by this organization. The following table presents our initiatives and the progress we have made with each of these principles, and their location in the different sections of our Sustainability Report 2018. .

ICMM Principles		Report Section
1	Apply ethical practices and sound systems of corporate governance and transparency to support sustainable development.	9. Governance, Transparency and ethics
2	Integrate sustainable development in corporate strategy and decision-making processes.	9. Governance, Transparency and ethics 4. Sustainability in our value chain 3. The future is now: Minsur and sustainability 5. Minsur and the environment <ul style="list-style-type: none"> <li>Closure plans</li> </ul>
3	Respect human rights and the interests, cultures and values of employees and communities affected by our activities.	9. Governance, Transparency and ethics <ul style="list-style-type: none"> <li>We respect human rights</li> </ul> 7. Our people 8. We are all community: our commitment to the communities <ul style="list-style-type: none"> <li>Cultural heritage and indigenous populations</li> </ul>
4	Implement effective risk management strategies based on sound science and which account for stakeholder perceptions of risk.	3. The future is now: Minsur and sustainability <ul style="list-style-type: none"> <li>Our risk management</li> </ul> 8. We are all community: our commitment to the communities <ul style="list-style-type: none"> <li>Our local emergency plans</li> </ul>
5	Pursue continual improvement in health and safety performance.	6. Safe spaces: occupational health and safety (OHS) 8. We are all community: our commitment to the communities <ul style="list-style-type: none"> <li>Our local emergency plans</li> </ul>
6	Pursue continual improvement in environmental performance issues.	5. Minsur and the environment
7	Contribute to the conservation of biodiversity and integrated approaches to land-use planning.	5. Minsur and the environment <ul style="list-style-type: none"> <li>Biodiversity management</li> </ul>
8	Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals.	4. Sustainability in our value chain 5. Minsur and the environment <ul style="list-style-type: none"> <li>Effluents and waste management</li> <li>Material management</li> </ul>
9	Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities.	7. Our people <ul style="list-style-type: none"> <li>We prioritize local employment</li> </ul> 8. We are all community: our commitment to the communities
10	Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance.	10. On this Report

**Annex 13- Table of correlation with ICMM principles**

Space reserved for the GRI seal

For the Materiality Disclosures Services, GRI has reviewed that the table of contents is clear, and that the reference for Contents 102-40 to 102-49 correspond to the sections indicated in the report.



GRI Standard	Thematic content	Page	Omissions or observations
Foundation			
GRI 101: Foundation	-	-	-
General Disclosures			
GRI 102: General Disclosures 2016	102-1: Name of the organization	7	-
	102-2: Activities, brands, products and services	7-8	-
	102-3: Location of headquarters	7, 10	-
	102-4: Location of operations	7-10	-
	102-5: Ownership and legal form	7	-
	102-6: Markets served	6	-
	102-7: Scale of the organization	7	-
	102-8: Information on employees and other workers	38-71	-
	102-9: Supply chain	21-54	-
	102-10: Significant changes to the organization and its supply chain	21-22	-
	102-11: Precautionary principle or approach	24-25	-
	102-12: External initiatives	13	-
	102-13: Membership of associations	13	-
	102-14: Statement from senior decision-maker	3-4	-
	102-16: Values, principles, standards and norms of behavior	2-48	-
	102-18: Corporate governance structure	47	-
102-40: List of stakeholder groups	11	-	
102-41: Collective bargaining agreements	49	-	
102-42: Identifying and selecting stakeholders	11	-	

	102-43: Approach to stakeholder engagement	11	-
	102-44: Key topics and concerns raised	52	-
	102-45: Entities included in the consolidated financial statements	10	-
	102-46: Defining report content and topic boundaries	10-52	-
	102-47: Lista of material topics	52	-
	102-48: Restatements of information	10	-
	102-49: Changes in reoporting	10	-
	102-50: Reporting period	10	-
	102-51: Date of most recent report	10	-
	102-52: Reporting cycle	10	-
	102-53: Contact point for questions regarding the report	For further information on our organization and sustainability management, please contact us at <a href="mailto:asuntoscorporativos@minsur.com">asuntoscorporativos@minsur.com</a> .	-
	102-54: Claims of reporting in accordance with the GRI Standards	10	-
	102-55: GRI content index	77-86	-
	102-56: External assurance	87	-
Material issues			
Economic performance			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	47	-
	103-3: Evaluation of the management approach		
GRI 201: Economic Performance 2016	201-1: Direct economic value generated and distributed	47	-
		47	-

Indirect economic impacts			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	46	-
	103-3: Evaluation of the management approach	46	-
GRI 203: Indirect Economic Impact 2016	203-1: Infrastructure investments and services supported	46	-
Procurement practices			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	43	-
	103-3: Evaluation of the management approach	43	-
GRI 204: Procurement practices 2016	204-1: Proportion of spending on local suppliers	43-55	-
Anticorruption			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48	-
	103-3: Evaluation of the management approach	48	-
GRI 205: Anticorruption 2016	205-3: Confirmed incidents of corruption and actions taken	48	-
Materials			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	32	-
	103-3: Evaluation of the management approach	32	-
GRI 301: Materials 2016	301-1: Materials used by weight or volume	32	-
Energy			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	34	-

GRI 302: Energy 2016	103-3: Evaluation of the management approach	34	-
	302-1: Energy consumption within the organization	34-67	-
<b>Water</b>			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	26-27, 57-61	-
	103-3: Evaluation of the management approach	26-27, 57-61	-
GRI 303: Water 2016	303-1: Water withdrawal by source	26,57-61	-
	303-2: Water sources significantly affected by withdrawal	28	-
	303-3: Water recycled and reused	29	-
<b>Biodiversity</b>			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	34	-
	103-3: Evaluation of the management approach		
GRI 304: Biodiversity 2016	304-2: Significant impacts of activities, products, and services on biodiversity	34-35	- -
<b>Emissions</b>			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	33	-
	103-3: Evaluation of the management approach	33	-
GRI 305: Emissions 2016	305-1: Direct (scope 1) GHG emissions	33-64	-
	305-2: Energy indirect (scope 2) GHG emissions	33-64	-
	305-3: Other indirect (Scope 3) GHG emissions	33-64	-
	305-4: GHG emissions intensity	33-64	-

Effluents and waste			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	30-31	-
	103-3: Evaluation of the management approach	30-31	-
GRI 306: Effluents and waste 2016	306-1: Water discharge by quality and destination	61	-
	306-2: Waste by type and disposal method	62	-
	306-3: Significant spills	63	-
	MM3: Total amount of overburden, rock, tailings and sludges an their associated risks	31	-
Environmental compliance			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	50	-
	103-3: Evaluation of the management approach	50	-
GRI 307: Environmental compliance 2016	307-1: Non-compliance with environmental laws and regulations	50	-
Supplier Environmental assessment			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	21-23, 56	-
	103-3: Evaluation of the management approach	21-23, 56	-
GRI 308: Supplier environmental assessment 2016	308-1: New suppliers that were screened using environmental criteria	21-23	-
Employment			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	38	-
	103-3: Evaluation of the management approach	38	-
GRI 401: Employment 2016	401-1: New employee hires and employee turnover	38, 39-71	-

Occupational health and safety			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	36-37	-
	103-3: Evaluation of the management approach	36-37	-
GRI 403: Occupational health and safety 2016	403-1: Workers representation in formal joint management-worker health and safety committees	36	-
	403-2: Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.	36-37	-
	403-3: Workers with high incidence or high risk of diseases related to their occupation	36-37	-
Training and education			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	39-40	-
	103-3: Evaluation of the management approach	39-40	-
GRI 404: Training and Education 2016	404-1: Average hours of training per year per employee	40	-
	404-3: Percentage of employees receiving regular performance and career development reviews	40	-
Diversity and equal opportunities			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48-49	-
	103-3: Evaluation of the management approach	48-49	-
GRI 405: Diversity and equal opportunities 2016	405-1: Diversity of governance bodies and employees	38-71	-



Non-discrimination			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48-49	-
GRI 406: No discrimination 2016	103-3: Evaluation of the management approach	48-49	-
	406-1: Incidents of discrimination and corrective actions taken	48-49	-
Freedom of association and collective bargaining			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	49	-
	103-3: Evaluation of the management approach	49	-
GRI 407: Freedom of association and collective bargaining 2016	407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	49	-
Child Labor			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48	-
	103-3: Evaluation of the management approach	48	-
GRI 408: Child Labor 2016	408-1: Operations and suppliers at significant risk for incidents of child labor	48	-
Corced or compulsory Labor			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48-49	-
	103-3: Evaluation of the management approach	48-49	-
GRI 409: Forced or compulsory labor 2016	409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labor	48	-

Security Practices			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	49	-
	103-3: Evaluation of the management approach	49	-
GRI 410: Security Practices 2016	410-1: Security personnel (Surveillance) trained in human rights policies or procedures, as well as support forces (police/ armed forces).	49-50	-
Rights of the indigenous population			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	43-44	-
	103-3: Evaluation of the management approach	43-44	-
GRI 411: Rights of indigenous peoples 2016	411-1: Incidents of violations involving rights of indigenous peoples	43	-
Evaluation of human rights			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48-49	-
	103-3: Evaluation of the management approach	48-49	-
GRI 412: Human Rights assessment 2016	412-2: Employee training on human rights policies or procedures	49	-
Local Communities			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	41-46	-
	103-3: Evaluation of the management approach	41-46	-
GRI 413: Local Communities 2016	413-1: Operations with local community engagement, impact assessment and development programs	44-46	-

Supplier social assessment			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	21-23, 56	-
	103-3: Evaluation of the management approach	21-23, 56	-
GRI 414: Supplier social assessment 2016	414-1: New suppliers that were screened using social criteria	21-23, 56	-
Public policies			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	48	-
	103-3: Evaluation of the management approach	48	-
GRI 415: Public policies 2016	415-1: Political contributions	No political contributions were made <sup>28</sup>	-
Socioeconomic compliance			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	50	-
	103-3: Evaluation of the management approach	50	-
GRI 419: Socioeconomic Compliance 2016	419-1: Non-compliance with laws and regulations in the social and economic area	50	-
Closure plan			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	34-35	-
	103-3: Evaluation of the management approach	34-35	-
Closure plan	MM10: Number and percentage of operations with closure plans	34-35	-

28. Worksheet GRI 415 Public Policies, GRI 415-1 MINSUR - Analía Calmell

Local Emergency plan			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	42-43	-
	103-3: Evaluation of the management approach	42-43	-
Risk Management			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	18-19	-
	103-3: Evaluation of the management approach	18-19	-
Exploration Investment			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-43	-
	103-2: The management approach and its components	MINSUR Annual Report 2018 30-32	-
	103-3: Evaluation of the management approach	MINSUR Annual Report 2018 30-32	-
Local Employment			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	38	-
	103-3: Evaluation of the management approach	38	-
Product life cycle			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	20-21	-
	103-3: Evaluation of the management approach	20-21	-
Cultural Heritage			
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its Boundaries	52-53	-
	103-2: The management approach and its components	43	-
	103-3: Evaluation of the management approach	43	-

Annex 14- External verification letter



---

(Free translation from the original in Spanish)

**MINSUR S.A.**

**INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE  
REPORT**

DECEMBER 31, 2018

---



(Free translation from the original in Spanish)

**INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT ON THE IDENTIFIED SUSTAINABILITY INFORMATION INCLUDED IN THE 2018 SUSTAINABILITY REPORT**

Shareholders and Board of Directors

October 23, 2019

We have undertaken a limited assurance engagement on the topics (hereinafter, objects of limited assurance scope) that are detailed below, for the year ended December 31, 2018 (hereinafter, the year under review), included in the 2018 Sustainability Report (hereinafter, IS18) of Minsur S.A. This assurance was conducted by a multidisciplinary team including auditors and sustainability experts.

- a. The performance indicators included in the IS18 of Minsur S.A. issued by the Administration, both in its printed version and PDF<sup>1</sup> version, described in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with GRI standard principles included in the 2018 Sustainability report and the declaration of Minsur S.A. included in IS18 regarding its filing in accordance with the "Essential" option of the Standard version of the Global Reporting Initiative (GRI) and based on the Principles of the International Council on Mining and Metals (ICMM).

Our verification with limited assurance scope is carried out with respect to the limited assurance objects that respond to the criteria described in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with GRI standard principles included in the 2018 Sustainability Report. We have not performed any procedure with respect to other elements included in said objects and, therefore, we do not express a conclusion on said elements.

**Criteria**

The criteria used by Minsur S.A. to prepare the before mentioned objects were established in accordance with the terms and conditions set forth in the Standard version of the Global Reporting Initiative (GRI) and based on the Principles of the International Council on Mining and Metals (ICMM); and with the formalized procedures that, in relation to these indicators, the Administration defined as a complement to the aforementioned in GRI and based on the Principles of the International Council on Mining and Metals (ICMM), which are detailed in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table GRI standard principles included in the 2018 Sustainability Report.

<sup>1</sup> The maintenance and integrity of the Minsur S.A. website (<https://www.minsur.com/>), objective repository of the pdf version of the 2018 Sustainability Report, is the responsibility of the Minsur S.A. Administration. This limited assurance report does not include the consideration of these activities and, accordingly, Gaveglia Aparicio y Asociados S. Civil de R.L. accepts no responsibility for any difference between the information presented on said website and the objects of limited assurance in the Report issued by the Administration of Minsur S.A. on which said limited assurance was made and the conclusion was issued.

Gaveglia Aparicio y Asociados Sociedad Civil de Responsabilidad Limitada.  
 Av. Santo Toribio 143, Piso 7, San Isidro, Lima, Perú. T: +51 (1) 211 6500 F: +51 (1) 211 6550  
[www.pwc.pe](http://www.pwc.pe)

Gaveglia Aparicio y Asociados Sociedad Civil de Responsabilidad Limitada es una firma miembro de la red global de PricewaterhouseCoopers International Limited (PwC). Cada una de las firmas es una entidad legal separada e independiente que no actúa en nombre de PwC, ni de cualquier otra firma miembro de la red. Inscrita en la Partida No. 11008537, Registro de Personas Jurídicas de Lima y Callao.





October 23, 2019  
Minsur S.A.  
Page 2

#### Management's responsibility for assurance objects

The Administration of Minsur S.A. is responsible for the preparation and presentation of the objects of limited assurance, in accordance with the criteria detailed in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with the GRI standard principles included in the 2018 Sustainability Report. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the assurance objects that are free from material misstatements, whether due to fraud or error.

#### Our independence and quality control

We have complied with the ethical and independence requirements of the Code of Ethics for Accounting Professionals issued by the International Ethics Standards Board for Accountants (IESBA), approved for application in Peru by the Board of Deans of Peruvian Certified Public Accountants, which is based on the principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our Firm applies the International Standard on Quality Control 1 (ISQC 1) and, therefore, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Our responsibility

Our responsibility is to express a limited assurance conclusion on the objects of assurance based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagement ISAE, specifically ISAE 3000, 'Assurance Engagements other than Audits or Reviews of Historical Financial Information', approved for application in Peru by the Board of Deans of Peruvian Certified Public Accountants. This standard requires that we plan and perform this engagement to obtain limited assurance about whether the objects of limited assurance are free from material misstatement.

A limited assurance engagement involves assessing the suitability, in the circumstances, of the use of criteria by Minsur S.A. as a basis for the preparation of limited assurance objects, assessing the risks of material misstatement in them, whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of said objects.

The procedures we performed were based on our professional judgment and included inquiries, observation of the developed processes, inspection of documents, and reconciling with underlying documents. Given the circumstances of the engagement, in performing the procedures listed above we:

- a. Understanding the tools used to generate, aggregate and report limited assurance objects through inquiries with those responsible for related processes during visits to the offices of Minsur S.A.



October 23, 2019  
Minsur S.A.  
Page 3

- b. Substantive tests of detail, on the basis of determined selection in accordance with assurance standards, on the information taken to determine the indicators subject to limited assurance through:
- i. Review of policies and procedures established by Minsur S.A.
  - ii. Review of supporting documents of internal and external origin.
  - iii. Arithmetic calculations according to formulas previously defined in the information criteria presented in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with GRI standard principles included in the 2018 Sustainability Report.
  - iv. Comparison of the contents presented by the Administration in its IS18 with what is established in this regard in the "Essential" option of the Standard guide of the Global Reporting Initiative (GRI) in its 2013 version and based on the Principles of the International Council on Mining and Metals (ICMM).

The procedures for collecting evidence in a limited assurance engagement vary in nature and extent from a reasonable assurance engagement and, therefore, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained in a reasonable assurance engagement in relation to both risk assessment procedures, including an understanding of internal control, as well as procedures performed in response to the assessed risks. Accordingly, we do not express a reasonable assurance opinion about whether the limited assurance objects of Minsur S.A. have been prepared, in all material aspects, in accordance with the criteria detailed in Annex 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with the GRI standard principles included in the 2018 Sustainability Report.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our opinion with limited assurance scope.

#### Conclusion

Based on the procedures we have performed and the evidence we have obtained:

- Nothing has come to our attention that causes us to believe that the performance indicators included in IS18, regarding the information that responds to the assurance criteria described in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with the GRI standard principles included in the 2018 Sustainability Report, are not prepared, in all material aspects, in accordance with these criteria.
- Nothing has come to our attention that causes us to believe the statement of Minsur S.A. included in IS18 regarding its presentation in accordance with the "Essential" option of the Standard version of the Global Reporting Initiative (GRI) and based on the Principles of the International Council on Mining and Metals (ICMM), regarding information which responds to the assurance criteria described in Appendix 12 - Correlation table with ICMM principles and Appendix 13 - Correlation table with the GRI standard principles included in the 2018 Sustainability Report, is not prepared, in all material aspects, in accordance with these criteria.



October 23, 2019  
Minsur S.A.  
Page 4

**Relevant issues**

Without qualifying our opinion, it stands out that:

- Qualitative interpretations of relevance, materiality and accuracy of non-financial information that comprises the objects of limited assurance are subject to the criteria that the organization has defined internally for this purpose.
- Our assurance is carried out on the objectives of limited assurance corresponding to the year under review and, therefore, it does not include information from previous years included in IS18, related to future projections and goals, or with financial information from Minsur S.A. for the year under review, unless otherwise stated in Appendix 12 - Correlation table with the ICMM principles and Appendix 13 - Correlation table with the GRI standard principles included in the 2018 Sustainability Report. We have not made any work outside the agreed scope and, therefore, our conclusion is restricted to the objects of assurance that respond to the assurance criteria described in Appendix 12 - Correlation table with the ICMM principles and Appendix 13 - Correlation table with the GRI standard principles included in the 2018 Sustainability Report.

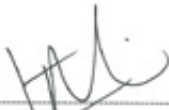
**Use and distribution**

This report, including the conclusion, has been prepared by Management to present to the Executive Directorate of Minsur S.A. in the framework of information on their performance and activities in the IS18. We authorize the publication of this report within the Sustainability Report.

To the extent permitted by law, we do not accept or assume responsibility for our work or for this report against third parties other than the Executive Directorate of Minsur S.A., unless expressly agreed terms and prior written knowledge.



Countersigned by



\_\_\_\_\_  
Juan M. Alegre (partner)  
Peruvian Certified Public Accountant  
Registration No. 01-020621

